

Weber State University

2025-2026 University Catalog

Captured 8-29-2025

Please refer to online catalog for current curriculum

University Profile

Overview

Weber State University is an exceptional comprehensive university providing associate, bachelor, masters, and doctoral degrees to meet the needs of the region. WSU graduates are broadly educated, capable and prepared for meaningful careers, graduate and professional schools, and civic engagement. The hallmark of the university is excellent teaching with extraordinary interactions between faculty and students. WSU offers a wide and diverse variety of degrees/programs (see Programs Sorted by Degree or Programs Sorted by Major/Minor). With a student body of over 30,000 drawn predominantly from Utah, but also including students from every other state, 1 territory and 71 foreign countries, WSU takes pride in its student-centered environment for learning and believes that quality education is founded upon close associations between faculty and students.

WSU is distinguished by outstanding academic programs that recruit motivated students to work with faculty to create and share knowledge. More than fifty academic departments and programs in seven colleges provide learning opportunities for a diverse spectrum of students, including grants and support for undergraduate research, community-based and service learning, an Honors program, and a Bachelor of Interdisciplinary Studies (BIS) program. The Office of Undergraduate Research (OUR) and the Center for Community Engaged Learning help to engage students in learning both inside and outside the classroom, and the Honors program provides small classes in a rich, supportive, and challenging academic setting. The BIS offers students the opportunity to design their own degrees with three areas of academic emphasis meant to prepare them for specific career paths or graduate study.

Academic studies are complemented by a wide range of extracurricular activities, including student government, intramural and intercollegiate athletics, and award-winning performing arts groups. In addition, the Student Success Center along with the First Year Experience program helps new students adjust to the university community, while a variety of support services and programs aid those with particular needs.

The WSU Ogden campus has about 70 buildings on 366 acres that house abundant classrooms and laboratories, excellent student computing facilities, outstanding performing arts auditoriums, a spacious library, and a well-equipped health and fitness center. An area of continued growth is WSU Davis, which provides instruction to students on a high-tech campus in Layton. In addition to its Ogden and Davis campuses, WSU offers courses throughout the state and Intermountain West and is a leader in online instruction.

Historical Perspective

Weber State University was founded in Ogden, Utah, as Weber Stake Academy on January 7, 1889, by the Weber Stake Board of Education of the Church of Jesus Christ of Latter-day Saints. The 1933 Utah Legislature established Weber College as a state junior college and placed it under the control of the Utah State Board of Education. Following World War II the college outgrew its downtown campus and moved to the present 400-acre site, spectacularly perched on the mountainside overlooking Ogden and the Great Salt Lake.

In 1959 the Utah Legislature authorized the addition of upper division courses, leading to award of the first baccalaureate degrees by Weber State College in 1964. The 1969 Legislature created the Utah System of Higher Education, comprising nine public institutions of higher learning, including Weber State College. The

system is governed by a State Board of Regents, and each institution has its own Board of Trustees; members of both boards are appointed by the governor.

In 1990 the state legislature renamed the institution Weber State University, effective New Year's Day 1991, appropriately symbolizing its role as Utah's premier public, undergraduate university.

Mission Statement

We transform lives and communities by educating students of all identities and backgrounds. We nurture student success through a supportive environment, individualized pathways, meaningful personal connections with faculty and staff, teaching and experiential learning, research, and civic engagement.

WSU Mission Core Themes Assessment

WSU has three core themes which highlight an aspect of the mission and collectively they encompass its mission. The core themes are:

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ACCESS

- The access core theme reflects our commitment to providing an affordable, quality education to communities with significant socioeconomic and cultural differences.

LEARNING

- The learning core theme is central to our mission to provide transformative educational experiences and its commitment to support student success at every stage of the student life cycle.

COMMUNITY

- The community core theme reflects our role as an educational, cultural and economic steward for the region.

Accreditation

Weber State University is institutionally accredited by the Northwest Commission on Colleges and Universities. All applied technical education programs are accredited by the Utah State Office of Vocational Education. Teacher education programs are accredited by the National Association of State Directors of Teacher Education and Certification. In addition, specific professional agencies currently accredit or approve the following departments and programs:

College of Engineering, Applied Science & Technology

Automotive Service Technology [AAS programs] (*National Automotive Technicians Education Foundation [NATEF]*)

Computer Science (Computing Accreditation Commission of ABET, Inc.)

Cybersecurity and Network Management (Computing Accreditation Commission of ABET, Inc.)

Manufacturing Engineering Technology, Mechanical Engineering Technology, Product Design and Development (*Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.*)

Electrical Engineering (*Engineering Accreditation Committee [EAC] of ABET, Inc.*)

Interior Design (*Council for Interior Design Accreditation [CIDA]*)

Telitha E. Lindquist College of Arts & Humanities

Music (*National Association of Schools of Music [NASM]*)

John B. Goddard School of Business & Economics

All undergraduate and graduate programs in business (*Association to Advance Collegiate Schools of Business [AACSB]*)

School of Accounting & Taxation-all undergraduate and graduate programs in accounting (*Association to Advance Collegiate Schools of Business [AACSB]*)

Jerry and Vickie Moyes College of Education

Early Childhood and Early Childhood Education (*National Association for the Education of Young Children Teacher Education Standards [NAEYC], National Council for Accreditation of Teacher Education*)

Family Studies (*National Council on Family Relations Standards for the Certified Family Life Educator [NCFR]*)

Teacher Education (*Association for Advancing Quality Educator Preparation [AAQEP]*)

Dr. Ezekiel R. Dumke College of Health Professions

Athletic Training (*Commission on Accreditation of Athletic Training Education [CAATE]*)

Dental Hygiene (*Commission on Dental Accreditation of the American Dental Association [CODA]*)

Emergency Healthcare (*Commission on Accreditation of Allied Health Education Programs [CAAHEP], Committee on Accreditation of Educational Programs in the Emergency Medical Services Professions*)

Health Administrative Services (*Association of University Programs in Health Administration [AUPHA]*)

Health Information Management, Health Information Technology (*Commission on Accreditation for Health Informatics and Information Management Education [CAHIIM]*)

Master of Health Administration Program (*Commission on Accreditation of Healthcare Management Education [CAHME]*)

Medical Laboratory Sciences (*National Accrediting Agency for Clinical Laboratory Science [NAACLS]*)

Nursing (*Accreditation Commission for Education in Nursing [ACEN]*)

Physician Assistant (*Accreditation Review Commission on Education for the Physician Assistant [ARC-PA]*)

Respiratory Therapy (*Commission on Accreditation for Respiratory Care [CoARC]*)

College of Science

Chemistry (*American Chemical Society [ACS]*)

College of Social & Behavioral Sciences

Social Work (*Council on Social Work Education [CSWE]*)

Division of Student Affairs

Nontraditional Student Hourly Childcare Program (*National Association for the Education of Young Children*)

Catalog Information

The Weber State University catalog is maintained by the Registrar's Office based on approved curricula. Although some areas of information are covered in detail, much of the content is presented in a general way. The catalog is not to be considered a binding contract between Weber State and any student or other institution. Weber State reserves the right to change its regulations or course offerings as conditions require during the period of any student's attendance. Students should refer to the official schedule of classes online which is available before and during registration each semester.

Assessment at WSU

WSU routinely conducts campus-based studies of student attitudes, student achievement, student satisfaction, and personal, professional and career development. These studies are grouped under the heading of student outcomes assessment. Each WSU student is expected to participate in outcomes assessment. While every student is not selected for participation in every activity, it is likely that an individual student will be involved in one or more assessment activities during the college years. It is only through cooperative participation in the assessment process that WSU can better understand itself and better serve its students.

As well, every academic program assesses student learning for both formative and summative assessment purposes. This assessment is generally embedded in the curriculum, but may also utilize outside exams, internships, and portfolios.

For more information on outcomes assessment at WSU, contact the Office of Institutional Effectiveness, Annex 2, 801-626-8586 <http://www.weber.edu/ie>.

Campus Safety and Nondiscrimination Policy Statement

CAMPUS SAFETY

Your safety while attending WSU is extremely important to us. The university maintains a campus alert system called Code Purple that provides notices about significant emergency situations on campus such as snow closures, power outages, gas leaks, or other potentially dangerous threats. We encourage you to sign-up for campus alerts at weber.edu/codepurple.

To report any crime or emergency, call **911** or University police at **801-626-6460**, 3734 Dixon Parkway, Ogden, UT 84408.

The university also publishes an Annual Security Report and Fire Safety Report which provides information about crime statistics, crime prevention, alcohol and drug policies, fire statistics, etc. These reports can be

found online at <http://weber.edu/clery>. You may request a physical copy by calling **801-626-7440** or visiting the WSUPD at 3734 Dixon Parkway, Ogden, UT 84408.

NONDISCRIMINATION

Weber State University is committed to protecting the personal rights of all students, employees, and visitors by providing an environment free from harassment and other forms of discrimination based upon race, color, national origin, pregnancy or pregnancy-related conditions, genetics, age (over 40), disability, religion, sex, sexual orientation, gender identity/expression, veteran, active military status, and other classifications protected by law. Such an environment is a necessary part of a healthy learning and working atmosphere. Unlawful discrimination undermines human dignity and the sense of community WSU seeks to foster.

Discrimination and harassment are illegal and specifically prohibited by the constitutions, statutes, precedents and regulations of the United States and Utah. It is the policy of the University to vigorously enforce these laws among its students and employees.

Individuals who believe any of these rights have been violated should review information available at the Office of Equal Opportunity website and in PPM 3-32 Discrimination Harassment and Sexual Misconduct including Title IX.

Discrimination and harassment complaints or those who need assistance with reasonable accommodations may contact:

Executive Director of OEO
OEO@weber.edu
801-626-6239 or 801-626-6240
Miller Administration Building, Room 102,
3850 Dixon Parkway, DEPT. 1022,
Ogden, UT 84408-1022

Note that persons who participate in this grievance procedure in good faith are protected against retaliation for doing so.

Questions may also be directed to:

1) Utah Antidiscrimination and Labor Division
P.O. Box 146630
Salt Lake City, UT, 84114 6630
Street Address:
160 East 300 South, 3rd Floor,
Salt Lake City, UT 84111
Phone: 801-530-6801
Email: discrimination@utah.gov

2) Equal Employment Opportunity Commission
Phoenix District EEOC Office
3300 North Central Avenue, Ste. 690
Phoenix, AZ 85012-2504
Phone: 602-640-5000
Fax: 602-640-5071

3) Office for Civil Rights
Denver Office
U.S. Department of Education
Cesar E. Chavez Memorial Building
1244 Speer Boulevard, Suite 310

Denver, CO 80204 3582
Telephone: 303-844-5695
Facsimile: 303-844-4303
Email: OCR.Denver@ed.gov

Sexual harassment is a type of discriminatory harassment involving unwelcome conduct directed against persons based on their sex, sexual orientation or gender identity/expression which is prohibited by WSU. Sexual harassment includes unwelcome sexual advances, requests for sexual favors or other verbal or nonverbal conduct of a sexual nature, including potentially criminal conduct such as rape, sexual assault, sexual exploitation, dating violence, domestic violence and stalking. Sexual violence is a severe form of sexual harassment. Individuals who experience or become aware of any form of violence, sexual violence, or sexual harassment are encouraged to immediately report such behaviors. To report any emergency or to file a police report regarding these behaviors, call **911** or University police at **801-626-6460**, 3734 Dixon Parkway, Ogden, UT 84408. For help responding to non-emergency situations involving these behaviors, contact the Executive Director of OEO, OEO@weber.edu, Miller Administration Building, Room 102, 3850 Dixon Parkway, DEPT 1022, Ogden, UT 84408-1022, at **801-626-6239**, or a Survivor Advocate with the Women's Center at **801-626-6372**. For more information, including options, processes, and a list of on and off campus resources, go to: <http://www.weber.edu/safeatweber/>.

The university provides training materials regarding sexual assault, violence prevention, dating violence, domestic violence, stalking, alcohol abuse, and how to assist if you are a bystander. These materials are a helpful guide for safe practices on and off-campus. The university expects all students, faculty and staff to complete this training. Go to portalapps.weber.edu/everfiSSO/.

Exceptions to University Policy

All students at Weber State University have the right, with appropriate rationale, to request an exception to University policies or requirements. Help with preparing requests for exceptions can be obtained from the Registrar's Office, SC 101, 801-626-6061, or from the Assistant Dean of Students, Miller Administration Building, Room 317, 801-626-7256.

Student Code

Students attending the University are expected to adhere to certain standards as defined in the Weber State University Student Code, a copy of which is available from the Office of the Dean of Students (Miller Administration Building, Suite 317) or online at <http://weber.edu/ppm/6-22.html>.

Administration & Faculty

Jadelyn Abbott (2022) - Assistant Professor of Teacher Education. BA, Pacific University, 2013; MA, EdD, Boise State University, 2018, 2022.

Brenda Acor (2003) - Instructor of Mathematics. BA, Southern Utah University, 1990; MEd, Weber State University, 1999; MA, Brigham Young University, 2003.

Brock Adams (2017) - Assistant Professor of Professional Sales. BS, Dixie State University, 2009; MA, Southern Utah University, 2012; PhD, Louisiana State University, 2018.

Mark S. Adams (2014) - Associate Professor of Child & Family Studies. BS, Brigham Young University, 1996; MS, University of Arizona, 1999; PhD, Texas Tech University, 2005.

Shaun Adamson (2008) - Professor of Library Science. BA, MA, University of South Florida, 1994, 1996; PhD, Walden University, 2008.

Jude Yaw Agboada (2021) - Assistant Professor of Graphic Design. BA, Kwame Nkrumah University of Science and Technology, 2013; MFA, School of the Art Institute of Chicago, 2019.

Christina S. Aguilar (2017) - Instructor of Health and Physical Education. BS, MS, University of Connecticut, 2012, 2014.

David Aguilar-Alvarez (2015) - Department Chair of Exercise and Nutrition Sciences and Assistant Professor of Nutrition. BS, Technological Institute of Sonora, MS, PhD, University of Connecticut, 2012, 2014.

Nazneen Ahmad (2006) - Professor of Economics. BS, MS, Jahangirnagar University, 1994, 1996; MA, York University, 2000; MS, PhD, University of New Orleans, 2005.

Jishan Ahmed (2023) - Assistant Professor of Data Science and Applied Mathematics. BS, MS, University of Dhaka 2010, 2012; MA, Ball State University 2018; PhD, Bowling Green State University, 2023.

Jee Hae (Esther) Ahn (2022) - Assistant Professor of Piano. BM, MM, New England Conservatory, 2014, 2015; DMA, Eastman School of Music - University of Rochester, 2021.

Mahmud Akelbek (2010) - Associate Professor of Mathematics. BS, MS, Xinjiang University, 1996, 1999; PhD, University of Regina, 2008.

Melina Alexander (2005) - Professor of Teacher Education. BS, Weber State University, 1990; MS, Weber State University, 1996; PhD, Utah State University, 2005.

Abdulmalek Al-Gahmi (2017) - Assistant Professor of Computer Science. BS, Sana'a University, 1997; MS, PhD, New Mexico State University, 2002, 2008.

Anthony T. Allred (1996) - Professor Business Administration. BGS, Weber State University, 1984; PhD, Oklahoma State University, 1997.

Sarah C. Allred (2022) - Assistant Professor of Respiratory Therapy. BS, MS, Weber State University, 2019, 2021.

James Almeida (2023) - Assistant Professor of Latin American History. BBA, Boise State University, 2009; MA Florida International University, 2015; PhD, Harvard University, 2022.

Noël T. Alton (2020) - Assistant Professor of Web and User Experience, School of Computing. BS, MS, Brigham Young University, 2005, 2010; DS, University of Baltimore, 2019.

Clinton L. Amos (2013) - Associate Professor of Business Administration. BBA, Northeastern State University, 1999; MBA, Dallas Baptist University, 2002; PhD, University of North Texas, 2008.

Eric D. Amsel (1996) - Associate Provost: Academic Programs and Assessment; Brady Presidential Distinguished Professor and Professor of Psychology. BA, McGill University-Montreal Canada, 1979; MEd, Harvard Graduate-Cambridge, 1980; PhD, Columbia University, 1986.

Nicole A. Anderson (2020) - Assistant Professor of Computer Science. BS, MS, University of Iowa, 1998, 2000; PhD, University of Utah, 2007.

Jennifer S. Anderson (2014) - Department Chair and Associate Professor of Management. BA, MBA, University of Washington, 1990, 1999; PhD, University of Arizona, 2014.

Natalie M. Anderson (2021) - Instructor and Concurrent Enrollment Math Coordinator. BS, MS, University of Utah, 2014, 2017.

Sheila Anderson (2014) - Associate Professor of Child & Family Studies. BS, University of Utah, 1994; MEd, Weber State University, 2004; PhD, Utah State University, 2012.

Adrienne Andrews (2005) - Assistant Vice President for Diversity & Chief Diversity Officer. BA, University of Utah, 1993, 1996; MS, Minnesota State University, Mankato, 1997; MA, Rutgers, the State University of New Jersey, 2001.

Charlotte Andrus (2023)- Instructor Nursing. BSN, MSN, Weber State University, 2021, 2023.

Rachel E. Ardern (2017) - Assistant Professor of Nursing. BN, Queensland University of Technology, 1997; MN, University of Southern Queensland, 2007; DHS, Queensland University of Technology, 2022.

Tariq Mohammad Arif (2019) - Assistant Professor of Mechanical Engineering. BSc, Bangladesh University of Engineering and Technology, 2005; M.Sc., University of Tokushima, 2011; PhD, New Jersey Institute of Technology, 2017.

John C. Armstrong (2003) - Professor of Physics. BS, University of Iowa, 1998; MS, PhD, University of Washington, 2001, 2003.

Kristen J. Arnold (2010) - Associate Professor of Interior Design. BS, MEd, Weber State University, 2005, 2008.

Michelle L. Arnold (2002) - Associate Professor of Physics. BS, University of Winnipeg, 1996; PhD, McMaster University, 2000.

Tony J. Asay (2008) - Instructor of Developmental English. BA, Brigham Young University, 2004; MA, Weber State University, 2008.

Isabel Asensio (2006) - Department Chair of Foreign Languages and Professor of Spanish and Translation. BA, University of Extremadura, 1999; MA, University of Kentucky, 2001; MA, PhD, Vanderbilt University, 2004, 2006.

Aaron L. Ashley (2006) - Department Chair and Professor of Psychology. BA, University of North Carolina at Greensboro, 1995; MA, Ball State University, 2000; PhD, University of Memphis, 2004.

Michael K. Ault (2016) - Associate Professor of Communication. BS, MA, Southern Utah University, 2007, 2012; PhD, University of Oklahoma 2016.

Rachel M. Bachman (2013) - Associate Professor of Mathematics. BS, The Pennsylvania State University, 2007; MA, EdD, Binghamton University, 2009, 2013.

Ashley D. Badali (2020) - Instructor of Interior Design. BS, Weber State University, 2017; MEd, Western Governors University, 2018.

Elizabeth A. Balgord (2015) - Assistant Professor of Earth and Environmental Sciences. BS, University of Wisconsin, 2009; MS, Idaho State University, 2011; PhD, University of Arizona, 2015.

Robert G. Ball (2015) - Associate Professor of Computer Science. BS, MS, Brigham Young University, 2002, 2003; PhD, Virginia Polytechnic Institute and State University, 2006.

Suzanne H. Ballingham (2018) - Instructor of Nursing. BSN, University of Phoenix, 1996; MSN-FNP, Westminster College, 2001.

Andrea M. Baltazar (2017) - Assistant Professor of Communication. BA, University of California, 2008; MFA, Pepperdine University, 2017.

Mikelle Barberi-Weil (2015) - Instructor of Professional Sales. BS, Weber State University, 2014; MS, University of Southern California, 2018, PhD, Pepperdine University, 2023.

Evan T. Barlow (2016) - Assistant Professor of Supply Chain Management. BS, Brigham Young University, 2004; MS, University of Texas, 2007; PhD, Northwestern University, 2016.

Joyce Marie Barra (2010) - Instructor of Nursing. BS, Northern Illinois University, 1980; MS, PhD, University of Utah, 1992, 2005.

Steven B. Bateman (2017) - Executive in Residence and Instructor of Health Administration. BA, Weber State College, 1982; MBA, Utah State University, 1985.

Vincent C. Bates (2012) - Professor of Teacher Education. BM, MM, Brigham Young University, 1992, 1996; PhD, University of Arizona, 2005.

Diego Rey Batista (2011) - Professor of Spanish. BA, Brigham Young University, 2001; MA, California State University Fullerton, 2005; PhD, University of Oklahoma, 2011.

Micah J. Bauer (2016) - Assistant Professor of Visual Arts & Design. BFA, Brigham Young University, 2003; MFA, Utah State University, 2015.

Mark R. Baugh (2004) - Department Chair and Professor of Manufacturing and Systems Engineering. BS, University of Utah, 1990; MS, Utah State University, 1996.

Bruce K. Bayley (2007) - Professor of Criminal Justice. BS, MS, University of Utah, 1997, 1999; PhD, Utah State University, 2002.

Nicole A. Beatty (2012) - Associate Professor of Library Science and Arts and Humanities Librarian. BA, University of Northern Colorado, 1998; MA, University of Illinois, 2001; MLS, Indiana University, 2007.

Steven Kendal Beazer (2016) - Associate Professor of Medical Laboratory Sciences. BS, MHA, Weber State University, 2010, 2014.

Daniel Bedford (2002) - Brady Presidential Distinguished Professor and Professor of Geography. BA, University of Oxford, 1990; MS, PhD, University of Colorado, 1992, 1997.

Craig N. Bergeson (1999) - Professor of Spanish. BA, Weber State University, 1991; MA, University of Nevada, 1993; PhD, University of Colorado, 1998.

Henry Laine Berghout (2000) - Associate Dean of College of Science and Professor of Chemistry. AA, BS, Weber State University, 1991, 1992; PhD, University of Wisconsin-Madison, 1998.

Tamara P. Berghout (2013) - Associate Professor of Nursing. BS, MSN, Weber State University, 2007, 2011; EdD, Walden University, 2019.

Andressa Bertolazzo (2023) - Assistant Professor of Chemistry. B.Sc., MS, Universidade, Federal do Parana 2007, 2010; PhD, Universidade Federal do Rio Grande do Sul, 2014.

Javier Álvaro Berzal Rojo (2021) - Instructor of Spanish. MA, Universidad Rey Juan Carlos, Spain, 2007; MA, Universitat Oberta de Catalunya, Spain, 2011.

Anne M. Bialowas (2008) - Department Chair and Professor of Communication. BA, University of Puget Sound, 1998; MA, California State University Sacramento, 2002; PhD, University of Utah, 2009.

Mark O. Bigler (1999) - Professor of Social Work. BA, MSW, University of Utah, 1985, 1987; PhD, New York University, 1992.

Dustin S. Birch (2011) - Professor of Mechanical Engineering. BS, MS, University of Utah, 1997, 2000; PhD, Colorado State University, 2021.

Timothy E. Black (2021) - Assistant Professor of Psychology. BA, Drury University, 2013; MS, PhD, Oklahoma State University, 2019, 2021.

Barbara Blair (2023) - Assistant Professor of Organizational Behavior. BA, Brown University, 1983; MBA, Dartmouth College, 1989; PhD, Claremont Graduate University, 2016.

Joseph F. Blake (2019) - Assistant Professor of Dance. BFA, University of Utah, 2003; MFA, University of Washington, 2017.

Barrett A. T. Bonella (2013) - Associate Professor of Social Work. BS, Westminster College, MSW, MBA, PhD, University of Utah, 2006, 2008, 2011.

Timothy E. Border (2008) - Associate Professor of Professional Sales. BS, Weber State College, 1986; MS, Utah State University, 1988.

Kellie Bornhoft (2023) - Assistant Professor of Art. BFA, Watkins College of Arts, Design & Film, 2013; MFA, The Ohio State, 2019.

Eric W. Bottelberghe (2021) - Instructor of Nursing. BA, Utah State University, 2011; BS, MSN, Weber State University, 2015, 2018.

Monica Bottelberghe (2015) - Instructor of Nursing. BSN, Weber State University, 2012; MSN, Western Governors University, 2014.

Katherine Bowman (2023) - Assistant Professor of Chemistry. BS, Brigham Young University, 2015; PhD, University of Utah, 2020.

Randall J. Boyle (2015) - Professor of Management Information Systems. BS, MPA, Brigham Young University, 1998, 2000; PhD, Florida State University, 2003.

Rebecka Brasso (2018) - Associate Professor of Zoology. BS, University of North Carolina, 2004; MS, The College of William and Mary, 2007; PhD, University of North Carolina, 2014.

Ivy M. Brenneman (2022) - Instructor of Visual Arts. BFA, Brown University, 2015; MFA, Indiana University, 2022.

Delroy A. Brinkerhoff (1996) - Professor of Computer Science. BS, Brigham Young University, 1984; MS, PhD, Utah State University, 1996, 2010.

Mackenzie K. Bristow (2020) - Instructor of Computer Science. BS, Weber State University, 2019.

Shawn D. Broderick (2016) - Associate Professor of Math Education. BA, Arizona State University, 2003; MA, Brigham Young University, 2009; PhD, University of Georgia, 2013.

Brady M. Brower (2007) - Professor of History. BA, University of Idaho, 1993; MA, University of Colorado, 1996; PhD, Rutgers University, 2005.

Fon R. Brown (2010) - Department Chair and Professor of Electrical Engineering. BS, Utah State University, 1984; MS, Brigham Young University, 1989; PhD, Utah State University, 1998.

Karen Bruestle (2001) - Professor of Performing Arts. BM, MFA, University of Utah, 1985, 1990; DMA, Arizona State University, 1997.

Jeremy G. Bryson (2013) - Associate Professor of Geography. BS, Brigham Young University, 2004; MS, Montana State University, 2006; PhD, Syracuse University, 2010.

J. Samuel Bryson (2020) - Instructor of Music. BM, Utah State University, 2009; MM, Northern Arizona University, 2012.

Amy J. Buckway (2014) - Associate Professor of Nursing. BS, Weber State University, 1997; MSN, University of Phoenix, 2004; EdD, Walden University, 2019.

Brandon J. Burnett (2015) - Department Chair and Assistant Professor of Chemistry. BS, Weber State University, 2009; PhD, University of Nebraska, 2013.

Justin V. Burr (2020) - Assistant Professor of Health Sciences. BS, Weber State University, 2012; DPT, New York University, 2016.

J. Russell Burrows (1993) - Professor of English. BA, Weber State College, 1977; MA, Brigham Young University, 1982; PhD, Bowling Green State University, 1987.

Russell C. Butler (2016) - Instructor of Construction and Building Sciences. BS, Brigham Young University, 1994; MBA, Brigham Young University, 2001.

David R. Byrd (2008) - Professor of Teacher Education. BA, Brigham Young University, 1989; MA, University of Arizona, 1993; PhD, University of Iowa, 2007.

Kathleen E. P. Cadman (2013) - Associate Professor of Nursing. BS, MSN, Western Governors University, 2012, 2013; PhD, University of Nevada, 2018.

Chloe Cai (2008) - Professor of Mathematics. BS, Hebei Normal University, 1997; MS, PhD, West Virginia University, 2004, 2008.

Ryan F. Cain (2018) - Instructor of Teacher Education. BA, University of Buffalo, 2001; MAT, Queens College, 2006; PhD, Utah State University, 2019.

Kimberlee Caldwell (2014) - Assistant Professor of Dental Hygiene. BS, MEd, Weber State University, 2005, 2012.

Christy A. Call (2008) - Director of Honors and Assistant Professor of English. BA, MA, Weber State University, 1999, 2004; PhD, University of Utah, 2015.

Evan Call (2023) - Instructor of Microbiology. BS, MS, Utah State University, 1984, 1991.

Morgan Call (2023) - Instructor of Spanish. MA, Brigham Young University, 2008; BA, Weber State University, 2017.

Tracy L. Callahan (1995) - Professor of Performing Arts. BFA, Florida State University, 1982; MFA, University of Florida, 1987.

Carey L. Campbell (2008) - Associate Professor of Music. BM, Mars Hill College, 1996; MM, University of Texas-El Paso, 2001; MA, PhD, University of Minnesota, 2005, 2008.

Carol J. Campbell (2012) - Instructor of Chemistry. BS, Northern Arizona University; PhD, Utah State University, 1987,

Darcy Carter (2011) - Department Chair, Director of Master of Health Administration Program and Associate Professor of Health Administrative Services. BS, MHA, Weber State University, 2007, 2010; DHSc, A.T. Still University, 2016.

Lisa T. Carver (2022) - Instructor of Nursing. BS, Weber State University, 2003; MSN, University of Utah, 2017.

John F. Cavitt (1999) - Brady Presidential Distinguished Professor and Professor of Zoology and Director of Undergraduate Research. BS, MS, Illinois State University, 1990, 1993; PhD, Kansas State University, 1998.

Valerie Chambers (2017) - Assistant Professor of Accounting & Taxation. BPAcc, Oklahoma Baptist University, 2005; MACC, PhD, Arizona State University, 2010, 2017.

Julian D. Chan (2011) - Professor of Mathematics. BS, University of Washington, 2005; MS, PhD, University of Utah, 2007, 2011.

Rachel Child (2023) - Instructor of Business Administration. MBA, Weber State University, 2015.

Matthew P. Choberka (2005) - Professor of Art. BA, Columbia College, 1993; MFA, Indiana University, 2005.

Rex T. Christensen (2008) - Associate Professor of Radiologic Sciences. BS, MHA, Weber State University, 1993, 2008.

Arpit Christi (2019) - Assistant Professor of Computer Science. BE, Dharmsinh Desai University, 2004; MS, Sacramento State University, 2007; PhD, Oregon State University, 2019.

Matthew Christiansen (2023) - Instructor of Developmental Mathematics. BA, University of Northern Colorado, 2001; MA, University of Northern Colorado, 2005.

Brian M. Chung (2007) - Professor of Zoology. BA, PhD, University of Calgary, 1995, 2001.

Victor S. Clampitt (2017) - Assistant Professor of Radiologic Sciences. BS, MSRS, Weber State University, 1989, 2013.

Daniel N. Clark (2017) - Assistant Professor of Microbiology. BS, Weber State University, 2007; PhD, Brigham Young University, 2013.

Heather J. Clark (2011) - Associate Professor of Nursing. BSN, MSN, Weber State University, 2009, 2011, DNP, Grand Canyon University, 2021.

Jonathan B. Clark (1998) - Professor of Zoology. BS, Bowling Green State University, 1981; PhD, Ohio State University, 1990.

Juan Carlos Claudio (2022) - Instructor of Dance. BS, Utah State University, 1995; MFA, University of Utah, 2009.

Amie Chere Clawson (2022) - Instructor of Medical Laboratory Sciences. BS, Weber State University, 2007.

Jeffrey A. Clements (2015) - Assistant Professor of Management Information Systems. BS, MS, University of Utah, 2008, 2010; PhD, Florida State University, 2014.

Laurie S. Coburn (2018) - Assistant Professor of Radiologic Sciences. BS, MSRS, Weber State University, 2013, 2016; EdD, A.T. Still University, 2019.

Mihail Cocos (2007) - Associate Professor of Mathematics. BS, University of Bucharest, 1994; MS, University of New Mexico, 1998; PhD, University of British Columbia, 2003.

Alysia Cohen (2018) - Assistant Professor of Athletic Training. BS, Oregon State University, 2002; MA, Boise State University, 2005; MPH, PhD, Oregon State University, 2015.

James I. Cohen (2020) - Assistant Professor, Plant Taxonomy. BS, University of Michigan, 2002; PhD, Cornell University, 2010.

Alex M. Collopy (2019) - Assistant Professor of Child & Family Studies. BS, PhD, The Pennsylvania State University, 2014, 2019.

George E. Comber (2000) - Professor of Manufacturing and Systems Engineering. BS, MS, Brigham Young University.

Nicola A. Corbin (2013) - Associate Professor of Communication. BA, Seton Hall University, 1999; MA, New York University, 2003; PhD, University of Georgia, 2013.

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Pene'e W. Stewart (2000) - Professor of Teacher Education. BS, PhD, Brigham Young University, 1975, 1986.

Brandon Stoddard (2017) - Instructor of Business Administration. BS, University of Utah, 2007; MS, Case Western Reserve University, 2011.

Laura K. Stott (2013) - Instructor of English. BA, Brigham Young University, 2001; MFA, Eastern Washington University, 2004.

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Janicke Stramer-Smith (2018) - Assistant Professor of Political Science. BA, University of Southern Denmark, 2000; MA, The American Graduate School of International Relations & Diplomacy, 2006; PhD, The University of Nevada, 2018.

Mahalingam Subbiah (1987) - Professor of English and Director of Master of Arts in English program. BS, Annamalai University-India, 1971; MA, Pachaiyappas College-India, 1978; PhD, Oklahoma State University, 1987.

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James A. Zagrodnik (2011) - Professor for Health, Physical Education and Recreation. BSA, University of Georgia, 2002, BSE, Augusta State University, 2005; MA, PhD, University of Georgia, 2007, 2011.

Lixuan (Grace) Zhang (2014) - Associate Professor of Management Information Systems. BA, Nankai University; MBA, MIS, University of Oklahoma; PhD, University of North Texas, 2006.

Fan Zhang (2023) - Assistant Professor of Costume Design. BA, Dalian Medical University China, 2010; MFA, University of Connecticut, 2014.

Yong Zhang (2012) - Assistant Professor of Computer Science. BE, ME, Harbin Institute of Technology, 1995, 1998; PhD, West Virginia University, 2006.

Xin Zhao (2022) - Assistant Professor of Clinical/Counseling Psychology. BS, Virginia Polytechnic Institute and State University, 2008; MS, PhD, Utah State University, 2012, 2016.

Ryan G. Zimmerman (2016) - Department Chair of Health, Physical Education and Recreation and Assistant Professor of Physical Education. BS, MEd, Utah State University, 2009, 2011; PhD, Springfield College, 2015.

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Emeriti Faculty

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Farhang Amiri (1984) - Professor Emeritus of Physics. BS, Tehran University, 1971; MS, Pars College, 1973; PhD, Florida State University, 1981.

Julianne K. Arbuckle (1993) - Professor Emerita of Psychology. BA, Weber State College, 1980; MEd, PhD, Brigham Young University, 1983, 1993.

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Sidney R. Ash (1970) - Professor Emeritus of Earth and Environmental Sciences. BA, Midland Lutheran College, 1951; BA, MA, University of New Mexico, 1957, 1961; PhD, University of Reading, England, 1966.

Lee W. Badger (1981) - Professor Emeritus of Mathematics. BA, University of Missouri, 1968; MA, PhD, University of Colorado, 1970, 1975.

Naseem A. Banerji (1993) - Professor Emerita of Art History. BA, BEd, MA, University of Calcutta, 1968, 1970, 1981; PhD, University of Iowa, 1993.

Norris R. Bancroft (1969) - Professor Emeritus of Psychology. BA, MA, PhD, University of South Dakota, 1964, 1966, 1968.

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Robert R. Beishline (1965) - Professor Emeritus of Chemistry. BS, MS, Brigham Young University, 1955, 1957; PhD, Penn State University, 1962.

Robert W. Belka (1970) - Associate Professor Emeritus of Foreign Languages. BA, Weber State College, 1966; MA, Tulane University, 1968; PhD, Brigham Young University, 1975.

F. A. (Bud) Belnap (1962) - Professor Emeritus of Health and Physical Education. BS, MS, Brigham Young University, 1961, 1962; PhD, University of New Mexico, 1983.

Nicole J. Berthelemy (2004) - Professor Emerita of Zoology. Maitrise, Doctorat de Troisieme Cycle, Universite d'Aix-Marseille, 1975, 1978; PhD, University of California, Davis, 1986.

Jewell (Judy) Bezoski (1985) - Instructor Specialist Emerita of Teacher Education. BS, Weber State College, 1972; MS, Utah State University, 1980.

Mark A. Biddle (1981) - Professor Emeritus of Visual Art and Design. BFA, MFA, Indiana State, 1977, 1981.

Georgine W. Bills (1987) - Professor Emerita of Health Sciences. BS, Weber State College, 1985; MBA, University of Utah, 1991; Registered Respiratory Therapist (RRT).

L. G. Bingham (1975) - Associate Professor Emeritus of Criminal Justice. BSL, University of Utah, 1951; JD, University of Utah, 1951.

James A. Bird (1978) - Professor Emeritus of Child and Family Studies. BS, MS, Brigham Young University, 1969, 1975; PhD, University of Utah, 1987.

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Richard H. Blake (1974) - Professor Emeritus of Teacher Education. BS, Brigham Young University, 1967; MS, University of Oregon, 1969; PhD, University of Utah, 1974.

Stephanie J. Bossenberger (1991) - Professor Emerita of Dental Hygiene. BS, Weber State University, 1980; MS, University of Utah, 1987.

Eugene G. Bozniak (1969) - Professor Emeritus of Botany. BS, MS, University of Alberta, 1963, 1966; PhD, Washington University, 1969.

Sharen A. Brady (1995) - Associate Professor Emerita of Nursing. BSN, University of Washington, 1971; MSN, University of Utah, 1994.

Hayle Buchanan (1965) - Professor Emeritus of Botany. BA, MA, Brigham Young University, 1951, 1953; PhD, University of Utah, 1960.

John A. Burkes (1979) - Professor Emeritus of Sales Technology. BS, MEd, Mississippi State University, 1961, 1973.

Keith R. Burnett (1969) - Professor Emeritus of Secondary Education. BS, Montana State University, 1956; MS, EdD, University of Utah, 1966, 1969.

Lloyd R. Burton (2000) - Professor Emeritus of Health Administrative Services. BA, MEd, University of Nebraska-Kearney, 1969, 1971; MHA, Baylor University, 1982; DM, Colorado Technical University; 1998.

Thomas R. Burton (1963) - Professor Emeritus of English. BS, MA, Brigham Young University, 1959, 1960; PhD, University of Washington, 1967.

Frances M. Butler (1999) - Professor Emerita of Teacher Education. BA, University of California, Berkeley, 1968; MEd, University of Southern Mississippi, 1996; EdD, University of Nevada, Las Vegas, 1999.

Shannon K. Butler (1984) - Professor Emerita of English. BA, MEd, University of Utah, 1971, 1973; DA, University of Michigan, 1977.

Paul G. Butterfield (1959) - Professor Emeritus of Adult Education. BS, Utah State University, 1952; MEd, Colorado State University, 1960; PhD, University of Wisconsin, 1965.

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Merlin G. Cheney (1965) - Professor Emeritus of English. BS, MA, Brigham Young University, 1961, 1966; PhD, Bowling Green University, 1971.

Wan Fu Chi (1969) - Professor Emeritus of Economics. BA, Chung Hsing University, 1962; PhD, Southern Illinois University, 1969.

Bruce P. Christensen (1989) - Associate Professor Emeritus of Business Administration. BS, PhD, University of Utah, 1969, 1984; MS, USAF Institute of Technology, 1977.

Evan J. Christensen (1968) - Assistant Professor Emeritus of Library Science. BS, Utah State University, 1959; MSLS, University of Illinois, 1961.

James C. Christian (1988) - Brady Presidential Distinguished Professor and Professor Emeritus of Performing Arts. BFA, University of Utah, 1976; MFA, Illinois State University, 1978.

William G. Clapp (1984) - Professor Emeritus of Computer and Electronics Engineering Technology. BS, San Diego State, 1971; MA, San Diego State, 1978; MA, Naval War College, 1994; EdD, Brigham Young University, 1987.

Stephen L. Clark (1967) - Professor Emeritus of Botany. BS, Weber State College, 1964; MS, Utah State University, 1967; PhD, Brigham Young University, 1980.

Larry Clarkson (2005) - Associate Professor Emeritus of Art. BFA, University of Utah, 1976; MFA, University of Illinois, 1981.

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Forrest C. Crawford (1977) - Professor Emeritus of Teacher Education. BS, Weber State College, 1975; MS, University of Utah, 1977; EdD, Brigham Young University, 1990.

Charles M. Crittenden (1967) - Professor Emeritus of Computer Science. BS, MS, EdD, Utah State University, 1962, 1968, 1980.

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Tamara R. Dahlkemper (1985) - Associate Professor Emerita of Nursing. ADN, Weber State College, 1981; BSN, University of Utah, 1983; MSN, University of Phoenix, 2001.

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Ron J. Deckert (2003) - Professor Emeritus of Botany. BSc, PhD, University of Guelph, 1995, 2000.

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James A. Dolph (1969) - Professor Emeritus of History. BA, Knox College, 1961; MA, University of Denver, 1965; PhD, University of Massachusetts, 1975.

Larry W. Doman (1972) - Professor Emeritus of Foreign Languages. BA, University of Utah, 1964; PhD, St. Louis University, 1972.

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Diane K. Leggett Fife (1999) - Associate Professor Emerita of Nursing. LPN, AS, Weber State College, 1973, 1974; BS, Weber State University, 1998; MSN, University of Phoenix, 2000; PhD, University of Utah, 2010.

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Melba J. Glade (1962) - Professor Emerita of Elementary Education. BA, University of Utah, 1932; MS, University of Southern California, 1935; EdD, University of Utah, 1972.

Gary M. Godfrey (1985) - Professor Emeritus of Foreign Languages and Literature. BA, Weber State College, 1967; MA, PhD, University of Washington, 1969, 1974.

Linda P. Gowans (1990) - Professor Emerita of Teacher Education. BA, Utah State University, 1969; MS, University of Oregon, 1980; PhD, University of Utah, 1988.

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Richard T. Grow (1976) - Professor Emeritus of Psychology. BS, Utah State University, 1964; MA, University of Utah, 1967; EdD, Utah State University, 1969.

Jeff Grunow (2002) - Associate Professor Emeritus of Emergency Care and Rescue. BSN, Widener University, 1976; MSN, University of Pennsylvania, 1980.

Nancy N. Haanstad (1987) - Associate Professor Emerita of Political Science. BA, Augustana College, 1966; MA, PhD, University of Utah, 1976, 1984.

JoAnn C. Hackley (1965) - Associate Professor Emerita of Nursing. BS, University of Utah, 1965; MS, Brigham Young University, 1983.

Susan Hafen (2003) - Professor Emerita of Communication. BS, MEd, Brigham Young University, 1974, 1978; PhD, Ohio University, 1995.

Kirk D. Hagen (1993) - Brady Presidential Distinguished Professor and Professor Emeritus of Mechanical Engineering and Coordinator of Pre-Engineering Program. BS, Weber State College, 1977; MS, Utah State University, 1980; PhD, University of Utah, 1989.

Edward J. Hahn (2005) - Associate Professor Emeritus of Library Instruction. BS, Strayer University, 1998; MS, University of Pittsburgh, 2004.

Richard D. Halley (1981) - Professor Emeritus of Communication. BS, MA, Bowling Green State University, 1964, 1965; PhD, Ohio University, 1972.

Carol Hannan (1980) - Professor Emerita of Nursing. BSN, University of Utah, 1979; MSN, Brigham Young University, 1984; PhD, University of Utah, 1994.

Cheryl M. Hansen (1990) - Professor Emerita of French. BA, Weber State College, 1983; PhD, University of Utah, 1997.

Carol Hansen (1986) - Professor Emerita of Library Science. BA, Johnston College, University of Redlands, 1973, MS; University of Southern California, 1975.

Norma J. Hansen (1965) - Professor Emerita of Nursing. BS, MS, PhD, University of Utah, 1963, 1965, 1970.

Rodney A. Hansen (2004) - Professor Emeritus of Nutrition. BS, Idaho State University, 1986; MS, PhD, Colorado State University, 1993, 2003.

Verne W. Hansen (1987) - Associate Professor Emeritus of Electronics Engineering Technology. BS, ME, Brigham Young University, 1972, 1976.

Vicky S. Hansen (2015) - Instructor Emerita of Nursing. MSN, University of Washington, 2004.

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Wynn J. Harrison (1975) - Professor Emeritus of Radiologic Sciences. BS, MEd, Weber State College, 1979, 1980.

David G. Hart (1972) - Associate Professor Emeritus of Computer Science. BA, University of Utah, 1967; MS, Rensselaer Polytechnic Institute, 1972.

W. Bruce Haslam (1967) - Professor Emeritus of Psychology. BA, MA, PhD, Brigham Young University, 1961, 1966, 1970.

David S. Havertz (1965) - Professor Emeritus of Zoology. BS, MS, PhD, University of Utah, 1956, 1957, 1962.

Patricia P. Henry (1967) - Professor Emerita of Mathematics. BS, MS, PhD, University of Utah, 1960, 1965, 1972.

Kathleen M. Herndon (1989) - Professor Emerita of English. BA, Willamette University, 1969; MAT, Oregon College of Education, 1973; EdD, Vanderbilt University, 1988.

Warren R. Hill (1990) - Dean Emeritus of the College of Engineering, Applied Science & Technology and Professor Emeritus of Electronics Engineering. BS, University of Nebraska, 1963; MS, Wayne State University, 1968; Doctor of Engineering, University of Detroit, 1975.

Richard G. Hills (1964) - Professor Emeritus of Physics. BS, PhD, University of Utah, 1958, 1965.

Robert B. Hilton (1999) - Associate Professor Emeritus of Computer Science. BA, Weber State University, 1983; MS, Regis University, 2005.

William E. Hoggan (1987) - Assistant Professor Emeritus of Computer Science. BS, MS, University of Utah, 1964, 1967.

Robert M. Hogge (1989) - Professor Emeritus of English. BA, MA, Brigham Young University, 1967, 1969; PhD, University of Arizona, 1980.

Jay Hollingsworth (1965) - Associate Professor Emeritus of Health, Physical Education, Recreation, and Dance. BS, University of Southern California, 1963; MS, University of Utah, 1970; EdD, University of Missouri, 1975.

Ronald L. Holt (1986) - Professor Emeritus of Anthropology. BA, MA, Texas Tech University, 1974, 1976; PhD, University of Utah, 1987.

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Glen W. Howard (1973) - Professor Emeritus of Criminal Justice. BS, MSW, PhD, University of Utah, 1960, 1963, 1972.

Debra Huber (2008) - Professor Emerita of Nursing. AS, Weber State College, 1973; BS, University of Utah, 1977; MSN, Brigham Young University, 1988; PhD, University of Utah, 1998.

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Kendall H. Hyde (1969) - Professor Emeritus of Mathematics. BS, University of Wyoming, 1959; MS, PhD, University of Utah, 1962, 1969.

Robert W. Irvine (1968) - Assistant Professor Emeritus of Mathematics. BA, MA, University of Utah, 1962, 1966.

James C. Jacobs (1985) - Professor Emeritus of Art. BFA, Jacksonville University, 1978; MFA, East Carolina University, 1982.

Gordon B. James (1981) - Professor Emeritus of Health Education. BS, MEd, PhD, University of Utah, 1968, 1975, 1977.

Helen J. James (1971) - Professor Emerita of Chemistry. BS, PhD, University of Nebraska, 1965, 1970.

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Raj Kumar (1974) - Professor Emeritus of Communication. BS, MS, Agra University, 1951, 1953; MEd, Government Pedagogical Institute, Allahabad, India, 1955; MA, Kent State University, 1971; PhD, Ohio University, 1989.

Ronald V. Ladwig (1982) - Professor Emeritus of Theatre Arts. BA, University of Denver, 1960; MA, California State University, 1967; PhD, Bowling Green State University, 1978.

LaRae Larkin (1991) - Associate Professor Emerita of History. BS, Brigham Young University, 1963; MS, Utah State University, 1976; PhD, University of Utah, 1990.

Lael Larsen (1973) - Assistant Professor Emerita of Nursing. BS, University of Utah, 1953; MSN, Brigham Young University, 1983.

Joanne L. Lawrence (1990) - Professor Emerita of Performing Arts. BA, University of Akron, 1977; MFA, University of North Carolina, 1987.

Shirley A. Leali (1993) - Professor Emerita of Teacher Education. BA, PhD, University of Denver; MA, University of Colorado.

Larry W. Leavitt (1984) - Professor Emeritus of Design Engineering Technology. BS, MS, Brigham Young University, 1973, 1985.

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Jim W. Lochner (1970) - Professor Emeritus of Health and Physical Education. BA, Colorado State College, 1962; MA, Adams State College, 1964; EdD, University of Northern Colorado, 1969.

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David R. Lynch (1999) - Professor Emeritus of Criminal Justice. BA, Brigham Young University, 1981; JD, Brigham Young University Law School, 1984; MA, PhD, State University of New York at Albany, 1994, 1996.

James R. MacBeth (1965) - Professor Emeritus of Visual Arts. BS, MFA, University of Utah, 1958, 1965.

James E. Macdonald (1982) - Professor Emeritus of Business Administration. BS, Eastern Illinois University, 1972; PhD, MBA/JD, Indiana University, 1980, 1981.

Kathryn L. MacKay (1988) - Professor Emerita of History. BA, University of California at Los Angeles, 1968; MA, PhD, University of Utah, 1973, 1987.

Laura G. MacLeod (1998) - Associate Professor Emerita of Web and User Experience. BS, Emporia State University, 1978; MS, Southwest Missouri State University, 1983; PhD, Northern Illinois University, 1990.

Susan Makov (1977) - Professor Emerita of Art. BFA, Syracuse University, 1974; Diploma, University of Brighton, 1975; MFA, State University of New York at Buffalo, 1977.

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Thomas J. Mathews (1996) - Professor Emeritus of Spanish. BA, Weber State University, 1981; MA, Middlebury College, 1984; PhD, University of Delaware, 1992.

David J. Matty (2011) - Professor Emeritus of Earth and Environmental Sciences. BS, Central Michigan University, 1977; MA, Portland State University, 1980; PhD, Rice University, 1984.

John C. (Jack) Mayhew, Jr. (2001) - Professor Emeritus of Teacher Education. BS, Plymouth State College, 1976; MS, PhD, University of Utah, 1994, 2001.

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Donald C. McCormick (1970) - Associate Professor Emeritus of Anthropology. BS, Brigham Young University, 1961; PhD, University of California-Berkeley, 1973.

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Richard E. McDermott (1989) - Professor Emeritus of Accounting & Taxation and Healthcare Administration. BS, Brigham Young University, 1969; MS, University of Colorado, 1971; PhD, Oklahoma State University, 1984.

Chloe D. Merrill (1979) - Professor Emerita of Child and Family Studies. AS, College of Eastern Utah, 1976; BS, MS, Utah State University, 1977, 1979; PhD, Colorado State University, 1984.

Jimmie D. Merrill (1968) - Professor Emeritus of Education. BS, MS, Brigham Young University, 1956, 1967; EdD, University of Oregon, 1968.

Robert S. Mikkelsen (1955-60, 1965) - Professor Emeritus of English. BA, MA, PhD, University of Utah, 1950, 1953, 1971.

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Judith P. Mitchell (1984) - Professor Emerita of Teacher Education. BA, Stanford University, 1953; BS, Weber State College, 1973; MEd, Utah State University, 1975; PhD, University of Utah, 1981.

Monica G. Mize (1994) - Professor Emerita of Physical Education. BS, Indiana State University, 1972; MS, Eastern Illinois University, 1973; PhD, Southern Illinois University, 1979.

Pamela A. Molen (1981) - Associate Professor Emerita of Nursing. BS, California State University-Sonoma, 1976; MSN, University of California-San Francisco, 1978.

Steven A. Moss (1964) - Associate Professor Emeritus of Mathematics. BS, MS, University of Utah, 1957, 1959; MA, University of Illinois, 1964.

C. Thomas Musgrave (1969) - Professor Emeritus of Psychology. BS, University of Utah, 1957; MS, Utah State University, 1965; EdD, Utah State University, 1976.

Karen G. Nakaoka (1997) - Professor Emerita of Microbiology. BS, Ohio University, 1976; PhD, Ohio State University, 1981.

Vicki S. Napper (1999) - Professor Emerita of Teacher Education. BA, Weber State College, 1982; MS, PhD, Utah State University, 1991, 1997.

Mark J. Nelson (1973) - Professor Emeritus of Business Administration. BS, Brigham Young University, 1962; MBA, PhD, University of Oregon, 1964, 1969.

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Kathryn T. Newton (2008) - Professor Emerita of Health Sciences. BS, Utah State University, 1980; MS, PhD, University of Utah, 2001, 2008.

Leonard A. Nicholas (1963) - Associate Professor Emeritus of Information Systems & Technologies. BS, Weber State College, 1967; MS, Colorado State, 1970.

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Leonard Gary Nielsen (1977) - Professor Emeritus of Medical Laboratory Sciences. BS, Metropolitan State College, 1972; MS, University of Utah, 1977.

Karen E. Nielsen (1976) - Professor Emerita of Secondary Education. BS. University of Utah, 1967; MEd, EdD, Brigham Young University, 1972, 1979.

Michael D. Norman (1981) - Professor Emeritus of Criminal Justice. BA, Western Washington University, 1969; MA, EdD, University of Northern Colorado, 1978, 1980.

Clifford Nowell (1988) - Professor Emeritus of Economics. BA, MA, PhD, University of Wyoming, 1978, 1980, 1988.

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Robert K. Okazaki (1998) - Professor Emeritus of Zoology. BA, University of California-Berkeley, 1971; MA, San Francisco State University, 1976; PhD, University of California-Santa Barbara, 1988.

Rick W. Orr (2000) - Professor Emeritus of Manufacturing and Systems Engineering . BS, MA, University of Utah, 1978, 1980; MS, Massachusetts Institute of Technology, 1985.

Dale A. Ostlie (1984) - Professor of Emeritus Physics. BA, St Olaf College, 1977; PhD, Iowa State University, 1982.

Lloyd Ott (1972) - Professor Emeritus of Professional Sales. BS, Southern Utah State College, 1968; MS, Utah State University, 1972.

H. Wayne Overson (1971) - Associate Professor Emeritus of Criminal Justice. BS, Weber State College, 1970; MS, Eastern Kentucky University, 1971; PhD, Claremont Graduate School, 1991.

Angelika Pagel (1986) - Professor Emerita of Visual Arts. BA, MA, University of California-Los Angeles, 1979, 1981; PhD, University of California-Berkeley, 1987.

Stacy E. Palen (2002) - Brady Presidential Distinguished Professor and Professor Emerita of Physics and Director of the Ott Planetarium. BA, Rutgers University, 1993; MS, PhD, University of Iowa, 1996, 1998.

Michael A. Palumbo (1982) - Professor of Music. BME, MA, University of Denver, 1967, 1971; DA, Ball State University, 1981.

Clayton Parkinson (1986) - Professor Emeritus of Health Sciences. DDS, Northwestern University, 1958; PhD, Utah State University, 1974.

Sharon B. Parkinson (1986) - Associate Professor Emerita of Social Work. BA, Southern Utah State College, 1982; MSW, University of Utah, 1986; EdD, Brigham Young University, 1990.

Joel C. Passey (1980) - Associate Professor Emeritus of Communication. BA, Utah State University, 1961; MA, University of Washington, 1969; PhD, University of Illinois, 1975.

Kathryn L. Payne (2000) - Associate Professor Emerita of Library Science. BA, MA, Washington University, St Louis, 1974, 1979; MA, PhD, University of Missouri, 1985, 1990.

A. Cordell Perkes (1979) - Professor Emeritus of Teacher Education. BS, MA, Utah State University, 1966, 1969; PhD, Ohio State University, 1973.

Levi S. Peterson (1965) - Professor Emeritus of English. BA, MA, Brigham Young University, 1958, 1960; PhD, University of Utah.

Ronald D. Peterson (1980) - Associate Professor Emeritus of Computer Science. BA, Weber State College, 1971; PhD, Cornell University, 1980.

Steven J. Peterson (2000) - Professor Emeritus of Construction and Building Sciences. BS, MBA, University of Utah, 1986, 1988.

June K. Phillips (1993) - Dean Emerita of the College of Arts and Humanities and Professor Emerita of Foreign Languages. BA, University of Pittsburgh, 1960; PhD, Ohio State University, 1974.

Paul D. Pitts (2000) - Associate Professor Emeritus of Teacher Education. BS, University of Utah, 1969; MEd, Utah State University, 1988; EdD, Brigham Young University, 1998.

Richard W. Pontius (2003) - Associate Professor Emeritus of Teacher Education. BA, MS, University of Wyoming, 1975, 1989; PhD, Ohio State University, 1993.

Sandra P. Powell (1990) - Associate Professor Emerita of Business Administration. BS, JD, MBA, PhD, University of Utah, 1967, 1977, 1986, 1992.

Judith P. Pratt (1990) - Associate Professor Emerita of Nursing. BS, Idaho State University, 1964; MSN, Brigham Young University, 1990.

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Victoria A. Ramirez (1999) - Professor Emerita of English. BA, MA, SUNY at Stony Brook, 1973, 1976; Postgraduate Diploma, St Andrews, Scotland, 1978; PhD, Binghamton University, NY, 1997.

Jack L. Rasmussen (2002) - Professor Emeritus of Teacher Education. BEd, Dipl in Ed, University of Lethbridge, 1977, 1987; MA, Gonzaga University, 1987; PhD, Brigham Young University, 1989.

T. R. Reddy (1966) - Professor Emeritus of Political Science. BA Honors, MA, University of Mysore, 1958, 1959; PhD, University of Kentucky, 1966.

Pamela Ann Rice (1984) - Associate Professor Emerita of Nursing. BS, Whitworth College, 1972; MS, Brigham Young University, 1993.

Franklin B. Richards (1984) - Professor Emeritus of Mathematics. BS, Rensselaer Polytechnic Institute, 1963; MS, Michigan State University, 1964; PhD, University of Wisconsin-Madison, 1970; LLB, University of Alberta, 1981.

Dick R. Rogers (1960) - Professor Emeritus of Mathematics. BS, MS, Utah State University, 1954, 1963; EdD, Oklahoma State University, 1971.

Brad L. Roghaar (1984) - Instructor Specialist Emeritus of English. BA, MA, University of Utah, 1974, 1980.

Stephen H. Russell (1991) - Professor Emeritus of Business Administration. BS, Brigham Young University, 1967; MS, Air Force Institute of Technology, 1974; PhD, Arizona State University, 1978.

Richard W. Sadler (1969) - Professor Emeritus of History. BS, MS, PhD, University of Utah, 1964, 1965, 1969.

Ty Sanders (1991) - Associate Professor Emeritus of Communication. BA, California State University, 1976; MA, Central Missouri University, 1990; PhD, University of Oregon, 2008.

Leland B. Sather (1970) - Professor Emeritus of History. BA, Augustana College, 1964; MA, University of Nebraska, 1967; PhD, University of California-Santa Barbara, 1975.

Allyson D. Saunders (2000) - Associate Dean for the College of Engineering, Applied Science & Technology and Professor Emerita of Network Technology and Business Multimedia. BS, Brigham Young University, 1979; MS, PhD, Utah State University, 1983, 1997.

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Randolph J. Scott (1978) - Associate Professor Emeritus of Communication. BS, Weber State College, 1973; MA, Northern Illinois University, 1975; PhD, University of Oregon, 1989.

Spencer L. Seager (1961) - Professor Emeritus of Chemistry. BS, PhD, University of Utah, 1957, 1962.

Gene A. Sessions (1976) - Brady Presidential Distinguished Professor and Professor Emeritus of History. BA, Utah State University, 1970; MA, PhD, Florida State University, 1972, 1974.

Sterling D. Sessions (1974) - Professor Emeritus of Business Administration. BA, Brigham Young University, 1949; MS, New York University, 1950; DBA, Harvard, 1962.

Donald K. Sharpes (1978) - Professor Emeritus of Education. BA, MA, Gonzaga University, 1959, 1961; MA, Stanford University, 1968; PhD, Arizona State University, 1969.

Patricia L. Shaw (1991) - Professor Emerita of Health Administrative Services. BS, College of St Scholastica, Duluth, MN, 1981; MEd, Weber State University, 1997; EdD, Northcentral University, 2016.

John R. Sillito (1977) - Professor Emeritus of Library Science. BS, MA, University of Utah, 1970, 1973, 1977.

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C. Jan Slabaugh (1975) - Professor Emerita of Interior Design Technology. BS, Utah State University, 1958; MS, Iowa State University, 1967.

Michael R. Slabaugh (1971) - Professor Emeritus of Chemistry. BS, Purdue, 1965; PhD, Iowa State University, 1970.

Richard W. Sline (1982) - Professor Emeritus of Communication. BA, Drake University, 1969; MS, Southern Illinois University, 1972; PhD, University of Utah, 1999.

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Molly M. Smith (1989) - Professor Emerita of Health Promotion and Human Performance. BS, University of Missouri, 1974; MS, University of Arizona, 1978; PhD, University of New Mexico, 1988.

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Robert B. Smith (1981) - Provost Emeritus. BS, Wheaton College, 1958; PhD, University of California Berkeley, 1962.

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Chris V. Soelberg (2004) - Associate Professor Emeritus of Construction and Building Sciences. BA, MPA, University of Utah, 1989.

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Stephen S. Stanford (1965) - Professor Emeritus of Sociology. BS, MS, Brigham Young University, 1950, 1951; PhD, University of Colorado, 1959.

Bud W. Stephenson (1967) - Associate Professor Emeritus of Psychology. BS, MS. Utah State University, 1962, 1973; PhD, University of Minnesota, 1982.

Morris R. Sterrett (1973) - Associate Professor Emeritus of Criminal Justice. BA, MS, Brigham Young University, 1967, 1969; MA, PhD, Claremont Graduate School, 1983, 1984.

Steven J. Peterson (2000) - Professor Emeritus of Construction and Building Sciences. BS, MBA, University of Utah, 1986, 1988.

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Jeffery D. Stokes (1985) - Professor Emeritus of Spanish. BA, Weber State College, 1975; MA, University of Utah, 1977; PhD, Indiana University, 1981.

Jerald T. Storey (1964) - Professor Emeritus of Management. BS, Brigham Young University, 1957; MBA, PhD, University of Utah, 1964, 1972.

James G. Swearingen (1985) - Professor Emeritus of Accounting. BS, MBA, University of Utah, 1971, 1972; PhD, University of Washington, 1982.

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Alden A. Talbot (1975) - Professor Emeritus of Telecommunications. BS, Weber State College, 1967; MS, Utah State University, 1969; PhD, University of Iowa, 1976.

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Blaine R. Thornock (1970) - Associate Professor Emeritus of Mechanical Engineering Technology. BS, MIE, Utah State University, 1961, 1979.

Roy D. Thornock (1982) - Professor Emeritus of Manufacturing Engineering Technology. BS, Utah State University, 1964; MS, Colorado State University, 1974.

Susan B. Thornock (1998) - Professor Emerita of Nursing. BSN, Weber State University, 1993; MS, University of Utah, 1998, EdD, Northcentral University, 2013.

Van M. Tinkham (1993) - Professor Emeritus of Performing Arts. BA, MA, Indiana University, 1973, 1975; MFA, Indiana University, 2003.

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E. K. Valentin (1984) - Professor Emeritus of Marketing and Business Administration. BS, MBA, PhD, University of Utah, 1970, 1971, 1979.

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W. Roy Van Orman (1977) - Associate Professor Emeritus of Gerontology. BS, Weber State College, 1964; MSW, University of Utah, 1967; MPA, University of Southern California, 1972; EdD, Brigham Young University, 1984.

Jane A. Van Valkenburg (1973) - Professor Emerita of Radiologic Sciences. BS, Weber State College, 1973; MEd, Weber State College, 1980; PhD, University of Utah, 1989.

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Peter J. Vernezze (1990) - Associate Professor Emeritus of Philosophy. BA, University of Wisconsin at Madison, 1982; MA, University of Illinois at Chicago, 1985; PhD, University of Washington, 1989.

Barbara A. Wachocki (1991) - Professor Emerita of Botany. BS, MS, PhD, Wayne State University, 1980, 1984, 1992.

Robert C. Wadman (1997) - Professor Emeritus of Criminal Justice. AA, Dan Diego City College, 1968; BS, MPA, Brigham Young University, 1970, 1975; DA, Idaho State University, 1998.

Wayne L. Wahlquist (1964) - Professor Emeritus of Geography. BA, MA, Brigham Young University, 1958, 1961; PhD, University of Nebraska, 1974.

Robert E. Wallentine (1963) - Professor Emeritus of Manufacturing Engineering Technology. BS, MS, Utah State University, 1959, 1970.

Leland A. Walser (1967) - Professor Emeritus of Foreign Languages. BA, MA, Brigham Young University, 1964, 1967; PhD, University of Utah, 1975.

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Wangari wa Nyatetu-Waigwa (1990) - Professor Emerita of Foreign Languages. BA, Université de Dijon, 1974; MA, PhD, University of Utah, 1983, 1989.

Joyce E. Wanta (1969) - Associate Professor Emerita of Respiratory Therapy. BS, EdS, University of Utah, 1961, 1980.

Margaret T. Waterfall (1962) - Associate Professor Emerita of Health, Physical Education, Recreation, and Dance. BS, MFA, University of Utah, 1962, 1968.

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Garth L. Welch (1964) - Professor Emeritus of Chemistry. BS, PhD, University of Utah 1959, 1963.

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Michael A. Beard (1972) - Professor Emeritus and Program Director of Clinical Laboratory Technician Program. BS, Utah State University, 1963; MS, University of Utah, 1970; EdD, Brigham Young University, 1979. SBB.

Robert R. Beishline (1965) - Professor Emeritus of Chemistry. BS, MS, Brigham Young University, 1955, 1957; PhD, Penn State University, 1962.

Robert W. Belka (1970) - Associate Professor Emeritus of Foreign Languages. BA, Weber State College, 1966; MA, Tulane University, 1968; PhD, Brigham Young University, 1975.

F. A. (Bud) Belnap (1962) - Professor Emeritus of Health and Physical Education. BS, MS, Brigham Young University, 1961, 1962; PhD, University of New Mexico, 1983.

Nicole J. Berthelemy (2004) - Professor Emerita of Zoology. Maitrise, Doctorat de Troisieme Cycle, Universite d'Aix-Marseille, 1975, 1978; PhD, University of California, Davis, 1986.

Jewell (Judy) Bezoski (1985) - Instructor Specialist Emerita of Teacher Education. BS, Weber State College, 1972; MS, Utah State University, 1980.

Mark A. Biddle (1981) - Professor Emeritus of Visual Art and Design. BFA, MFA, Indiana State, 1977, 1981.

Georgine W. Bills (1987) - Professor Emerita of Health Sciences. BS, Weber State College, 1985; MBA, University of Utah, 1991; Registered Respiratory Therapist (RRT).

L. G. Bingham (1975) - Associate Professor Emeritus of Criminal Justice. BSL, University of Utah, 1951; JD, University of Utah, 1951.

James A. Bird (1978) - Professor Emeritus of Child and Family Studies. BS, MS, Brigham Young University, 1969, 1975; PhD, University of Utah, 1987.

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Richard H. Blake (1974) - Professor Emeritus of Teacher Education. BS, Brigham Young University, 1967; MS, University of Oregon, 1969; PhD, University of Utah, 1974.

Stephanie J. Bossenberger (1991) - Professor Emerita of Dental Hygiene. BS, Weber State University, 1980; MS, University of Utah, 1987.

Eugene G. Bozniak (1969) - Professor Emeritus of Botany. BS, MS, University of Alberta, 1963, 1966; PhD, Washington University, 1969.

Sharen A. Brady (1995) - Associate Professor Emerita of Nursing. BSN, University of Washington, 1971; MSN, University of Utah, 1994.

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John A. Burkes (1979) - Professor Emeritus of Sales Technology. BS, MEd, Mississippi State University, 1961, 1973.

Keith R. Burnett (1969) - Professor Emeritus of Secondary Education. BS, Montana State University, 1956; MS, EdD, University of Utah, 1966, 1969.

Lloyd R. Burton (2000) - Professor Emeritus of Health Administrative Services. BA, MEd, University of Nebraska-Kearney, 1969, 1971; MHA, Baylor University, 1982; DM, Colorado Technical University; 1998.

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Frances M. Butler (1999) - Professor Emerita of Teacher Education. BA, University of California, Berkeley, 1968; MEd, University of Southern Mississippi, 1996; EdD, University of Nevada, Las Vegas, 1999.

Shannon K. Butler (1984) - Professor Emerita of English. BA, MEd, University of Utah, 1971, 1973; DA, University of Michigan, 1977.

Paul G. Butterfield (1959) - Professor Emeritus of Adult Education. BS, Utah State University, 1952; MEd, Colorado State University, 1960; PhD, University of Wisconsin, 1965.

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Merlin G. Cheney (1965) - Professor Emeritus of English. BS, MA, Brigham Young University, 1961, 1966; PhD, Bowling Green University, 1971.

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Timothy R. Conrad (1983) - Associate Professor of Emeritus English and English as a Second Language. BA, MA, Utah State University, 1976, 1983, PhD, Indiana University of Pennsylvania, 2000.

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Richard J. Dahlkemper (2002) - Associate Professor Emeritus of Health Administrative Services. BBA, University of Notre Dame; MBA, Indiana University, 1975; PhD, Walden University, 2008.

Tamara R. Dahlkemper (1985) - Associate Professor Emerita of Nursing. ADN, Weber State College, 1981; BSN, University of Utah, 1983; MSN, University of Phoenix, 2001.

Erika Daines (1989) - Professor Emerita of German. Diplom-Uebersetzer, University of Heidleberg, 1971.

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Richard K. DeMoss (1978) - Professor Emeritus of Automotive Technology. BS, MS, Utah State University, 1968, 1975.

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James A. Dolph (1969) - Professor Emeritus of History. BA, Knox College, 1961; MA, University of Denver, 1965; PhD, University of Massachusetts, 1975.

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Matthew J. Domek (2004) - Professor Emeritus of Microbiology. BS, Saint Mary's College, 1976; MA, California State University, 1980; PhD, Montana State University, 1985.

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James H. Foster (1975) - Professor Emeritus of Mathematics. BS, University of Notre Dame, 1964; MS, PhD, University of Wisconsin, 1969.

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Richard T. Grow (1976) - Professor Emeritus of Psychology. BS, Utah State University, 1964; MA, University of Utah, 1967; EdD, Utah State University, 1969.

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Kirk D. Hagen (1993) - Brady Presidential Distinguished Professor and Professor Emeritus of Mechanical Engineering and Coordinator of Pre-Engineering Program. BS, Weber State College, 1977; MS, Utah State University, 1980; PhD, University of Utah, 1989.

Edward J. Hahn (2005) - Associate Professor Emeritus of Library Instruction. BS, Strayer University, 1998; MS, University of Pittsburgh, 2004.

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Cheryl M. Hansen (1990) - Professor Emerita of French. BA, Weber State College, 1983; PhD, University of Utah, 1997.

Carol Hansen (1986) - Professor Emerita of Library Science. BA, Johnston College, University of Redlands, 1973, MS; University of Southern California, 1975.

Norma J. Hansen (1965) - Professor Emerita of Nursing. BS, MS, PhD, University of Utah, 1963, 1965, 1970.

Rodney A. Hansen (2004) - Professor Emeritus of Nutrition. BS, Idaho State University, 1986; MS, PhD, Colorado State University, 1993, 2003.

Verne W. Hansen (1987) - Associate Professor Emeritus of Electronics Engineering Technology. BS, ME, Brigham Young University, 1972, 1976.

Vicky S. Hansen (2015) - Instructor Emerita of Nursing. MSN, University of Washington, 2004.

Alma F. Harris (1973) - Professor Emeritus of Business Administration. BS, MS, Utah State University, 1963, 1972; PhD, Purdue University, 1973.

Wynn J. Harrison (1975) - Professor Emeritus of Radiologic Sciences. BS, MEd, Weber State College, 1979, 1980.

David G. Hart (1972) - Associate Professor Emeritus of Computer Science. BA, University of Utah, 1967; MS, Rensselaer Polytechnic Institute, 1972.

W. Bruce Haslam (1967) - Professor Emeritus of Psychology. BA, MA, PhD, Brigham Young University, 1961, 1966, 1970.

David S. Havertz (1965) - Professor Emeritus of Zoology. BS, MS, PhD, University of Utah, 1956, 1957, 1962.

Patricia P. Henry (1967) - Professor Emerita of Mathematics. BS, MS, PhD, University of Utah, 1960, 1965, 1972.

Kathleen M. Herndon (1989) - Professor Emerita of English. BA, Willamette University, 1969; MAT, Oregon College of Education, 1973; EdD, Vanderbilt University, 1988.

Warren R. Hill (1990) - Dean Emeritus of the College of Engineering, Applied Science & Technology and Professor Emeritus of Electronics Engineering. BS, University of Nebraska, 1963; MS, Wayne State University, 1968; Doctor of Engineering, University of Detroit, 1975.

Richard G. Hills (1964) - Professor Emeritus of Physics. BS, PhD, University of Utah, 1958, 1965.

Robert B. Hilton (1999) - Associate Professor Emeritus of Computer Science. BA, Weber State University, 1983; MS, Regis University, 2005.

William E. Hoggan (1987) - Assistant Professor Emeritus of Computer Science. BS, MS, University of Utah, 1964, 1967.

Robert M. Hogge (1989) - Professor Emeritus of English. BA, MA, Brigham Young University, 1967, 1969; PhD, University of Arizona, 1980.

Jay Hollingsworth (1965) - Associate Professor Emeritus of Health, Physical Education, Recreation, and Dance. BS, University of Southern California, 1963; MS, University of Utah, 1970; EdD, University of Missouri, 1975.

Ronald L. Holt (1986) - Professor Emeritus of Anthropology. BA, MA, Texas Tech University, 1974, 1976; PhD, University of Utah, 1987.

Diane S. Horne (1981) - Professor Emerita of Microbiology. BS, Mundelein College, 1966; PhD, Northwestern University, 1974.

Glen W. Howard (1973) - Professor Emeritus of Criminal Justice. BS, MSW, PhD, University of Utah, 1960, 1963, 1972.

Debra Huber (2008) - Professor Emerita of Nursing. AS, Weber State College, 1973; BS, University of Utah, 1977; MSN, Brigham Young University, 1988; PhD, University of Utah, 1998.

Pamela E. Hugie (1989) - Associate Professor Emerita of Nursing. BS, MS, University of Utah, 1971, 1993.

Kendall H. Hyde (1969) - Professor Emeritus of Mathematics. BS, University of Wyoming, 1959; MS, PhD, University of Utah, 1962, 1969.

Robert W. Irvine (1968) - Assistant Professor Emeritus of Mathematics. BA, MA, University of Utah, 1962, 1966.

James C. Jacobs (1985) - Professor Emeritus of Art. BFA, Jacksonville University, 1978; MFA, East Carolina University, 1982.

Gordon B. James (1981) - Professor Emeritus of Health Education. BS, MEd, PhD, University of Utah, 1968, 1975, 1977.

Helen J. James (1971) - Professor Emerita of Chemistry. BS, PhD, University of Nebraska, 1965, 1970.

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Richard M. Jenson (1960) - Professor Emeritus of English. BS, MEd, EdD, Utah State University, 1952, 1959, 1984.

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Paul R. Joines (1978) - Professor Emeritus of Performing Arts. BM, Kansas State University, 1962; MM, University of Texas, 1965; DMA, University of Oregon, 1975.

Cecil L. Jorgensen (1964) - Professor Emeritus of English. BS, MS, EdD, Utah State University, 1949, 1958, 1975.

Deborah M. Judd (2004) - Professor Emerita of Nursing. ASN, Brigham Young University, 1976; BS, MSN-NP, Georgia State School of Nursing, 1992, 1994; DNP, University of Alabama - Tuscaloosa, 2013.

Roydon O. Julander (1960) - Professor Emeritus of Political Science and Coordinator of Legal Studies program. BS, MS, PhD. University of Utah, 1958, 1962, 1987.

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Raj Kumar (1974) - Professor Emeritus of Communication. BS, MS, Agra University, 1951, 1953; MEd, Government Pedagogical Institute, Allahabad, India, 1955; MA, Kent State University, 1971; PhD, Ohio University, 1989.

Ronald V. Ladwig (1982) - Professor Emeritus of Theatre Arts. BA, University of Denver, 1960; MA, California State University, 1967; PhD, Bowling Green State University, 1978.

LaRae Larkin (1991) - Associate Professor Emerita of History. BS, Brigham Young University, 1963; MS, Utah State University, 1976; PhD, University of Utah, 1990.

Lael Larsen (1973) - Assistant Professor Emerita of Nursing. BS, University of Utah, 1953; MSN, Brigham Young University, 1983.

Joanne L. Lawrence (1990) - Professor Emerita of Performing Arts. BA, University of Akron, 1977; MFA, University of North Carolina, 1987.

Shirley A. Leali (1993) - Professor Emerita of Teacher Education. BA, PhD, University of Denver; MA, University of Colorado.

Larry W. Leavitt (1984) - Professor Emeritus of Design Engineering Technology. BS, MS, Brigham Young University, 1973, 1985.

Ruby A. Licon (2005) - Associate Professor Emerita of Library Science. BA, University of California at Berkeley, 1969; MLS, Louisiana State University, 1982.

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E. Jeffery Livingston (1980) - Professor Emeritus of Business Administration. BS, Brigham Young University, 1968; MBA, University of Utah, 1969; PhD, Arizona State, 1974.

Jim W. Lochner (1970) - Professor Emeritus of Health and Physical Education. BA, Colorado State College, 1962; MA, Adams State College, 1964; EdD, University of Northern Colorado, 1969.

Karen Lofgreen (1979) - Professor Emerita of Teacher Education. BS, Utah State University, 1956; MEd, EdD, Brigham Young University, 1972, 1988.

Marilyn A. Lofgreen (1994) - Instructor Specialist Emerita of Teacher Education and Teacher Assistant Path to Teaching (TAPT) Director. BS, MEd, Weber State University, 1980, 1991; Administrative Endorsement, Utah State University, 1993.

William H. Lorowitz (2000) - Professor Emeritus of Microbiology. BS, Lehigh University, 1980; MS, University of Illinois, 1983; PhD, University of Oklahoma, 1994.

Scott A. Loughton (1976) - Associate Professor Emeritus of English. BS, Weber State College, 1971; MA, PhD, Brigham Young University, 1974, 1986

S. Jack Loughton (1987) - Professor Emeritus of Health Promotion and Human Performance. BS, University of Utah, 1968; MA, Utah State University, 1972; PhD, University of Utah, 1974.

Kathleen M. Lukken (1975) - Professor Emerita of Dental Hygiene. BS, Marquette University, 1970; MS, University of Iowa, 1975; PhD, University of Utah, 1985.

David R. Lynch (1999) - Professor Emeritus of Criminal Justice. BA, Brigham Young University, 1981; JD, Brigham Young University Law School, 1984; MA, PhD, State University of New York at Albany, 1994, 1996.

James R. MacBeth (1965) - Professor Emeritus of Visual Arts. BS, MFA, University of Utah, 1958, 1965.

James E. Macdonald (1982) - Professor Emeritus of Business Administration. BS, Eastern Illinois University, 1972; PhD, MBA/JD, Indiana University, 1980, 1981.

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Laura G. MacLeod (1998) - Associate Professor Emerita of Web and User Experience. BS, Emporia State University, 1978; MS, Southwest Missouri State University, 1983; PhD, Northern Illinois University, 1990.

Susan Makov (1977) - Professor Emerita of Art. BFA, Syracuse University, 1974; Diploma, University of Brighton, 1975; MFA, State University of New York at Buffalo, 1977.

J. David Malone (2007) - Professor Emeritus of Accounting & Taxation. BBA, MBA, Southwest Texas State University, 1979, 1981; PhD, University of Arkansas, 1987.

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Thomas J. Mathews (1996) - Professor Emeritus of Spanish. BA, Weber State University, 1981; MA, Middlebury College, 1984; PhD, University of Delaware, 1992.

David J. Matty (2011) - Professor Emeritus of Earth and Environmental Sciences. BS, Central Michigan University, 1977; MA, Portland State University, 1980; PhD, Rice University, 1984.

John C. (Jack) Mayhew, Jr. (2001) - Professor Emeritus of Teacher Education. BS, Plymouth State College, 1976; MS, PhD, University of Utah, 1994, 2001.

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Donald C. McCormick (1970) - Associate Professor Emeritus of Anthropology. BS, Brigham Young University, 1961; PhD, University of California-Berkeley, 1973.

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Jimmie D. Merrill (1968) - Professor Emeritus of Education. BS, MS, Brigham Young University, 1956, 1967; EdD, University of Oregon, 1968.

Robert S. Mikkelsen (1955-60, 1965) - Professor Emeritus of English. BA, MA, PhD, University of Utah, 1950, 1953, 1971.

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Richard R. Miller (1969) - Professor Emeritus of Mathematics. BS, PhD, University of Utah, 1963, 1969.

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Leonard Gary Nielsen (1977) - Professor Emeritus of Medical Laboratory Sciences. BS, Metropolitan State College, 1972; MS, University of Utah, 1977.

Karen E. Nielsen (1976) - Professor Emerita of Secondary Education. BS. University of Utah, 1967; MEd, EdD, Brigham Young University, 1972, 1979.

Michael D. Norman (1981) - Professor Emeritus of Criminal Justice. BA, Western Washington University, 1969; MA, EdD, University of Northern Colorado, 1978, 1980.

Clifford Nowell (1988) - Professor Emeritus of Economics. BA, MA, PhD, University of Wyoming, 1978, 1980, 1988.

Craig J. Oberg (1982) - Brady Presidential Distinguished Professor and Professor Emeritus of Microbiology. BS, Weber State College, 1979; PhD, Utah State University, 1985.

Linda K. Oda (1989) - Professor Emerita of Teacher Education. BS. Weber State College, 1967; MEd, Utah State University, 1980; EdD, Brigham Young University, 1987.

Janet Oja (2008) - Associate Professor Emerita of Medical Laboratory Science. BS, MHA, Weber State University, 1987, 2011.

Robert K. Okazaki (1998) - Professor Emeritus of Zoology. BA, University of California-Berkeley, 1971; MA, San Francisco State University, 1976; PhD, University of California-Santa Barbara, 1988.

Rick W. Orr (2000) - Professor Emeritus of Manufacturing and Systems Engineering . BS, MA, University of Utah, 1978, 1980; MS, Massachusetts Institute of Technology, 1985.

Dale A. Ostlie (1984) - Professor of Emeritus Physics. BA, St Olaf College, 1977; PhD, Iowa State University, 1982.

Lloyd Ott (1972) - Professor Emeritus of Professional Sales. BS, Southern Utah State College, 1968; MS, Utah State University, 1972.

H. Wayne Overson (1971) - Associate Professor Emeritus of Criminal Justice. BS, Weber State College, 1970; MS, Eastern Kentucky University, 1971; PhD, Claremont Graduate School, 1991.

Angelika Pagel (1986) - Professor Emerita of Visual Arts. BA, MA, University of California-Los Angeles, 1979, 1981; PhD, University of California-Berkeley, 1987.

Stacy E. Palen (2002) - Brady Presidential Distinguished Professor and Professor Emerita of Physics and Director of the Ott Planetarium. BA, Rutgers University, 1993; MS, PhD, University of Iowa, 1996, 1998.

Michael A. Palumbo (1982) - Professor of Music. BME, MA, University of Denver, 1967, 1971; DA, Ball State University, 1981.

Clayton Parkinson (1986) - Professor Emeritus of Health Sciences. DDS, Northwestern University, 1958; PhD, Utah State University, 1974.

Sharon B. Parkinson (1986) - Associate Professor Emerita of Social Work. BA, Southern Utah State College, 1982; MSW, University of Utah, 1986; EdD, Brigham Young University, 1990.

Joel C. Passey (1980) - Associate Professor Emeritus of Communication. BA, Utah State University, 1961; MA, University of Washington, 1969; PhD, University of Illinois, 1975.

Kathryn L. Payne (2000) - Associate Professor Emerita of Library Science. BA, MA, Washington University, St Louis, 1974, 1979; MA, PhD, University of Missouri, 1985, 1990.

A. Cordell Perkes (1979) - Professor Emeritus of Teacher Education. BS, MA, Utah State University, 1966, 1969; PhD, Ohio State University, 1973.

Levi S. Peterson (1965) - Professor Emeritus of English. BA, MA, Brigham Young University, 1958, 1960; PhD, University of Utah.

Ronald D. Peterson (1980) - Associate Professor Emeritus of Computer Science. BA, Weber State College, 1971; PhD, Cornell University, 1980.

Steven J. Peterson (2000) - Professor Emeritus of Construction and Building Sciences. BS, MBA, University of Utah, 1986, 1988.

June K. Phillips (1993) - Dean Emerita of the College of Arts and Humanities and Professor Emerita of Foreign Languages. BA, University of Pittsburgh, 1960; PhD, Ohio State University, 1974.

Paul D. Pitts (2000) - Associate Professor Emeritus of Teacher Education. BS, University of Utah, 1969; MEd, Utah State University, 1988; EdD, Brigham Young University, 1998.

Richard W. Pontius (2003) - Associate Professor Emeritus of Teacher Education. BA, MS, University of Wyoming, 1975, 1989; PhD, Ohio State University, 1993.

Sandra P. Powell (1990) - Associate Professor Emerita of Business Administration. BS, JD, MBA, PhD, University of Utah, 1967, 1977, 1986, 1992.

Judith P. Pratt (1990) - Associate Professor Emerita of Nursing. BS, Idaho State University, 1964; MSN, Brigham Young University, 1990.

Valory Quick (1983) - Associate Professor Emerita of Emergency Care and Rescue. BS, California State University-Long Beach, 1973; MS, Utah State University, 1988.

Victoria A. Ramirez (1999) - Professor Emerita of English. BA, MA, SUNY at Stony Brook, 1973, 1976; Postgraduate Diploma, St Andrews, Scotland, 1978; PhD, Binghamton University, NY, 1997.

Jack L. Rasmussen (2002) - Professor Emeritus of Teacher Education. BEd, Dipl in Ed, University of Lethbridge, 1977, 1987; MA, Gonzaga University, 1987; PhD, Brigham Young University, 1989.

T. R. Reddy (1966) - Professor Emeritus of Political Science. BA Honors, MA, University of Mysore, 1958, 1959; PhD, University of Kentucky, 1966.

Pamela Ann Rice (1984) - Associate Professor Emerita of Nursing. BS, Whitworth College, 1972; MS, Brigham Young University, 1993.

Franklin B. Richards (1984) - Professor Emeritus of Mathematics. BS, Rensselaer Polytechnic Institute, 1963; MS, Michigan State University, 1964; PhD, University of Wisconsin-Madison, 1970; LLB, University of Alberta, 1981.

Dick R. Rogers (1960) - Professor Emeritus of Mathematics. BS, MS, Utah State University, 1954, 1963; EdD, Oklahoma State University, 1971.

Brad L. Roghaar (1984) - Instructor Specialist Emeritus of English. BA, MA, University of Utah, 1974, 1980.

Thomas R. Root (1984) - Emeritus Professor of Music. BS, MA, University of Minnesota, 1969, 1973; PhD, Michigan State University, 1986.

Stephen H. Russell (1991) - Professor Emeritus of Business Administration. BS, Brigham Young University, 1967; MS, Air Force Institute of Technology, 1974; PhD, Arizona State University, 1978.

Richard W. Sadler (1969) - Professor Emeritus of History. BS, MS, PhD, University of Utah, 1964, 1965, 1969.

Ty Sanders (1991) - Associate Professor Emeritus of Communication. BA, California State University, 1976; MA, Central Missouri University, 1990; PhD, University of Oregon, 2008.

Leland B. Sather (1970) - Professor Emeritus of History. BA, Augustana College, 1964; MA, University of Nebraska, 1967; PhD, University of California-Santa Barbara, 1975.

Allyson D. Saunders (2000) - Associate Dean for the College of Engineering, Applied Science & Technology and Professor Emerita of Network Technology and Business Multimedia. BS, Brigham Young University, 1979; MS, PhD, Utah State University, 1983, 1997.

Peggy J. Saunders (2004) - Professor Emerita of Teacher Education. BA, MEd, Weber State University, 1977, 1993; PhD, University of Utah, 2002.

Randolph J. Scott (1978) - Associate Professor Emeritus of Communication. BS, Weber State College, 1973; MA, Northern Illinois University, 1975; PhD, University of Oregon, 1989.

Spencer L. Seager (1961) - Professor Emeritus of Chemistry. BS, PhD, University of Utah, 1957, 1962.

Gene A. Sessions (1976) - Brady Presidential Distinguished Professor and Professor Emeritus of History. BA, Utah State University, 1970; MA, PhD, Florida State University, 1972, 1974.

Sterling D. Sessions (1974) - Professor Emeritus of Business Administration. BA, Brigham Young University, 1949; MS, New York University, 1950; DBA, Harvard, 1962.

Donald K. Sharpes (1978) - Professor Emeritus of Education. BA, MA, Gonzaga University, 1959, 1961; MA, Stanford University, 1968; PhD, Arizona State University, 1969.

Patricia L. Shaw (1991) - Professor Emerita of Health Administrative Services. BS, College of St Scholastica, Duluth, MN, 1981; MEd, Weber State University, 1997; EdD, Northcentral University, 2016.

John R. Sillito (1977) - Professor Emeritus of Library Science. BS, MA, University of Utah, 1970, 1973, 1977.

Allen F. Simkins (1976) - Professor Emeritus of Accounting. BS, Utah State University, 1969; MACC, Brigham Young University, 1970; PhD, Arizona State University, 1976.

C. Jan Slabaugh (1975) - Professor Emerita of Interior Design Technology. BS, Utah State University, 1958; MS, Iowa State University, 1967.

Michael R. Slabaugh (1971) - Professor Emeritus of Chemistry. BS, Purdue, 1965; PhD, Iowa State University, 1970.

Richard W. Sline (1982) - Professor Emeritus of Communication. BA, Drake University, 1969; MS, Southern Illinois University, 1972; PhD, University of Utah, 1999.

John E. Sohl (1990) - Brady Presidential Distinguished Professor and Professor Emeritus of Physics. BS, University of West Florida, 1979; MS, PhD, Ohio State University, 1986, 1990.

Lyneer C. Smith (1964) - Assistant Professor Emeritus of Music. BA, MS, Brigham Young University, 1951, 1952.

Molly M. Smith (1989) - Professor Emerita of Health Promotion and Human Performance. BS, University of Missouri, 1974; MS, University of Arizona, 1978; PhD, University of New Mexico, 1988.

R. Michael Smith (1985) - Professor Emeritus of Teacher Education. BS, BS, Weber State College, 1976, 1977; M. Ed, Utah State University, 1978; EdD, Brigham Young University, 1984.

Robert B. Smith (1981) Provost Emeritus. BS, Wheaton College, 1958; PhD, University of California Berkeley, 1962.

William E. Smith (1981) - Professor Emeritus of Health Administrative Services. BS, Westchester State University, 1956; MS, Indiana University, 1957; EdD, Arizona State University, 1970.

Chris V. Soelberg (2004) - Associate Professor Emeritus of Construction and Building Sciences. BA, MPA, University of Utah, 1989.

Mohammad Sondossi (1991) - Professor Emeritus of Microbiology. BS, University of Azarabadehgan, 1974; MS, University of Detroit, 1978; PhD, Wayne State University, 1988.

Douglas M. Spainhower (1967) - Associate Professor Emeritus of English. BS, Brigham Young University, 1956; MA, California State College-Fullerton, 1967; EdD, Brigham Young University, 1988.

Tony Spanos (1974) - Professor Emeritus of Foreign Languages. BA, Weber State College, 1968; MA, University of Nevada-Reno, 1973; PhD, University of Utah, 1988.

Walther N. Spjeldvik (1985) - Professor Emeritus of Physics. E Art, U Pihl, 1965; CMag, Universitetet i Bergen, 1969; MS, PhD, University of California-Los Angeles, 1971, 1974.

Stephen S. Stanford (1965) - Professor Emeritus of Sociology. BS, MS, Brigham Young University, 1950, 1951; PhD, University of Colorado, 1959.

Bud W. Stephenson (1967) - Associate Professor Emeritus of Psychology. BS, MS. Utah State University, 1962, 1973; PhD, University of Minnesota, 1982.

Morris R. Sterrett (1973) - Associate Professor Emeritus of Criminal Justice. BA, MS, Brigham Young University, 1967, 1969; MA, PhD, Claremont Graduate School, 1983, 1984.

Steven J. Peterson (2000) - Professor Emeritus of Construction and Building Sciences. BS, MBA, University of Utah, 1986, 1988.

Alan E. Stockland (1970) - Professor Emeritus of Microbiology. BS, University of Nebraska, 1961; MS, PhD, Michigan State University, 1967, 1970.

H. Stephen Stoker (1968) - Professor Emeritus of Chemistry. BA, University of Utah, 1963; PhD, University of Wisconsin, 1968.

Jeffery D. Stokes (1985) - Professor Emeritus of Spanish. BA, Weber State College, 1975; MA, University of Utah, 1977; PhD, Indiana University, 1981.

Jerald T. Storey (1964) - Professor Emeritus of Management. BS, Brigham Young University, 1957; MBA, PhD, University of Utah, 1964, 1972.

James G. Swearingen (1985) - Professor Emeritus of Accounting. BS, MBA, University of Utah, 1971, 1972; PhD, University of Washington, 1982.

Eva L. Szalay (1999) - Professor Emerita of German. BS, Virginia Polytechnic Institute and State University; MS, PhD, Georgetown University, 1998.

Alden A. Talbot (1975) - Professor Emeritus of Telecommunications. BS, Weber State College, 1967; MS, Utah State University, 1969; PhD, University of Iowa, 1976.

John S. Thaeler (1982) - Associate Professor Emeritus of Mathematics. BA, MAT, Duke University, 1960, 1961; BS, University of Utah, 1968; PhD, Florida State University, 1981.

Joan S. Thompson (1988) - Professor Emerita of Nutrition. BS, University of California-Berkeley, 1978; MS, PhD, University of Arizona, 1981, 1983.

Blaine R. Thornock (1970) - Associate Professor Emeritus of Mechanical Engineering Technology. BS, MIE, Utah State University, 1961, 1979.

Roy D. Thornock (1982) - Professor Emeritus of Manufacturing Engineering Technology. BS, Utah State University, 1964; MS, Colorado State University, 1974.

Susan B. Thornock (1998) - Professor Emerita of Nursing. BSN, Weber State University, 1993; MS, University of Utah, 1998, EdD, Northcentral University, 2013.

Van M. Tinkham (1993) - Professor Emeritus of Performing Arts. BA, MA, Indiana University, 1973, 1975; MFA, Indiana University, 2003.

Michael A. Toth (1975) - Professor Emeritus of Sociology. BS, MS, PhD, University of Utah, 1960, 1964, 1973.

E. K. Valentin (1984) - Professor Emeritus of Marketing and Business Administration. BS, MBA, PhD, University of Utah, 1970, 1971, 1979.

Richard Vandenberg (1987) - Professor Emeritus of Automotive Engineering Technology. BGS, Weber State College, 1977, MEd, Utah State University, 1970.

W. Roy Van Orman (1977) - Associate Professor Emeritus of Gerontology. BS, Weber State College, 1964; MSW, University of Utah, 1967; MPA, University of Southern California, 1972; EdD, Brigham Young University, 1984.

Jane A. Van Valkenburg (1973) - Professor Emerita of Radiologic Sciences. BS, Weber State College, 1973; MEd, Weber State College, 1980; PhD, University of Utah, 1989.

Michael B. Vaughan (1981) - Brady Presidential Distinguished Professor and Professor Emeritus of Economics. BS, MBA, University of Arkansas, 1976, 1977; PhD, University of Nebraska, 1981.

L. Mikel Vause (1983) - Brady Presidential Distinguished Professor and Professor Emeritus of English. BS, Weber State College, 1981; MA, PhD, Bowling Green State University, 1982, 1986.

Peter J. Vernezze (1990) - Associate Professor Emeritus of Philosophy. BA, University of Wisconsin at Madison, 1982; MA, University of Illinois at Chicago, 1985; PhD, University of Washington, 1989.

Barbara A. Wachocki (1991) - Professor Emerita of Botany. BS, MS, PhD, Wayne State University, 1980, 1984, 1992.

Robert C. Wadman (1997) - Professor Emeritus of Criminal Justice. AA, Dan Diego City College, 1968; BS, MPA, Brigham Young University, 1970, 1975; DA, Idaho State University, 1998.

Wayne L. Wahlquist (1964) - Professor Emeritus of Geography. BA, MA, Brigham Young University, 1958, 1961; PhD, University of Nebraska, 1974.

Robert E. Wallentine (1963) - Professor Emeritus of Manufacturing Engineering Technology. BS, MS, Utah State University, 1959, 1970.

Leland A. Walser (1967) - Professor Emeritus of Foreign Languages. BA, MA, Brigham Young University, 1964, 1967; PhD, University of Utah, 1975.

R. Kenneth Walter (1982) - Professor Emeritus of Computer Science. BS, PhD, Brigham Young University, 1964, 1970.

Wangari wa Nyatetu-Waigwa (1990) - Professor Emerita of Foreign Languages. BA, Université de Dijon, 1974; MA, PhD, University of Utah, 1983, 1989.

Joyce E. Wanta (1969) - Associate Professor Emerita of Respiratory Therapy. BS, EdS, University of Utah, 1961, 1980.

Margaret T. Waterfall (1962) - Associate Professor Emerita of Health, Physical Education, Recreation, and Dance. BS, MFA, University of Utah, 1962, 1968.

Helena B. Watson (1967) - Assistant Professor Emerita of Elementary Education. BS, Utah State University, 1960; MS, Montana State University, 1961.

Garth L. Welch (1964) - Professor Emeritus of Chemistry. BS, PhD, University of Utah 1959, 1963.

Glen J. Wiese (1959) - Professor Emeritus of English. BA, MA, Brigham Young University, 1958, 1959; PhD, University of Utah, 1971.

Carla Wiggins (2013) - Professor Emerita of Health Administrative Services. BS, Ithaca College, 1985; PhD, University of Minnesota, 1994.

Floyd A. Wilkes (1982) - Associate Professor Emeritus of Information Systems & Technologies. BS, Brigham Young University, 1959; MS, PhD, University of Oregon, 1972, 1987.

Gary D. Willden (1977) - Professor Emeritus of Health Promotion and Human Performance. BS, MA, Brigham Young University, 1972, 1973; EdD, University of Utah, 1983 (CLP).

Benne D. Williams (1958) - Professor Emeritus of Psychology. BS, Utah State University, 1958; MS. Utah State University, 1959; EdD, Utah State University, 1965.

Deanna L. Williams (1979) -Associate Professor Emeritus of Nursing. BS, Brigham Young University, 1966; MS, Pittsburgh State University, 1976.

James R. Wilson (1982) - Professor Emeritus of Earth and Environmental Sciences. BS, Auburn University, 1967; MS, University Tennessee, 1973; PhD, University of Utah, 1976.

Lydia Wingate (1998) - Dean Emerita Dr. Ezekiel R. Dumke College of Health Professions. BS, University of Leeds, 1956; MS, Albany Medical College, Union University, 1978; PhD, State University of New York, 1984.

Joseph Wolfe (2007) - Associate Professor Emeritus of Construction and Building Sciences. BS, Auburn University, 1963; MBA, University of North Florida, 1982.

Ray E. Wong (1980) - Professor Emeritus of Teacher Education. BA, Temple University, 1970; MA, Northeast Missouri State University, 1974; PhD, Iowa State University, 1992.

Ronald L. Wooden (1967) - Professor Emeritus of Music. BS, MS, Utah State University, 1961, 1965; PhD, University of Utah, 1975.

Scott H. Wright (1998) -Professor Emeritus of Medical Laboratory Science. BS, Weber State College, 1978; MS, Idaho State University, 1980.

Gloria Z. Wurst (1978) - Professor Emerita of Zoology. BS, Juniata College, 1966; MS, PhD, University of Pittsburgh, 1970, 1974.

Samuel I. Zeveloff (1984) - Brady Presidential Distinguished Professor and Professor Emeritus of Zoology. BA, State University of New York-Binghamton, 1972; MEd, City College of New York; 1973 MS, North Carolina State University, 1976; PhD, University of Wyoming, 1982.

James E. Young (1988) - Professor Emeritus of English. BA, Tulane University, 1962; MA, PhD, Peabody College of Vanderbilt University, 1971, 1979.

Catherine A. Zublin (1986) - Professor Emerita of Theatre Arts. BA, University of Colorado-Boulder, 1977; MFA, Indiana University-Bloomington, 1986.

Academic Info & Policies

Weber State University is committed to providing a quality undergraduate education for students. The role of the offices and services listed in this section of the catalog is to support students and help them achieve their educational goals.

Contact Information

University Registrar, Cori Horne	801-626-6100
Deputy Registrar, Director of Records and Transfer, Jamie Call	801-626-7791
Graduation Information	801-626-6100
Graduation Office, Kelani Purvis	801-626-6327
NCAA Eligibility Information, Karen Hicks	801-626-8881
Records Information	801-626-6100
Registration Assistance	801-626-6100
Registrar's Solution Center, Rylee Parker	801-626-6339
Admissions Information	801-626-6743
Admissions, Assistant Vice Present for Access, Scott Teichert	801-626-6005
General Studies and Exploratory Advising	801-626-6752
Student Pathways and Success, Assistant Vice President, Sari Byerly	801-626-7910
Student Success Center	801-626-7006

Records

University Registrar: Cori Horne
Deputy Registrar, Director of Records and Transfer: Jamie Call
Location: Student Services Center, Room 101
Telephone: 801-626-7791
Internet Address: weber.edu/records

Privacy Rights

The WSU Records Office maintains student records in accordance with the Family Educational Rights and Privacy Act (FERPA), which affords students the right to inspect and review their educational records, the right to seek to have the records amended, and the right to have some control over the disclosure of information from the records. The law generally requires that written consent of the student be received before personally identifiable data about the student is released. Institutions may release, without written consent, those items specified as public or directory information, provided the institution informs students of the data designated as public information and gives students prior opportunity to refuse disclosure of any or all categories of that information. Directory information at Weber State University is currently specified to include name, address, telephone number, major (program of study), dates of

attendance, degree(s) received, full-time/part-time status, videos used for educational purposes, and honors received. A student may have their public or directory information made confidential by submitting a written request to the Registrar's Office.

If a student feels that information other than directory information has been made public in violation of this act, they may contact the Registrar's Office to file a formal grievance. Copies of the entire policy or information about specific procedures may be obtained from the Office of the Registrar.

Transcripts

Students may obtain official copies of their academic transcripts from the Registrar's Solution Center. There is a \$7.50 charge for this service. For students who attended prior to Summer 2010, four fee-free transcripts will be provided if the request is made in person or by mail.

- Transcripts picked up in person require photo identification.
- Transcript requests may be made by mail or online at www.weber.edu/records (telephone requests cannot be accepted) and should include the student's name, social security number or WSU student ID number, birthdate, student's signature and complete address where the transcript should be sent.
- Transcript requests by anyone other than the student must be accompanied by a written release from the student that includes:
 - A sentence stating that you have given your consent to a friend or a relative to pick up your transcript, and for what purpose.
 - The date the release was written
 - Your full name and any prior names
 - Your Social Security Number or Student ID Number
 - Your date of birth
 - The name of your friend or relative that will be retrieving your transcript
 - Your signature

The person receiving the record will be asked to show photo identification.

A printable copy of a transcript request form is available via the WSU Web site at weber.edu/records. Requests should be mailed to: Weber State University, Records Office, 3885 West Campus Dr. DEPT 1102, Ogden, UT 84408-1102; or emailed as a pdf or jpeg attachment to records@weber.edu.

Record Holds

Transcripts and diplomas will not be issued for students who owe money to the University for financial aid, library fines, housing, traffic tickets, etc.

Students may access their grades on the Internet with a "Wildcat Username" and password. To obtain information about access to the eWeber student portal, contact the Computing Support Center Help Desk at 801-626-7777.

Grading

Grade System

The following grades and numeric point values are used to compute the cumulative grade point average (GPA).

A	Excellent	4.0
A-	Excellent	3.7
B+	Good	3.3
B	Good	3.0
B-	Good	2.7
C+	Standard	2.3
C	Standard	2.0
C-	Standard	1.7
D+	Sub-Standard	1.3
D	Sub-Standard	1.0
D-	Sub-Standard	0.7
E	Failure	0.0
UW	Unofficial Withdrawal	0.0

To calculate a cumulative GPA, the total number of grade points (the number of credit hours per course multiplied by the numeric points listed above for the grade) is divided by the total number of credit hours.

Courses coded with an R in front of the grade (indicating academic renewal), or an E in the far right column of the form (indicating exclusion due to a repeat), are not used in computing the GPA, the graduation hours or the total hours completed. Courses coded ND (non-degree) are not used in computing the GPA or the graduation hours completed, but they are included in computing the total hours attempted. Courses numbered below 1000-level (ex. MATH 0950) are considered developmental and are not used in computing the GPA and they do not count toward total hours completed.

Courses with the following notations in the grade column are not used in computing the GPA, the graduation hours, or the total hours completed (with the exception of CR-Credit courses which may be used toward graduation hours or total hours).

AU-Audit

- Indicates the student was allowed to sit in a class without earning credit or a grade.
- Audit students who fail to attend class without withdrawing may be issued a withdrawal (W).
- Developmental courses are not eligible to take in audit mode.
(See Registration section of the Student Access and Success page of this catalog.)

CE-Continuing Education Unit

- Students who enroll in a Continuing Education Unit through the Continuing Education Office will receive a CE grade. It is not counted in the WSU GPA or Total Hours, but can be listed on a transcript.

CR-Credit

- Indicates the student registered for a course on a pass/fail basis and earned a C- or better. (See Registration section of the Student Access and Success page of this catalog.)
- Certain courses are offered on a credit/no credit basis only and letter grades are not given.
- Credit/no credit courses may only be used as electives in a student graduation requirements. Classes taken on a credit/no credit basis will not satisfy major, minor, or general education requirements with exception of those courses or programs of study approved by the University Curriculum and General Education committees and those courses approved by academic departments for credit by special examination.
- A maximum of 20 hours of credit/no credit electives may be used for graduation.

I-Incomplete

- Indicates the student was unable to complete the course for a legitimate reason (such as accident or illness) after having completed a substantial portion (approximately 80%) of the required work.
- A written contract between the student and the instructor indicates the work still to be done and the deadline for its completion (within 12 months).
- The student must complete remaining work without re-registering or attending the class during a subsequent semester.
- Credit hours are not counted until a letter grade is posted.
- All incomplete (I) courses must be completed prior to graduation.

NC-No Credit

- Indicates the student registered for a course on a credit/no-credit basis and earned less than a C-.
- Students who stop attending a class for which they are registered on a credit/no-credit basis without officially withdrawing will receive an NC grade entry for that class.
- Certain courses are offered on a credit/no credit basis only and letter grades are not given.

NG-No Grade Reported

- The instructor has not reported a grade for the course.

SC-Special Credit

- The student has received credit through an examination, waiver, or substitution for which they are not eligible for a letter grade.
- These credits are counted toward the total number of credits required for graduation but are not used to calculate the cumulative grade point average.
- Special credits may be used for graduation requirements as determined by the academic departments.

T-Temporary Grade

- The course is being continued in the subsequent semester and a grade and credits will be calculated when the course is complete and a letter grade has been issued. The "T" grade is approved for specific courses only.

UW-Unofficial Withdrawal

- Indicates the student stopped attending the course without officially withdrawing. UWs are calculated as failing grades in the student's semester and cumulative grade point averages.

W-Withdrawal

- The student withdrew from the course in the interval comprising the 16th through the 50th business day of a semester or the 30th business day of a block. Withdrawals are not permitted after the 50th business day of a semester or 30th business day of a block.

Changing of Grades

- Grades may be changed only by the instructor who submitted the original grade.
- Students who feel their work has been evaluated unfairly should contact the instructor.
- Students who choose to complete a course on a credit/no credit basis may petition the Registrar's Office to have a CR grade replaced by the earned letter grade if they recently changed their major or minor and need the letter grade to meet graduation requirements for the new major or minor.

Repeat Courses

- Repeated courses will be automatically flagged as part of the grading process at the end of each term.
- Each course (unless specifically listed as repeatable for credit in the course description) may be used only once in cumulative hours and GPA.
- A course will appear on the transcript each time it is completed, but it will be counted only once in total hours and only the most recent letter grade received will be used to calculate the GPA (CR is not considered a letter grade and will not cause a previous grade to be discounted).
- Once a degree has been posted to a student's permanent record, courses used for that degree may not be repeated to improve the posted degree's GPA.

Academic Renewal Policy

1. The applicant for academic renewal must be a currently enrolled undergraduate student or must have been enrolled during the previous term. Students who are not currently enrolled and who cannot obtain financial aid until their GPA is recalculated using Academic Renewal should begin the process with Academic Records and take written evidence of the initiation of this process to the Financial Aid Office.
2. Academic renewal may be requested only once during a student's academic career.
3. Once a certificate, associate, or bachelor degree is awarded by Weber State University or received as a transfer credit, any Weber State course(s) completed prior to the completion of that certificate or degree will not qualify for academic renewal. However, WSU courses completed after receiving a certificate or associate degree, but before completion of a bachelor degree, are eligible for renewal if they meet the requirements.
4. The policy does not apply to graduate students or students pursuing a second bachelor's degree.
5. Grades of "D+" or less which were earned six years or more prior to the petition date will not be computed in the GPA.
6. Academic requirements may not be satisfied by courses to which academic renewal has been applied.
7. Hours not used for GPA purposes are not used to satisfy total and upper division credit hour requirements.
8. The Academic Renewal Policy will apply only to courses taken at Weber State University.
9. Only the calculation of a student's GPA will be affected by this policy.
10. This policy applies to WSU GPA calculation only. A student's GPA when transferring or applying for graduate/professional schools will be calculated according to the policy of that institution, i.e. the receiving institution may average the grades or use the original grades.
11. Students who are applying for academic renewal and graduating in the same semester must notify the Graduation Department.

Applications for academic renewal and detailed policy information are available at the Records Office or at www.weber.edu/records.

Credit by Examination or Petition

Contact: Records Office

Location: Student Services Center, Room 101

Telephone: 801-626-6100

Students may receive WSU degree credit by examination or petition under the following restrictions:

- The student must be a WSU-admitted student.
- The student must pay the appropriate recording fee in addition to specific test fees.
- Credit will not be given if it duplicates previous examinations, petitions, or course work for which a student previously received a grade (A-E) or notation UW, CR, I or T.
- Credit by examination or petition will not be considered part of the residency requirement.
- Credit by examination or petition, although graded with credit (SC), may be used to satisfy major, minor and general education requirements.

Advanced Placement Examination (AP)

- AP credit is earned by completing one or more high school AP courses and successfully completing the appropriate exam(s) while in high school.
- WSU credit hours may be earned with each AP examination score of 3, 4, or 5. Please see <http://www.weber.edu/admissions/aptests.html> for details.
- To have credit evaluated, a student must fill out an "Application for Test Credit" at this link <https://www.weber.edu/admissions/aptests.html>
 - Scores may be submitted to the Admissions Office as a part of the Admissions process, or
 - Scores may be submitted to the Admissions Office in person, along with a receipt for the \$10 recording fee payment.
- If a student submits AP, CLEP, and IB scores for evaluation, the IB scores will be awarded first. If the AP or CLEP credit duplicates the IB credit already awarded, the AP and CLEP credits will be reduced by the amount of credit awarded for the IB Higher-Level Subject in the specific area.

International Baccalaureate Credit (IB)

Admitted WSU students can earn college credit through the International Baccalaureate (IB) program.

- A student must be admitted and matriculated at WSU to have IB credit evaluated.
- Once test results have been received, students eligible for credit will receive an evaluation from the Admissions Office with instructions about how to have credits added to their transcript.
- IB Credit evaluations are available on the Prior Learning Assessment webpage.

College Level Examination Program (CLEP)

- CLEP is a way for students to earn college credit by completing one or more of the General or Subject Examinations administered by the Testing Center.
- Applications and further information on the procedure, fees, and testing schedule are available from the WSU Testing Center.
- A student's test scores will be considered if the student drops the same course within the first 3 weeks of the semester.
- Students must submit examination scores to the Admissions Office to initiate the evaluation process.

Special Examination

- Special examinations may be arranged to earn credit for some WSU courses not covered by CLEP testing. Each department determines which courses will qualify.
- Students must provide evidence of sufficient background in the area to be tested.
- Applications for Special Examinations and further information about requirements, limitations, and fees may be obtained from the academic departmental offices.

Foreign Language Credit for Prior Language Experience

- Students with prior language experience may be given foreign language credit by examination or by passing an upper division (3000-level or higher) course with a minimum grade of C. See the Department of World Languages & Cultures for applications and more information.

Credit for Military Training

- Students who have completed at least 24 months of active military service may be granted a maximum of 10 credit hours. These credits are awarded as social science general education course HLTH 1030 **(3)** and 7 elective credit hours.
- Students who have completed four or more years in the National Guard or a reserve unit may be granted social science general education course HLTH 1030 **(3)** and 7 elective credit hours.
- Additional credit may be granted for military schooling if specific requirements are met.
- To receive credit students should submit military form DD-214 and a receipt for the \$10 recording fee to the Records Office to start the process.
- Military credit will be evaluated only if it can be applied to a legitimate undergraduate degree program. Students who have already earned a bachelor's degree may have their credit evaluated upon request.
- Military credit is added to a student's total credit hours completed, and may reduce a student's eligibility for financial aid.
- More information can be found at: http://www.weber.edu/Records/Military_Credit.html

Credit for Courses from Non-accredited Schools and Colleges

- Students with credit from non-accredited schools may request transfer credit for certain courses which are equivalent to courses described in the catalog.
- Official transcripts with the Application for Transfer Credit form should be taken to the appropriate academic department for evaluation. Transfer credits from non-accredited schools may be accepted under the following guidelines.
- Credit may be accepted only if the course is deemed to be equivalent to a course in the WSU catalog.
- Specific course credit may be applied by the Records Office if recommended and approved by the appropriate department chair with the Application for Transfer Credit form which can be obtained from the Records Office.

Credit for Experiential Learning and Industrial or Commercial Training

- Credit for experiential learning shown to be equivalent to courses described in the catalog may be allowed by some departments according to specific guidelines.
- Application for Credit forms and further information are available from the major and minor department offices.
- Before credit for prior experiential learning becomes part of the student's permanent record, the student must have completed thirty credit hours with a GPA of 2.25 or better to establish evidence of a satisfactory learning pattern.

Academic Standards/Eligibility

University Registrar: Cori Horne

Location: Student Services Center, Room 101

Telephone: 801-626-6100

Assistant Registrar for NCAA Eligibility: Karen Hicks

Location: Student Services Center, Room 101

Telephone: 801-626-8881

Minimum GPA Standards

The minimum cumulative institutional grade point average (GPA) required at WSU is 2.00 or C. The minimum institutional GPA required by the University for graduation is 2.00; however, many majors and minors have a higher requirement. Students with a GPA below 2.00 will receive one of the following notices and should see an academic advisor immediately.

Academic Warning

- Students with a cumulative institutional GPA below 2.00 will be placed on academic warning. They must earn a semester GPA of at least 2.00 each semester until their cumulative WSU GPA reaches 2.00 to remain on academic warning and avoid academic probation. Students whose cumulative WSU GPA reaches 2.00 will be restored to good academic standing.

Academic Probation

- Students who earn a semester GPA below 2.00 while on academic warning will be placed on academic probation. They must earn a semester GPA of at least 2.00 each semester until their cumulative WSU GPA reaches 2.00 to remain on academic probation and avoid academic suspension. Students whose cumulative WSU GPA reaches 2.00 will be restored to good academic standing.

Academic Suspension

- Students who earn a semester GPA below 2.00 while on academic probation will be placed on a one-semester academic suspension. After serving the one-semester suspension, students will be returned to academic warning and will be eligible to re-enroll at the institution.

Appeal Procedure

- Students who have been placed on academic warning, probation, or suspension and feel their classification is in error should see the Associate Registrar to review their records and receive information regarding the process of appeal.
- Students who have received an academic suspension will be required to serve the full suspension length of one semester before re-enrolling at the University unless their classification was made in error.

Dean's List and Provost's List

Each semester, students who complete at least 12 credit hours with letter grades (CR/NC grades and Non-credit courses will not be counted) will qualify for recognition on the basis of their semester GPA as follows:

4.00 for the Provost's List Certificate
3.50 to 3.99 for the Dean's List Certificate

Student Activity Eligibility

Students participating in activities such as student government, university organizations, clubs, special awards, and intramural athletics should be matriculated students working toward a degree or certificate. Many individual programs and organizations have standards higher than this minimum.

Intercollegiate Athletics Eligibility

Students participating in NCAA sports must be enrolled as full-time students in a Bachelor's degree program, must remain in good academic standing, and must meet the satisfactory progress policies of the University, the Big Sky Conference, and the NCAA. Details of these requirements may be obtained from the Eligibility or Compliance Office.

Graduation

University Registrar: Cori Horne
Assistant Registrar for Graduation: Kelani Purvis
Location: Student Services Center, Room 101
Telephone: 801-626-6100
Website: www.weber.edu/graduation

Commencement and Convocation

Convocation ceremonies are held in April and December, While commencement ceremonies are held in April. Students who complete degree requirements during the fall semester may attend commencement ceremonies in December, or the following April. Students who complete requirements in the spring are eligible to attend the April commencement ceremonies. Students who complete degree requirements in the summer may attend ceremonies the prior April or the following December.

Graduation candidate names will appear in the commencement program according to the following:

- Fall applications received by the Fall deadline will appear in the December commencement program. All Fall graduates will also appear in the following April commencement program.
- Spring applications received by the Spring deadline will appear in the April commencement program.
- Summer applications received by the Spring deadline will appear in the April commencement program.
- Summer applications received after the Spring deadline will appear in the December commencement program.

Commencement information will be mailed to all candidates who apply for graduation by the application deadlines. This information may also be obtained from the Graduation website.

Graduation Application Deadlines and Verification Process

Graduation Application Schedule of Deadlines			
<i>Semester that all your degree requirements will be complete:</i>	<i>Graduation Application Deadline:</i>	<i>Commencement program that your name will be listed in:</i>	<i>Graduation Requirement Completion Deadline:</i>
Summer 2025	August 15, 2025	December 2025	October 6, 2025
Fall 2025	December 12, 2025	December 2025 and April 2026	February 2, 2026
Spring 2026	April 24, 2026	April 2026	June 16, 2026
Summer 2026	August 14, 2026	April* and December 2026	October 5, 2026

*NOTE: Summer graduation candidates who wish to participate in the Spring commencement ceremonies should apply for Summer, but follow the Spring semester deadline.

Students who are nearing completion of Graduation Requirements, should take the following steps:

1. Schedule an appointment and meet with your advisor(s) as required. Keep in mind that you may need to see a college advisor, a major advisor, and a minor advisor. NOTE: Students seeking an Associate of Science or Arts degree in General Studies should meet with an Academic Advisor in the General Studies and Exploratory Advising.
2. Review your CatTracks degree evaluation with your advisor(s). Make sure that your Program of Study is correctly listed in your CatTracks degree evaluation and then check for missing requirements with your advisor(s). Program of Study corrections must be completed with your advisor prior to submitting your graduation application.
3. Submit your application for the semester that all of your program requirements will be complete. Applications are online - log into your eWeber portal, search for "Graduation Application" in the search bar and then follow the instructions outlined in the graduation application.
4. Commencement Ceremony information will be sent to all candidates who apply by the application deadline, or it can be found on the Graduation website.

All possible care is taken in checking student records for graduation; however, it is the sole responsibility of the student to verify all requirements for a degree.

- The Graduation Office will confirm that the requirements defined in the student's degree evaluation are completed before posting their degree or certificate.
- Students who do not complete graduation requirements by the Graduation Requirement Completion Deadline or who change their graduation semester should notify the Graduation Office of their new anticipated semester graduation date. Complete policy information on Graduation Requirement Deadline is at http://www.weber.edu/ppm/Policies/4-1_GraduationStandards.html
- Diplomas will be sent and degrees will be posted to student transcripts the semester following completion.

Changes in Graduation/Catalog Requirements

Entering students, including first-time and transfer students, will be required to complete the degree and program requirements listed in the catalog in effect when they first enroll, with the following exceptions:

- When students change their program of study, they are then required to graduate under the catalog in effect when they declare the new program of study.
- Students must complete major and minor requirements under a catalog no older than 6 years for a bachelor's degree or 3 years for an associate's degree.

Requests for Exceptions to Graduation Requirements

Requests for exceptions to graduation requirements are considered only on the basis of substantial and reasonable grounds. Students should contact the academic department who has oversight for the major or minor requirements for more information about their exceptions process. For questions about General Education requirements, students should contact the Student Success Center or their college advisor. Questions about all other degree requirements can be brought to the Registrar's Office.

Completed Degree

Once a degree has been completed, the degree title and program name cannot be altered and a student cannot change factors related to that degree; courses cannot be repeated to improve the degree GPA and majors or minors cannot be added. If a student continues to earn a second bachelor's degree or a master's degree, credit hour and GPA calculations begin again. If a student continues on to earn a bachelor's degree after earning an associate's degree, the grades earned toward the associate's degree will be used in calculating cumulative GPA for the bachelor's degree. Academic renewal cannot be applied to courses taken prior to the posting of an associate's degree.

Awarding of Multiple Degrees

- Students may receive multiple degrees in the same academic year. However, students who first earn their degree in a specific academic area, with the exception of the AAS degrees and certificates, will not be awarded an Associate of General Studies degree or a Certificate of General Education in a subsequent term.
- Students must submit a graduation application for each degree requested.

Second Bachelor's Degree

A student may qualify for admission to a second baccalaureate degree following the completion of a first bachelor's degree at an accredited institution. To qualify for a second degree, a student must complete a minimum of 30 credit hours in residence at WSU with a GPA of at least 2.00 and fulfill all requirements for the programs declared. For students whose first baccalaureate degree is also from Weber State University, credits earned in conjunction with but beyond the minimum credits required for the first degree may be applied toward the second baccalaureate degree. However, a minimum of 30 new semester credit hours must be earned at WSU after the first degree is conferred. All candidates for a second bachelor's degree must satisfy the university's American Institutions (AI) requirement. Course work taken as part of the first degree that is comparable to the current list of approved diversity courses may be used to satisfy this requirement. Students pursuing a Bachelor of Arts, Bachelor of Music, Bachelor of Music Education, or Bachelor of Arts in Music must fulfill WSU's foreign language requirement. Policy governing the second bachelor's degree can be found in PPM 4-1.I.G. For additional information about a second baccalaureate policy please contact the academic department in which you plan to earn your second degree.

Honors at Graduation

Students who qualify for honors based on their cumulative institutional grade point average (GPA) will have the appropriate designation indicated on their transcripts and diplomas.

Bachelor's Degree Honors

Summa Cum Laude - WSU GPA of 3.90 or higher.

Magna Cum Laude - WSU GPA of 3.80 or higher.

Cum Laude - WSU GPA of 3.60 or higher.

Associate's Degree Honors

High Honors - WSU GPA of 3.85 or higher.

Honors - WSU GPA of 3.60 or higher.

Additional honors awarded at graduation are described under the Honors Program (see Honors Program).

Interruption or Changes in Instruction Due to Circumstances Beyond the Reasonable Control of the University

Each semester the University will endeavor to provide courses and services as it traditionally has including face-to-face or hybrid instruction for those courses for which all or a portion would normally occur on site. However, as recent experience has taught us, the traditional delivery of courses may be interrupted or changed due to circumstances beyond the reasonable control of the University. Such circumstances may be a health emergency, like the recent COVID-19 outbreak, closure of the University due to damage or destruction of the physical facilities, like an earthquake, or other events including but not limited to natural or person-made events such as civil unrest, strike, cyberattack, pandemic, directive of government or health authorities, etc. (hereinafter "Circumstances Beyond the Reasonable Control of the University"). In the event of the interruption of or changes in instruction caused by Circumstances Beyond the Reasonable Control of the University you recognize and agree that the University may deliver all or part of the courses and services in a virtual environment or in other non-traditional ways. This may occur at any time including prior to the start of or in the middle of a semester. Agreeing to the statement and registering for courses acknowledges your understanding and acceptance of this delivery method. In addition, you recognize and agree that in the event of Circumstances Beyond the Reasonable Control of the University that cause courses to be suspended or canceled that the University will make a good faith determination of when or if courses will be resumed and may determine that the courses are sufficiently complete for the awarding of credit without further instruction with or without final exams, projects, papers, etc. You agree that the University's decision in such cases is final and that you will be entitled only to a refund of a pro rata amount of tuition if courses are not finished and not resumed or rescheduled or no refund if courses are completed and you agree that this is your sole remedy. In addition, you agree to waive any right to seek damages, direct or indirect resulting from or related to Circumstances Beyond the Reasonable Control of the University. If the University determines to provide pro rata refunds, you agree that such refunds may be in the form of a tuition credit for future semesters.

Student Access and Success, Services and Information

The Division of Student Access and Success provides comprehensive support and resources to help all students succeed along their educational journey by cultivating equitable access, persistence, and personal and career development. The goals of Student Access and Success are to:

- Strengthen connections between and across the university and the community to increase student access, enrollment, and completion.
- Improve student retention and graduation rates through personalized academic advising, mentoring programs, and proactive intervention strategies.
- Facilitate seamless transitions for students by streamlining processes and creating clear pathways from admission to graduation across all divisions of the institution.
- Promote overall student wellbeing by offering a variety of accessible resources to support physical and mental health along with all aspects of wellness.
- Develop and implement programs to enhance students' interpersonal skills and personal/professional development, including leadership, critical thinking, and accountability.
- Foster a sense of community on campus by promoting and providing accessible services to meet the needs of our student populations.
- Emphasize student success beyond the classroom, preparing students for future career and life achievements.
- Continuously assess and adapt strategies based on best practices and data to meet the evolving needs of students.
- Improve and sustain professional development and learning opportunities for Student Access and Success focused on our divisional goals.

weber.edu/studentlife

Campus Services

Wildcat Stores

Telephone: 801-626-6352

Location: Shepherd Union Building and Davis Campus

Website: www.wildcatstores.com/

- Textbooks
- Computer Sales and Service
- School and Office Supplies
- Vocational Art & Engineering Supplies
- General Books & Gifts

IT Service Desk

Telephone: 801-626-7777

Location: Lampros Hall (LP) 110

Website: weber.edu/help

Wildcat and Email Account

All Weber State University students are provided a Wildcat account that includes email. Many professors communicate with their students by email, so it is important for students to activate their accounts early on. Students must also activate their Wildcat account prior to online registration. This can be done on the IT Help Desk website (visit any student computer lab to access the Internet).

Student ID (Wildcard)

Ogden Campus: 801-626-6367, Shepherd Union Lobby Information Center

Davis Campus: 801-395-3460, Bldg. D2, Suite 262

Website: weber.edu/wildcard

You need a Wildcard because it:

- is your library card
- allows you use of the physical education and campus recreation facilities
- gives you free admittance into athletic events and discounts to select club events
- is used for dining options
- allows you to print in the computer labs
- gives you access to campus health facilities
- is your I.D. to be used at the testing center and to get transcripts printed

You can upload your Wildcard on your phone! Find directions at weber.edu/wildcard.

Parking Services

Telephone: 801-626-6533

Location: Public Safety Building

Website: weber.edu/parking

Parking Services is responsible for issuing parking permits and regulating traffic, parking and related campus matters. Permits are required in all lots on campus Monday-Friday, 7 a.m. to 4 p.m. You can park at the Dee Events Center for free and take the shuttle to campus.

Academic Support Services

Academic Support Centers & Programs

Telephone: 801-626-7847

Website: weber.edu/ascp

Academic Support Centers and Programs (ASCP) offer an array of services designed to meet the individual needs of WSU students. These services include tutoring and testing centers.

Tutoring Services

Ogden Campus: Various locations, check website for current locations, times and how to make an appointment.

Davis Campus: Phone: 801-395-3569; Location: Bldg. D2, Room 214

Website: weber.edu/tutoring

Weber State Learning Support offers an array of peer tutoring and peer education services designed to meet the individual needs of WSU students. Tutoring focuses on developmental and general education courses. The program is

certified by the National Association for Developmental Education (NADE) and includes peer tutors certified through the College Reading and Learning Association (CRLA).

Supplemental Instruction

Ogden Campus: 801-626-6804, Tracy Hall, Suite 101

Davis Campus: 801-395-3539, Bldg. D2, Room 213

Website: www.weber.edu/tutoring/supplemental-instruction.html

Supplemental Instruction (SI) provides opportunities for students to participate in learning teams where they explore concepts and solve problems through group discussion and interaction as directed by a student team leader who has successfully completed the course. SI student leaders work in collaboration with the course professor and SI coordinator.

Student Support Services

Telephone: 801-626-7009

Location: Student Services, Suite 265

Website: weber.edu/sss, Check out STEM specific Student Support Services at weber.edu/sss-stem

Student Support Services (SSS) provides opportunities for academic development, assists students with basic college requirements, and motivates students toward completion of their college degree. The goal of SSS is to increase college retention and graduation rates of its participants and to help students make the transition from one level of higher education to the next. The program is only open to students who have been admitted to, or are enrolled at, Weber State University, and are low-income, first-generation college students or have a documented disability.

Computer Labs

Telephone: 801-626-7018

Website: weber.edu/computerlabs

WSU has nine open student computer labs. These computer labs are meant to serve the general needs of all enrolled WSU students. Lab hours vary from lab to lab and some labs are open seven days a week.

Locations:

- Davis Campus building D2, Room 205
- Davis Laptop Lounge building DSC, Lobby
- Elizabeth Hall (EH), Room 214
- Shepherd Union Computer Lab, SU Room 230
- Stewart Library, Second Floor
- Lindquist Hall (LH), Room 016
- Tracy Hall (TY), Rooms 126
- University Village, CC 108
- Wattis Business (WB), Room 118

Testing Centers

Telephone: 801-626-6803

Website: weber.edu/testingcenter

The testing center offers a variety of standardized tests for placement into appropriate courses and admission to academic programs. Tests are also administered for various academic departments on campus and Independent Study courses.

Locations:

- Student Services, Room 262
- Library, Room 110
- Tracy Hall, Room 101C
- Davis Campus, DSC Room 231
- Lindquist Hall, Room 024, Overflow room 017
- Morgan Testing

Career Services

Telephone: 801-626-6393

Ogden Campus Location: Student Services, Suite 230

Davis Campus Location: Bldg. D2, Suite 262

Website: weber.edu/careerservices

Career Services provides career counseling and employment advising to individuals and groups through interest, personality and ability assessments. A career development class is offered to students in a traditional classroom setting and online. Help is provided with resume and interview preparation and networking strategies. Career Center introduces students to employers through career and job fairs and through employer information sessions during the year. Students can find part-time jobs on campus and full and part-time jobs off campus through Handshake. Career Services works with employers to develop internships and jobs through employer outreach efforts. Counselors provide students with graduate school information and a graduate school fair is held annually.

Student Wellness Services**Student Health & Wellness**

Telephone: 801-626-7503

Location: Wildcat Center 210

Website: weber.edu/studentwellness

The Student Health & Wellness (SHW) department promotes optimal student health and wellbeing by providing evidence-based health education programming, services and resources to meet the health and wellness needs of Weber State students. Through the development of healthy habits in all eight dimensions of wellness, students are better prepared to be engaged in the classroom, in their personal lives and in their future careers. Students can also find healthcare services through Ogden Clinic-Professional North as part of the Student Health & Wellness program.

Counseling & Psychological Services Center

Telephone: 801-626-6406

Location: Student Services, Suite 280

Website: weber.edu/counselingcenter

The Counseling & Psychological Services Center provides professional mental health care, outreach and training to help individuals improve coping and achieve personal goals. The center promotes growth and development in an environment that welcomes and respects individuals of all backgrounds, belief systems and identities. Limited services may also be available at the Davis Campus.

Student Support & Resource Center

Ogden Campus: 801-626-7794, Shepherd Union, Room 322

Davis Campus: 801-395-3464, D2, Room 307

Website: weber.edu/support-resources

The Student Support & Resources Center has services meant to help students with basic needs and remove barriers so they can focus on their education. The center includes basic needs resources, Hourly Child Care, Weber Cares Pantry, Financial Literacy and emergency funding.

Services for Special Student Populations

State GEAR UP College Access Program

Telephone: 801-395-3547

Location: Davis Campus, DSC, Suite 308

Website: weber.edu/stategearup

GEAR UP (Gaining Early Awareness & Readiness for Undergraduate Programs) provides college readiness support for targeted students in the Weber and Davis school districts. First Year services are also provided for GEAR UP students pursuing post-secondary education. The GEAR UP program includes the following services:

- Financial Aid/Scholarship Advising
- FAFSA Completion
- ACT Preparation
- Academic Enrichment
- Campus Visits
- Family Outreach

GEAR UP Ogden School District

Telephone: 801-626-6211

Email: trenaroueche@weber.edu

Ogden School District's (OSD) GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) is a federally funded college access & readiness program. This is a partnership grant in which Weber State partners with OSD to offer college experiences to their students. This grant will follow and provide services to this cohort through their first year of college. The goals of this grant are to help students:

- Successfully graduate from high school
- Establish a college-going culture within their homes
- Gain knowledge about postsecondary options, preparation, and financing
- Prepare to enter and succeed in postsecondary education.

Upward Bound (TRIO Program)

Telephone: 801-626-6798

Location: Annex 3

Website: weber.edu/upwardbound

The Upward Bound program is a federal project that assists low-income, first-generation students throughout high school in becoming academically prepared and mentally ready for entrance into post-secondary education to obtain a bachelor's degree.

Services include but are not limited to:

- Academic Advising and Counseling in preparation for college entrance
- Academic tutoring both individually and in group sessions
- College and University life skills and academic skills training
- Career Exploration Financial Aid, FAFSA, and Scholarship workshops and assistance
- Life Enrichment Activities
- College Tours
- Weekly College Preparation Sessions
- Six-Week Residential Campus Program

International Student & Scholar Center

Telephone: 801-626-6853

Fax: 801-626-7693

Location: Student Services, Suite 143

Website: weber.edu/issc

The International Student and Scholar Center advises and assists international students with their personal, cultural, and academic adjustment to WSU, and is responsible for the recruitment, admission, and retention of international students. An orientation program is provided for all new international students each semester. Advisement is available to assist students concerning immigration related questions and concerns. The ISSC assists students with the following:

- International Student Admissions
- Student Advocacy and Adjustment
- Student Clubs
- International Events
- International Exchange Programs
- Consultation & Outreach

Hourly Child Care Center

Telephone: 801-626-7798

Location: Shepherd Union Building, Room 322E

Website: weber.edu/childcare

The Hourly Child Care Center is designed to provide flexible, hourly, or back-up care for the children of WSU students. Back-up care is based on availability. Children ages two to the start of kindergarten may attend. A child may be at the center while parents are attending classes, using the computer lab, studying, or using other campus resources.

Disability Services

Ogden Campus: 801-626-6413, Student Services, Suite 181

Davis Campus: 801-395-3442, Bldg D2, Room 256

Website: weber.edu/disabilityservices

Email: disabilityadvisor@weber.edu

Students requesting accommodations due to disability should be referred to Disability Services. Based upon documentation of the disability, Disability Services will authorize appropriate accommodations. Disability Services works closely with faculty and staff to ensure that any approved accommodation is appropriate and necessary for the situation. Some examples of accommodations include the following: classroom interpreting for deaf students, alternative-format textbooks, Braille and large print materials for handouts and syllabi, test accommodations, adaptive technology, registration assistance and advisement. Disability Services advises students on issues related to disabilities and higher education and provides priority registration for qualified students.

Military Affiliated Student Center

Ogden Campus: 801-626-6039, Shepherd Union Building, Room 322

Davis Campus: 801-395-3460, Bldg D2, Suite 262

Website: weber.edu/military-affiliated

The Military Affiliated Student Center is the liaison between Weber State University and the U.S. Department of Veterans Affairs for educational benefits for veterans and dependents who are eligible for the GI Bill. In addition, Veterans Services provides a variety of support services to assist in making education a successful experience for veterans. The center also helps veterans and their dependents identify sources of support for their educational needs.

Veterans Upward Bound

Ogden Campus: 801-626-7173, Annex 12

Davis Campus: 801-395-3460, Bldg D2, Suite 262

Website: weber.edu/vetsupwardbound

Veterans Upward Bound is designed to motivate and assist veterans in the development of academic and other requisite skills necessary for acceptance and success in a program of postsecondary education. The program provides assessment and enhancement of basic skills through counseling, mentoring, tutoring and academic instruction in the core subject areas. Veterans Upward Bound provides instruction in mathematics, English, science, foreign language, composition and literature and computer use. The project also assists veterans in securing support services from other locally available resources such as the Veterans Administration, state veterans agencies, veteran associations, and other state and local agencies that serve veterans.

Safe@Weber

Telephone: 801-626-6090

Location: Shepherd Union 323

Website: www.weber.edu/SafeAtWeber/get-training.html

Email: safeatweber@weber.edu

Safety is foundational to the best educational experience for all. Safe@Weber provides comprehensive support and advocacy services to victims/survivors and imparts empowerment, dignity, and hope. We are committed to innovative violence prevention education and outreach to engage the next generation in creating a more resilient, safe, and compassionate campus community. Our values include advocacy, community and empowerment. Main initiatives include:

- **Safe@Weber Advocacy Services:** Trauma-informed and confidential advocacy services for survivors of discrimination, harassment and sexual misconduct (sexual assault/harassment, rape, domestic/dating violence and/or stalking). Services include: supportive measures such as petition support, civil protective order support, referrals to community resources, etc.; assistance reporting to Title IX and/or law enforcement; and safety planning.
- **Safe@Weber Violence Prevention Education:** Comprehensive education on consent, healthy relationships, bystander intervention, risk reduction and supporting survivors. Workshops can be requested at:

<https://weber.edu/SafeAtWeber/workshops.html> We additionally have a free resource pantry that is stocked with menstrual products, safe sex products and pregnancy tests.

- Leadership & Engagement: Safe@Weber Peer Educators, internships for Women & Gender Studies minors, and student volunteers. We have many scholarships available for students.

The Safe@Weber Violence Prevention and Advocacy Program supports a campus-wide response to issues of violence. It focuses on the prevention of violence by educating students on sexual assault, relationship violence, and stalking, and eliminating violence on campus. Safe@Weber provides free services and support to those affected by sexual and relationship violence, and stalking. Core services include safety planning, investigation advocacy, and supporting survivors in establishing educational accommodations. Leadership opportunities through Safe@Weber include the Safe@Weber Ambassador program, the Peer Educator program, internships and practicums. Contact us via phone (801-626-6090) or email (safeatweber@weber.edu) to schedule a Safe@Weber presentation for your class, club, or WSU community.

Housing & Residence Life

Telephone: 801-626-7275

Location: Wildcat Village

Website: weber.edu/housing

Housing serves students who choose to live on campus in a living/learning environment, which includes peer counseling, social education, academic support and planned activities. Housing is located in two distinct villages. University Village is comprised of a 4- person suite style with kitchens, private bedrooms, and 2 bathrooms. Wildcat Village offers single and double rooms in a suite-style with 4 people per suite. Housing includes high-speed internet, fully furnished, fitness centers, laundry and mail facilities. Wildcat Village also has a food service operation in the complex. With our Living/Learning Villages, Housing offers several opportunities for students to get involved. Resident Assistants (RA's), Residence Hall Association (RHA) and Office Assistants (OA's) work and/or volunteer in the housing community.

Student Life & Activities

Campus Recreation

Telephone: 801-626-7967

Location: Stromberg Wildcat Center for Health, Education and Wellness, Room 101

Website: weber.edu/campusrecreation

The Department of Campus Recreation offers a variety of recreational opportunities throughout the Ogden and Davis campuses for users with an active WSU Wildcard. Please check weber.edu/campusrecreation for facility hours, program information and schedules. Campus Recreation offers students opportunities to improve their personal health, well-being and overall fitness through the following programs/services:

- Aquatics & Safety (drop-in swim, swimming lessons, CPR/First Aid certifications)
- Fitness (drop-in strength and cardio, drop-in group exercise classes, personal fitness training) Competitive Sports (Intramural Sport leagues/tournaments and Sport Clubs)
- Outdoor Programs (Located in the Welcome Center; outdoor equipment rental center, outdoor trips/clinics, certifications, clinics climbing wall and challenge course activities)

Esports

Location: University Village Community Center Room 108 and Wattis Business Building Room 118

Website: weber.edu/esports

Weber State Esports offers casual and competitive play allowing engagement with fellow students and the community. Our varsity Esports teams compete collegiately and have won several tournaments. We have weekly get-togethers of casual play. This occurs within our weekly Super Smash Brothers events, Jr. Varsity teams and weekly match viewing for each game type. Weber varsity players also offer coaching to Weber students with a desire to compete at a higher level or simply learn one of our supported titles. Currently, the competitively played esports games include Super Smash Brothers, Valorant, Rocket League and League of Legends.

WSU Athletics

Telephone: 801-626-6817
Location: Stewart Stadium, second floor
Website: www.weberstatesports.com

The mission of the Department of Intercollegiate Athletics is to support the greater mission of Weber State University in meeting the educational needs of Utah by stimulating and improving athletics programs for students designed to develop and promote skills that assure an excellent chance of success in athletics participation, college and career.

Shepherd Union

Telephone: 801-626-6367
Location: Shepherd Union
Website: weber.edu/union

The Shepherd Union provides a focal point for the Weber State University community through an array of programs, services and operations including:

- Wildcard Office - Shepherd Union Information Center
- Wildcat Lanes & Games Center
- Wildcat Stores
- Scheduling Events and Conference Services
- Weber Dining

Student Involvement and Leadership

Telephone: 801-626-6349
Location: Shepherd Union, Suite 326
Website: weber.edu/studentinvolvement

Student Involvement and Leadership is committed to enhancing student life by providing inclusive programs and leadership opportunities that promote education, engagement and development. SIL is committed to providing opportunities for all students in clubs and organizations, leadership workshops and programs, events and campus activities and student government.

Center for Community Engaged Learning

Telephone: 801-626-7737
Location: Shepherd Union, Suite 327
Website: weber.edu/ccel

The Center for Community Engaged Learning at Weber State University facilitates both curricular and co-curricular community engaged learning experiences. The main mission of the center is to engage students, faculty and staff members in direct service, civic engagement and community research to promote civic participation, build community capacity and enhance the educational process.

Community engaged learning can be facilitated through one of our three pathways: direct service, civic engagement and community research. Student learning outcomes, definitions, and measurement rubrics can be found at weber.edu/ccel.

WSU Student Association (WSUSA)

Telephone: 801-626-6349

Location: Shepherd Union, Suite 326

Website: www.weber.edu/studentinvolvement/wsusa.html

WSU Student Association (WSUSA) includes:

- Legislative Branch (Student Senate)
- Judicial Branch
- Executive Branch
- Committee Involvement

Dean of Students

Telephone: 801-626-7256

Location: Miller Administration Building, Suite 317A

Website: weber.edu/deanofstudents

The Office of the Dean of Students (located in the Miller Administration Building, Suite 317A) is committed to assisting each student to become a successful member of the Weber State University community. As a means of supporting this mission, the Dean's office is responsible for Student Code of Conduct. The Student Conduct process is designed to assist in the development and education of students, promote mutual respect within the University community, contribute to maintaining a safe campus environment, and provide a process for tracking repeated incidents of student code violation. The WSU Student Code can be found online (weber.edu/ppm), WSU Policy and Procedures Manual section 6-22.

Student Success Center

Telephone: 801-626-7006

Location: Student Services Center, Room 150 & 160

Website: www.weber.edu/student-success-center

The Student Success Center offers individualized student coaching to focus on the needs of each student and creates events and programming to foster vibrant communities. The center cultivates an environment where students achieve academic, personal and professional excellence. Come here if you have any questions about college, need some support, or want to connect to Weber State but don't know how.

Admissions, Enrollment, and Financial Aid

Weber State University is continually working to make it easier for students to access information and receive the assistance they need. Students may apply for admission and access registration, transcripts, and a lot more online at weber.edu. Academic advisement, admissions, registration and other enrollment services are also provided at the Davis Campus. Class schedule information for specific semesters is available online at weber.edu.

Information on records, grading and transcripts; academic standards and eligibility; credit by examination or petition; and graduation requirements is provided in this catalog under the Academic Info & Policies.

The Office of Admissions

Director of Access Engagement and Activities: Andy Young

Location: Student Service Center, Room 201 and Room 210

Telephone: 801-626-6050

Website: weber.edu/admissions

The Office of Admissions encourages future students to reach their educational dreams by providing exceptional service and personal support through the exploration, application, acceptance, transfer, orientation and initial enrollment processes.

Recruitment Services

Director of Recruitment Outreach: Brant Brown

Location: Student Service Center, Room 210

Telephone: 801-626-6050

Website: weber.edu/getintoweber

Admissions Advisors and staff help future students navigate the admission process and provide general information on transferring from another institution, scholarships, programs and majors. Additionally, staff regularly visit high schools and community colleges to inform students, educators, and parents of the educational programs and opportunities available at Weber State University.

Members of the Office of Admissions, including Student Ambassadors, provide campus tours and regularly host campus visit opportunities. Campus visits may be scheduled through the Office of Admissions by calling 801-626-6050 or by visiting weber.edu/getintoweber.

Transfer Advisement: Student Success Center

Location: Shepherd Union Building, Room 322

Telephone/Appointments: 801-626-7794

Email: transitionadvising@weber.edu

Website: weber.edu/transfer

Transfer Guide: weber.edu/transferguide

Transfer students are strongly encouraged to contact the Office of Admissions for valuable information and assistance while making the transition to Weber State University. This office provides advisement on submitting official transcripts from other institutions, information on admission, scholarships and financial aid and more.

Admission Process

Before students may take classes at Weber State University, they must first be admitted. To apply for admission a student must submit a completed application for admission, a \$30 non-refundable processing fee and official high school/college transcripts to the WSU Admissions Office located in the Student Service Center, Room 201. This may also be done by mail:

Weber State University
Admissions Office
3885 West Campus Drive Dept. 1137
Ogden, UT 84408-1137

- Students can complete an online application by going to weber.edu/apply.
- For more information visit weber.edu/apply or call 801-626-6050.
- Refer to the Academic Calendar for semester dates.

- Specific guidelines for international students are described below.
- Acceptance letters are sent to students for the academic semester indicated on their application. A student must inform the Office of Admissions if they wish to begin school in a semester earlier than that listed on his/her acceptance letter.

Freshman Students

Students will be considered freshmen if they meet any of the following criteria:

- Students who have never attended any college or university.
- Students who graduated from high school or have a GED.
- Students with fewer than 30 semester credit hours from another university or college.

Application Steps for Freshman Admission

1. Submit an application for admission.
2. Pay the \$30 application fee (non-refundable processing fee).
3. Submit an official transcript from the high school of graduation. The transcript should be sent directly from the high school to the WSU Admissions Office or brought into the Admissions Office in an envelope sealed by the school.
4. Submit an official transcript for any college-level course work completed through another institution. The transcript should be sent directly from the institution to the WSU Admissions Office.

Transfer Students

Students who have attended another college or university after high school graduation, and have completed the equivalent of at least 30 semester credit hours, will be considered a transfer student.

Students who have completed fewer than 30 semester hours will be considered freshman (see above). These students will also receive transfer credit based on the guidelines below.

Application Steps for Transfer Students

1. Submit an application for admission.
2. Pay the \$30 application fee.
3. Submit an official transcript from EACH college or university previously attended. The transcript must be sent directly to the WSU Admissions Office.

Transfer Credit

Weber State University accepts transfer credit from regionally accredited colleges and universities.

- Higher Learning Commission
- Western Association of Schools and Colleges
- Southern Association of Colleges and Schools Commission on Colleges
- Middle State Commission on Higher Education
- New England Commission of Higher Education
- Northwest Commission on Colleges and Universities

Transfer Degrees

Completed Associate of Arts (AA) and Associate of Science (AS) degrees earned at another Utah institution as a part of the Utah System of Higher Education (USHE) will satisfy all WSU general education core and breadth requirements. Out-of-state AA and AS degrees from regionally accredited institutions are evaluated using NCAA standards and will fulfill WSU general education core and breadth requirements if the degree includes evidence of 6 credits of college-level English coursework, 3 credits of college-level math coursework, and 3 credits of college-level physical or life science coursework.

Students are required to complete the American Institutions (AI) requirement in addition to their accepted associate degree if that degree does not include 3-6 credits of coursework with the course learning outcomes that include a reasonable understanding of the history, principles, form of government, and economic system of the United States as required by state law.

Transfer credit for college courses that are remedial or developmental **will not** be transferred to WSU. Credit will be carried on the student's transcript by WSU but may not apply toward certain degree requirements. WSU Academic Departments will evaluate and determine whether the transfer credits will be acceptable toward their major or minors.

For students who are transferring from a non-regionally accredited institution, please refer to Credit by Examination or Petition in Academic Information.

International Students

International applicants with no prior college or university credit will be considered for admission by submitting evidence of the U.S. equivalent of a high school diploma. International applicants who have attended a U.S. college or university and have at least 30 semester hours will be considered a transfer student.

Application Steps for International Students

The following must be submitted at least 30 days prior to the start of the semester in which the applicant plans to enroll.

1. A completed international application for admission. (see www.weber.edu/issc)
2. A \$65 USD non-refundable application fee (check or money order payable to Weber State University).
3. A copy of the identification page of the passport.
4. A Financial Guarantee consisting of the following documents.

Bank Statement or Bank Letter: A bank statement or bank letter that shows the account holder's full name, the currency type, the balance of the account and a signature and stamp from a bank official on a bank letterhead. This must be in English. The amount in the bank account should be more than the cost estimate (equal to one year of tuition and all other expenses).

Financial Guarantee Form: Must be filled out by the sponsor, which is the person that provided the bank statement. The sponsor will need to fill out the form completely.

1. Official transcripts of student academic records and a diploma showing date of completion. Include certified translation into English, if necessary. Note: High School Transcripts are not required if students pass at least 30 degree-seeking credits at an accredited U.S. college or university. For West African Students Only: Include with your transcripts a WAEC Scratch Card as well as all the required documents or necessary information needed to verify your results.
2. International Transfer Students: Need to provide all items listed above and also the items listed below.
3. Copy of current I-20 from a U.S. educational institution and a copy of their visa.
4. Transfer Authorization form, which will be provided by WSU once all other application requirements have been met. Please inform the school you previously attended that you wish to transfer to WSU and submit the Transfer Authorization form to them to be complete and emailed back to WSU.

NOTE: If you are transferring from a school outside of the U.S., you will be considered a freshman until your credential evaluation report is received and entered into your student record by the WSU Admissions office. If you

wish to receive credit for college/university course work completed outside the U. S., you will need to send your transcripts to a credential evaluation company accepted by WSU. You may view a list of accepted credential evaluation companies at www.weber.edu/issc. Please request that the course by course evaluation be sent to the WSU International Student and Scholar Center.

International Graduate Applicants

International applicants who wish to apply to graduate programs must satisfy all Weber State University (WSU), International Student Scholar Center admissions criteria, and graduate program requirements that apply to U.S. citizens, in addition to providing evidence of English language proficiency. WSU graduate programs require a minimum English language proficiency test score for admission. Minimum scores of 75 for the TOEFL (Test of English as a Foreign Language) or 6.5 for the IELTS (International English Language Testing System) have been set by the Office of Graduate Studies. Individual graduate programs may require higher English language proficiency test score minimums. Students may also take an alternative English language proficiency test (e.g., Duolingo) as the graduate program permits. The alternative English language proficiency test score must be equivalent to the TOEFL or IELTS minimum scores established through the Weber State International Student and Scholar Center or as specified by the graduate program.

International graduate student applicants who completed coursework and/or transferred from unfinished degree programs at institutions whose primary language of instruction was English, or completed a bachelor's degree (or higher) at an institution whose primary language of instruction was not English must present an English language proficiency test score to the graduate program.

Provide any additional documentation required by the International Student & Scholar Center

TOEFL or IELTS Requirements:

Minimum placement Scores:

- TOEFL Internet Based Score: 61 or higher.
- TOEFL Paper Based Score: 500 or higher.
- IELTS Score: 6.0 or higher, with a minimum of 5.0 on each subscale.
- SAT Critical Reading score of 420
- ACT English score of 17
- PTE Academic score of 46
- Completion of the International Baccalaureate Diploma at an accredited high school
- Attended a U.S. high school for at least 3 years
- Received a grade of "C" or better in a college-level English Composition Course (equal to WSU's English 1010) at an accredited U.S. college or university
- DUOLINGO English Test: Score of 105 or above (please request official results sent to WSU directly from Duolingo).
- Common European Framework of Reference for Languages (CEFR): B2

International Application Deposit**

After acceptance, new out-of-country international students must pay a non-refundable tuition deposit of \$250 before an I-20 document can be issued. This deposit will be applied to your first semester tuition. If you defer your admission to the next semester, the deposit will be carried forward accordingly for one semester only.

**U.S. transfer students are not required to pay this deposit.

Graduate Program Information

Weber State University has exceptional graduate degree programs and certificates. To learn more about these programs and their admission requirements, visit the Office of Graduate Studies website at weber.edu/graduateprograms.

- Master of Arts in English (MA), Literature Emphasis Telitha E. Lindquist College of Arts & Humanities
- Master of Professional Communication (MPC) Telitha E. Lindquist College of Arts & Humanities
- Master of Accounting (MAcc) John B. Goddard School of Business & Economics
- Master of Business Administration (MBA) John B. Goddard School of Business & Economics
- Master of Taxation (MTax) John B. Goddard School of Business & Economics
- Masters of Education, Curriculum & Instruction (MEd) Jerry and Vickie Moyes College of Education
- Masters of Education, Educational Leadership (MEd) Jerry and Vickie Moyes College of Education
- Masters of Education, Educational Technology (MEd) Jerry and Vickie Moyes College of Education
- Masters of Education, Family Life Education (MEd) Jerry and Vickie Moyes College of Education
- Masters of Education, Higher Education Leadership (MEd) Jerry and Vickie Moyes College of Education
- Masters of Education, Sport Coaching Leadership (MEd) Jerry and Vickie Moyes College of Education
- Master of Science in Athletic Training (MS) Dr. Ezekiel R. Dumke College of Health Professions
- Master of Health Administration (MHA) Dr. Ezekiel R. Dumke College of Health Professions
- Master of Science in Nursing (MSN) Dr. Ezekiel R. Dumke College of Health Professions
- Master of Science in Radiologic Sciences (MSRS) Dr. Ezekiel R. Dumke College of Health Professions
- Master of Science in Criminal Justice (MCJ) College of Social & Behavioral Sciences
- Master of Science in Computer Engineering (MSCE) College of Engineering, Applied Science, & Technology
- Master of Science in Computer Science (MS) College of Engineering, Applied Science, & Technology
- Master of Science in Data Science (MS) College of Engineering, Applied Science, & Technology
- Master of Science in Electrical Engineering (MSEE) College of Engineering, Applied Science & Technology
- Master of Social Work (MSW) College of Social & Behavioral Sciences
- Master of Physician Assistant Studies (MPAS) Dr. Ezekiel R. Dumke College of Health Professions
- Doctor of Nursing Practice (DNP) Dr. Ezekiel R. Dumke College of Health Professions

Post Baccalaureate Certificates

- Aerospace Management Post Baccalaureate Certificate
- Autonomous Vehicle Software Post Baccalaureate Certificate
- Business Analytics Post Baccalaureate Certificate
- Business Development Post Baccalaureate Certificate
- Computational Data Science and Machine Learning Post Baccalaureate Certificate
- Contract Management in Business Post Baccalaureate Certificate
- Cybersecurity Post Baccalaureate Certificate
- Elementary Teaching Post Baccalaureate Certificate
- Management Information Systems: Information Assurance Post Baccalaureate Certificate
- Occupational Health Nursing Post Baccalaureate Certificate
- Quality and Lean Manufacturing Post Baccalaureate Certificate
- Regulatory Affairs Post Baccalaureate Certificate
- Rhetoric and Writing Studies Post Baccalaureate Certificate
- Secondary Teaching Post Baccalaureate Certificate
- Special Education Teaching Post Baccalaureate Certificate
- Sustainability for Business Post Baccalaureate Certificate
- Systems Engineering and Sustainable Engineering Post Baccalaureate Certificate
- Taxation Post Baccalaureate Certificate

Post Master's Certificates

- Advanced Pediatric Imaging Post Master's Certificate
- Educational Leadership Post Masters Certificate
- Nurse Leadership & Management Post Master's Certificate
- Nurse Educator Post Master's Certificate

I. Application Procedures

To apply to a graduate program all individuals must contact the graduate program for specific admissions requirements. The following items must be provided to the specific graduate program office:

1. A completed online application accompanied by the nonrefundable application fee (as designated by the Graduate Council).
2. A bachelor's degree from a regionally accredited college or university is required for admission as a graduate student at Weber State University. An official transcript from each previously attended college and/or university (except WSU) must be sent directly from each institution to the graduate program. Transcripts must be submitted for all coursework above the high-school level and all prior degrees. For international students, transcripts must be accompanied by a professional degree and transcript evaluation, which must be sent directly to the graduate program by a WSU-approved foreign credentials evaluation service. See International Student Admissions website for further details. Transcripts submitted as application credentials become the property of the Weber State University and will not be returned to the applicant.
3. Admissions tests may be required by the specific graduate program (GRE, GMAT, Miller's Analogies Test, etc.), as well as proof of English language competency for international applicants. Applicants should request that their test score reports be sent directly to the graduate program to which they are applying, or to WSU if a specific institutional code is not available for the graduate program.

II. Admission Requirements

Admission to a graduate program at Weber State University is based on the applicant's academic ability, past performance and evidence of a reasonable chance of success within that program. Selection for admission is made without regard to race, color, ethnic background, national origin, religion, creed, age, lack of American citizenship, disability, status of veteran of the Vietnam era, sexual orientation or preference or gender.

Admission is competitive and solely at the discretion of the graduate program to which the applicant has applied: meeting minimum admission requirements does not guarantee admission. Minimum requirements for admission to a Weber State University graduate program are as follows:

- A bachelor's degree from a regionally accredited college or university that will be completed before matriculation into the graduate program (see the U.S. Department of Education website for a list of recognized regional accreditation agencies). A satisfactory GPA on all undergraduate work. Contact the graduate program for specific GPA requirements.
- Appropriate admissions test scores if required. (Contact graduate program for specific admissions test requirements.)
- A completed application, along with the submission of all required supporting materials (contact graduate program office for specific requirements).

Note: Individual graduate programs may have additional requirements. Information concerning admission to and requirements for these programs is located in the sections of this catalog for the colleges indicated above.

Departmental Admissions

Certain programs of study require an additional acceptance process into the major beyond admission to the institution. Upon successful completion of required prerequisites, students may apply for formal acceptance into the

program, which may include a competitive selection process. More detailed information is available in this catalog under the Acceptance Requirements listed for each program. Students should contact the academic department responsible for the program in which they are interested in more information about specific acceptance and/or prerequisite requirements.

Admission Requirements

Freshman Students

New freshmen students, and transfer students with fewer than 30 semester credit hours, will be admitted to the University on the basis of the following:

- Verification of high school graduation from an accredited high school or General Education Development test (GED) with scores established by the University. (See Applicants Without High School Diplomas.)
- Submission of official college or university transcripts if college credit has been earned.

Applicants Without High School Diplomas

Applicants who are not high school graduates must present evidence of high school equivalency to be considered for admission. High school equivalency may be satisfied in one of the following ways:

- Passing the General Education Development test (GED) with an overall score of 2250 or above with no individual score below 450. Applicants who plan to submit GED scores in lieu of a high school diploma are not eligible to take the test until they are 16 years old.
- Passing the American College Test (ACT) with a composite score of 21 or above (SAT score of 1030 or above).

Transfer Students

Transfer students will be admitted to the University on the basis of the following:

- More than 30 semester credit hours earned at an accredited institution with a cumulative college-level GPA of 2.00 or above.

Transfer students with a cumulative GPA below 2.00 will be referred to the Admissions Committee and may be considered for admission to WSU on warning or probation according to the current Academic Standards policy.

Admission Appeal Process

An information sheet highlighting grounds for appeals to admission decisions is available at the WSU Admissions Office.

Utah Residency

The Admissions Office classifies all applicants as either resident or non-resident based on information from the application for admission. Applicants whose credentials indicate out-of-state status are classified as non-residents. If there is doubt concerning resident status, an applicant is classified as a non-resident.

Non-residents who have reason to believe they can qualify for resident status should file a residency application with the Admissions Office. Applications are accepted only until the end of the third week of the current semester. Any application received after the third week will be considered for the following semester only.

Residency applications are available online at weber.edu/utahresident. Each application will be considered in accordance with the provisions of Utah Code Annotated 53B-8-102 and Utah State Board of Regents Policy and Procedures R-512 and WSU PPM 6-01.

Math and English Placement

Upon admission to Weber State University, Math and English course placement is determined based on students' prior academic performance and test results. Fees may be charged for assessment tests and/or tutoring. Students may enroll in courses for which they meet the prerequisites. For specific information about placement, visit weber.edu/placement.

Special Admission Programs

Concurrent Enrollment

High School Dual Enrollment at Weber State is the intersection of the Concurrent Enrollment and Early College programs. These programs allow students to earn college credit while they are enrolled in high school.

Our Mission

To provide equitable access to college credit and advising support for high school students of all identities and backgrounds. Our team advocates for students by empowering them with the knowledge and opportunities to achieve their academic dreams.

Our Vision

We will transform the lives of students and their communities by helping them embrace the value of college education, implementing innovative strategies to promote success in college, and empowering students to take ownership of their educational experience.

For updated information, visit weber.edu/dual-enrollment.

Early College

Location: Student Service Center, Room 140 and Davis Campus, Building D2, Suite 241

Telephone: 801-395-3480

Early College allows students to fulfill both high school and university graduation requirements at the same time by attending classes at the university while they are still in high school. University faculty teach classes, and the credits/grades from the Early College program become part of the student's permanent WSU transcript.

Although scholarships are available, students are responsible for the university tuition and fees. Utah colleges and most out-of-state and private universities will accept Early College credits.

For more information, visit weber.edu/dual-enrollment/early-college.html.

First Year Experience

Location: Student Service Center, Room 140

Telephone: 801-626-6752

Website: weber.edu/fye

The First Year Experience (FYE) Program is designed to help incoming students make a successful transition into the university community. The program assists students in making progress toward fulfilling the following educational and personal goals:

- Acquiring a sense of competence as a student and becoming successful in college.
- Mastering academic skills, such as note-taking, textbook reading, test-taking, writing and time management.
- Demonstrating knowledge and use of campus resources.
- Demonstrating effective interpersonal skills with a variety of people.
- Developing a sense of belonging to the WSU community through the connections with other students, teachers, mentors and WSU employees.
- Enhancing his or her mental, physical, spiritual and social health.

The FYE Program is further explained below.

Honors Program

Location: Stewart Library, Room 324

Telephone: 801-626-7591

The Honors Program is designed to offer students of superior ability and motivation opportunities to broaden and enrich their academic program and accelerate their preparation for graduate work.

The Honors Program is further explained on Engaged Learning, Honors, and Interdisciplinary Programs.

Senior Citizen

Location: Student Services Center, Room 201

Telephone: 801-626-6743

Utah residents age 62 and over are permitted to enroll on a tuition-free, audit basis. Senior citizens will be required to complete an application for admission and register at the Registration Office on or after the first day of class. Where applicable, senior citizens will be charged a fee for use of consumable materials. A \$10 per semester administrative fee will be charged and enrollment is limited to space availability.

Scholarships

Executive Director: Jed W. Spencer

Director: Bridget Jensen

Location: Student Services Center, Room 120

Telephone: 801-626-7569

Website: weber.edu/scholarships

WSU awards scholarships for academic excellence or specific activities as described below. Unless otherwise specified, all scholarships are for one year and are not renewable. New freshmen students are automatically considered for academic scholarships upon being admitted to the University. Students should complete the Weber State Scholarship Universe Application. It is important to apply early; the online application becomes available on October 1st each year.

An award may be canceled if the Award Offer is not accepted within the specified time period.

The Priority deadline for scholarships is:

- Priority date to submit the admissions application, high school transcripts and test scores to the Admissions Office: Feb. 1

- Priority date to accept academic scholarships: May 1
- Priority acceptance for Scholarship Universe Applications: July 1

Students may only have up to full tuition in academic and activity waiver combined.

Academic Awarding Categories

New Freshmen

Scholarships include the Presidential Scholarship (8 consecutive semesters of tuition waiver and general fees); Trustees, Deans, Merit, Success and Concurrent Enrollment Edge.

These scholarships are a four year award (8 semesters, or until graduation with a Bachelor's degree- whichever occurs first) and may consist of up to full tuition, and are generally based upon an index score (determined by the high school cumulative grade point average and the composite ACT/SAT score - see the Scholarship Index Score Chart). Sterling Scholar winners is a one year award.

Transfer Students

The Academic Distinction Scholarship is awarded based upon cumulative GPA and completion of 30 hours of college credit. This scholarship is a three year award (6 semesters, or until graduation with a Bachelor's degree- whichever occurs first).

Wildcat Activity Award Categories

General Requirements

- Must be registered full time (12 credit hours).

Activity scholarships are one-year awards waiving up to full tuition, and are based on the student's abilities or outstanding achievements. Activity scholarships (with the exception of leadership scholarships) may be renewed when the student meets the selection criteria established by the awarding department.

Scholarships for Specific Activities

With the exception of leadership, students are required to contact the activity area to get information about specific requirements and auditions. Scholarships are available in the following areas:

- Performing Arts - Band, Orchestra, Dance, Theatre Arts, Piano, Vocal. Advise contact prior to January 9, audition only, call 801-626-6437 for more information
- Debate - Contact WSU Communication Department, 801-626-8924
- Cheerleaders - Contact WSU Athletics, 801-626-6500
- Rodeo - Contact Club Sports, 801-626-6476
- Signpost - Student newspaper. Contact Signpost, 801-626-7974
- KWCR Radio - Contact KWCR, 801-626-6299
- Visual Arts - Contact WSU Visual Arts Department, 801-626-6455
- Club Sports - Contact Club Sports, 801-626-6476

Emerging Leaders Scholarships

These scholarships are available only to incoming freshmen and sophomores as well as transfer students. Students are not required to be student body officers to be considered. In addition to the scholarship application, students applying for a leadership scholarship must meet the following requirements:

1. Have a cumulative GPA of 3.0 or higher on a 4.0 scale.
2. Exhibit involvement in academic and community activities, with particular experience in leadership roles.
3. Be accepted to Weber State University and will be attending in the next fall and spring semesters
4. Successfully participate in the Emerging Leaders program as established by the Department of Student Involvement & Leadership. These expectations include:
 - Mandatory bi-weekly meetings on Thursdays from 2:30-4:00pm.
 - Mandatory attendance at Project LEAD Leadership Conference.
 - Only 2 absences per semester.

Students must apply for admissions/scholarships by the 2nd Monday in March. Emails may be directed to: Sheldon Cheshire (scheshire@weber.edu).

Donor Sponsored Departmental and Special Consideration Scholarships (Privately Funded)

Privately funded scholarships are awarded according to the donor's specifications, which can be major-specific (often referred to as departmental scholarships), need based or special conditions. To apply for private donor scholarships, complete the Weber State Scholarship Universe Application by the priority date of February 1.

General Requirements

- Maintain the minimum GPA specified by the scholarship (varies between 2.0 and 3.7).
- Register for the minimum number of credit hours specified by the scholarship (most scholarships require 12 credit hours).

Scholarships for Out-of-State Students

Out of state students are eligible for tuition incentive programs or academic waivers. Tuition incentive programs include: Alumni Legacy, the Western Undergraduate Exchange Program, and the 100 mile radius scholarship. Academic Waivers include Mt. Ogden, Golden Spike, and Waterfall Canyon for new freshmen and Ben Lomond, Skyline Trail, Antelope Island and Malan's Peak for transfer students. Nonresident waivers cannot be combined with tuition incentive programs. Current information for each program can be found on the WSU website at weber.edu/Scholarships.

Nonresident Academic Scholarships

Academic nonresident scholarships for new freshmen students are determined based on index score (high school GPA and ACT/SAT test scores). Academic nonresident scholarships for transfer students will be determined by cumulative transfer GPA.

Alumni Legacy

The Alumni Legacy Program allows children of non-resident Weber State alumni to pay in-state tuition. This scholarship pays the out-of-state portion of tuition. This scholarship is for one year and is not renewable.

100-Mile Tuition Reduction

Non-resident students living within 100 highway miles of WSU are eligible to apply for this tuition reduction. It will pay one-half of the difference between resident and nonresident tuition charges.

Western Undergraduate Exchange Program (WUE)

For full-time undergraduate students from Alaska, Arizona, California, Colorado, the Commonwealth of the Northern Marianas Islands, Guam, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Washington and Wyoming. This program offers a reduced tuition level to 150% of Weber's resident tuition. Time spent on the WUE cannot be used towards residency. The WUE cannot stack with other academic waivers.

International Students

New freshman International students who have not attended another Utah System of Higher Education may apply for a 4-year award (8 semesters, or until graduation with a bachelor's degree) and is dependent on a GPA or grade profile that is unique to each country - Transfer students with 30 or more college credits may apply for a 3 year award (6 semesters, or until graduation with a bachelor's degree) and will be determined by transfer GPA. International scholarships include Louis F Moench, H. Aldous Dixon, Aaron W. Tracy and William P. Miller.

Scholarship Deferment

Scholarship deferment requests must be submitted at weber.edu/returntoweber.

Scholarship Index Score Chart

Utah resident index chart for incoming freshmen

Nonresident index chart for incoming freshmen

Financial Aid

Executive Director: Jed W. Spencer

Director: Marc Gangwer

Location: Student Services Center, Room 120

Telephone: 801-626-7569

Website: weber.edu/financialaid

The Financial Aid Program was established to assist students in achieving their educational goals. The following sources of financial aid are available for eligible students:

- Grants - Funds that are considered gifts and do not have to be repaid if Satisfactory Academic Progress (SAP) is maintained.
- Student Loans - Funds that are loaned to students and must be repaid with interest.
- Work-Study - Employment opportunities that allow students to earn funds to help pay for school.

Each form of financial aid has different regulations. The following is only a brief summary of the financial aid process. Students desiring financial aid should contact the Financial Aid & Scholarship Office as early as possible for guidance and assistance. The priority deadline for financial aid is April 1.

General Eligibility Requirements

- Meet the admission requirements of WSU as described in the Admissions section of this catalog. Conditional admission does not qualify for federal aid.
- Be enrolled or accepted for enrollment in a program that leads to a degree or certificate at WSU.
- Be a U.S. citizen, permanent resident, or other eligible non-citizen.
- Be registered with the Selective Service, if required.
- Be in good standing (not in default) on any student loan, federal loan or grant.
- Maintain Satisfactory Academic Progress.

- Have a correct Social Security Number.

Types of Financial Aid Available at WSU

Grants/Gifts

Grants are funds that do not have to be repaid if Satisfactory Academic Progress is maintained. All grants require a minimum overall GPA of 2.00 by the end of a student's fourth semester. All grants require that the student demonstrate a financial need, as determined by the FAFSA. The types of grants available are:

Federal Pell Grant - Available to undergraduate students. For the 2025-2026 aid year, awards may range up to \$3,698 per semester.

Federal SEOG (Supplemental Educational Opportunity Grant) - Awarded to help undergraduates pay for their education after high school. Awards may range up to \$550 per semester.

Student Loans

Loans are aid that must be repaid with interest. The types of loan programs available are:

- Federal Direct Loan
 - Subsidized Stafford
 - Unsubsidized Stafford
 - Federal Parents Loan for Undergraduate Students (PLUS)
 - Federal Graduate Plus Loan for Students in Graduate Programs

Employment - Federal Work Study (FWS)

This program provides jobs for undergraduate and graduate students who meet the basic eligibility requirements for financial aid and demonstrate financial need. Jobs are available both on-campus and off-campus. To see a listing of all jobs available visit jobs.weber.edu, select "Search Jobs" in the left menu, then Position Type "Hourly." Work study jobs will be defined in the job description as federal work study or FWS.

Application Process

Students should first determine if they are eligible for financial aid. Refer to General Eligibility Requirements above. The priority application deadline is April 1; this does not guarantee receipt of any specific type(s) of grants. Applications received after the deadline will be processed as quickly as possible with no guarantee that the award will be ready to meet fall semester tuition and fees payment deadlines.

Application Steps

The WSU FINANCIAL AID CODE IS 003680. This code will be needed to complete your FAFSA application online at <https://studentaid.gov/h/apply-for-aid/afsa>. All other applications and forms are available online at www.weber.edu.

1. Complete the Free Application for Federal Student Aid (FAFSA) or the Renewal Application (for continuing students) at <https://studentaid.gov/h/apply-for-aid/afsa>.
2. Submit additional, required documents through Financial Aid Verify, located in the eWeber student portal.

The Review Process

Students are advised to apply online at <https://studentaid.gov/h/apply-for-aid/fafsa>. Applications will go through a Federal "needs analysis." The ability of a student and the student's family to contribute, as well as other resources, will determine the need for financial assistance. Students will receive a FAFSA Submission Summary (FSS) which will provide information on the student aid index and financial need.

Once a student's FAFSA is sent to Weber State University, it will be reviewed in the order it was received. As part of the review, our office may require additional information which may include, but is not limited to, official academic transcripts, tax return transcripts, marriage documentation, citizenship documentation, and/or emancipation documentation.

Students will be notified through their Wildcat Mail of additional requirements. If a student feels that their FAFSA does not accurately reflect their situation, they should contact a Financial Aid Advisor.

When a student's file is complete, an award notice will be emailed to the student, directing them to their student portal. Students can view/accept their award(s) through the eWeber student portal, under Award Information.

An award may be canceled if the Award Offer is not accepted within the specified time period.

Satisfactory Academic Progress

In order to receive financial aid, students must meet qualitative and quantitative academic standards.

Cumulative GPA (Qualitative)

In addition to the University's standards, all students who receive financial aid must maintain at least a "C" average overall GPA (2.00) by the end of their fourth semester. This includes transfer work. Students not meeting this requirement will be disqualified from financial aid until they bring their overall GPA to the minimum requirement.

Completion Rate & Maximum Time Frame (Quantitative)

Students who receive financial aid must satisfactorily complete (receive grades other than I, T, W, UW, NC, E, or AU) at least 67% of their attempted credits, on a semester-by-semester and overall basis.

Students who receive financial aid must also complete their program of study within 150% of their program length. For example, a student in a bachelor's program that requires 126 credits will need to complete their program within 189 attempted credit hours. A student in an associate's degree that requires 62 credits will need to complete their program within 94 attempted credits. A student in a certificate program that requires 30 credits will need to complete their program within 45 attempted credits.

Any exceptions to these requirements must be approved by the Financial Aid & Scholarship Petition Committee (see Petitions and Reinstatement of Aid).

Eligibility Status

Students who receive financial aid and complete less than the minimum number of credit hours required by their award level will be put on financial aid denial or warning.

Please be aware that any time a student drops a class, there will be financial aid consequences.

Credit hours transferred from other colleges/universities will be included in the total hour eligibility for Satisfactory Academic Progress whether or not financial aid was received at the other institution(s).

If students change their program of study, credit hours completed for the previous major or majors will still be included in the total number of hours for financial aid eligibility even though the credit hours may or may not satisfy

program requirements for the new major. If a student cannot complete their program within the maximum time frame for their program (150% of credits needed for graduation), their financial aid will be denied.

Petitions & Reinstatement of Aid

Students who are denied financial aid, but who experienced extenuating circumstances, may petition to have their denial removed. Petitions include 1) a letter from the student 2) documentation of their circumstance and 3) a graduation plan. All petitions are reviewed by the Financial Aid & Scholarship Petition Committee.

For students who do not have extenuating circumstances, or whose petition is denied, can regain financial aid eligibility by paying for their courses with other funding until they meet the completion rate and GPA Satisfactory Academic Progress requirements.

Programs must be completed within the maximum time frame.

Withdrawals and Return of Title IV Funds

Withdrawals will negatively affect your satisfactory academic progress calculation. If you completely withdraw from school, you may be required to return a portion, if not all, of the financial aid awarded for the semester.

If you are dropping some, but not all of your classes, make sure you know how this could affect your Pell Grant.

Return to Title IV Policy (R2T4)

Federal regulations require your eligibility for aid to be recalculated whenever you withdraw from the university, either officially or unofficially. The recalculation determines the amount of aid you have "earned" by prorating according to the percent of the term completed before withdrawing.

After the 60% point in the semester or period of enrollment, you are considered to have earned 100% of the Title IV funds you were scheduled to receive during that period.

The Financial Aid and Scholarship Office will use the withdraw date recorded in the Registrar's Office as your official withdrawal date from the university. In the case of unofficial withdraws (i.e. dropped courses, UW grades, and/or retroactive withdrawals), your last date of attendance is reported by the instructor. When such a date can't be determined, the midpoint of the semester is used as your last date of attendance.

A repayment of aid is required when the actual amount of aid disbursed is greater than the amount earned, as determined by the recalculation. The university will return funds to the Title IV Program on your behalf when you owe an overpayment, and the university will consider the returned funds as your debt to the institution.

If the overpayment is not repaid by the end of the semester:

- A hold is placed on future registration.
- Your account is referred to the Loan Servicing Department for collection.
- You will be put on financial aid denial and will not be eligible to receive any future federal financial aid funding until the overpayment is paid in full and satisfactory progress requirements have been met.

A post-withdrawal disbursement will be made if you had eligibility for the Title IV funds (essentially earning more aid than was disbursed.) If you are entitled to a post-withdrawal disbursement:

- You will be sent an email informing you that you are entitled to additional funding.
- You must respond within 14 days of the receipt of the notification confirming the receipt of loan funds.
- You will be informed what type of funds you are eligible to receive and reminded that if the funds are loans, you are responsible for the repayment.
- If you still have outstanding institutional balances, the funds will be applied to the balance first.

A school must return Title IV funds to the programs from which you received aid during the semester as soon as possible, but no later than 45 days after the date it determines you withdrew. Funds are returned in the following order, as applicable.

1. Unsubsidized Federal Stafford loans
2. Subsidized Federal Stafford loans
3. Federal PLUS loans
4. Federal Pell Grants
5. Federal Supplemental Educational Opportunity Grants (FSEOG)

Sample Calculations

Scenario 1

The semester is 110 days long prior to excluding Spring Break. Spring Break is nine days long. After removing the nine day break the semester is 101 days. 101 days will be used for the standard semester R2T4 calculation. If a student received \$2,309 in Direct Unsubsidized Loan and \$1,814 in Direct Subsidized Loan. You attended 29 days before you did a complete withdrawal. To find out the percentage earned you take 29 completed days divided by 101 calendar days. The percentage earned is 28.7%. The student earned \$2213 and the amount that needs to be repaid immediately is \$1910. Your revised award is \$399 in Direct Unsubsidized Loan and \$1814 in Direct Subsidized Loan.

Scenario 2

The 2nd block of the semester is 56 days long prior to excluding Spring Break. Spring Break is nine days. After removing the nine day break the semester is 47 days. 47 days will be used for the 2nd block R2T4 calculation. If a student received \$1,979 in Direct Unsubsidized Loan and \$1,724 in the Federal Pell Grant. You attended 12 days before you did a complete withdrawal. To find out the percentage earned you take 12 completed days divided by 47 calendar days. The percentage earned is 25.5%. The student earned \$2,284 and the amount that needs to be repaid immediately is \$1,419. Your revised award is \$560 in Direct Unsubsidized Loan and \$1724 in Federal Pell Grant.

Scenario 3

The semester is 110 days long prior to excluding Spring Break. Spring Break is nine days long. After removing the nine day break the semester is 101 days. 101 days will be used for the standard semester R2T4 calculation. If a student received \$1,484 in Direct Unsubsidized Loan, \$2,226 in Direct Subsidized Loan, and \$1,381. You attended 66 days before you did a complete withdrawal. To find out the percentage earned you take 66 completed days divided by 101 calendar days. The percentage earned is 65%. By attending more than 60% of the term, there is no repayment required. You are allowed to keep all the aid initially awarded.

Student Expense Budget (Cost of Attendance)

The cost of attending Weber State University includes direct educational costs such as tuition, fees, books and supplies, as well as living costs such as room and board. Below is a table that gives an approximate budget for students attending the 2018-2019 fall and spring semesters. Students should use this only as an estimate when planning their education expenses.

Sample Budget: 2024-2025 Undergraduate - 2 semesters at Full Time Attendance

	In-state On-Campus (Utah residents)*	Out-of state On-Campus (non-resident)*
Tuition and Fees	\$6,557	\$17,545

(2 semesters)

Misc. Expenses	\$3,000	\$3,000
Books (estimated)	\$1,400	\$1,400
Housing & Food ** (on-campus housing)	\$9,572	\$9,572

*Based on attending full time for 2 semesters. Graduate tuition and fees vary by program. Current tuition and fee amounts by credit hour load are published on the web at weber.edu/bursar/TuitionFee_Tables.html.

**Room and board can vary greatly depending on whether or not students live in the dorms and what meal plan they select.

General Studies & Exploratory Advising

Location: Student Services Center, Room 140

Telephone: 801-626-6752

Website: www.weber.edu/general-exploratory-advising/default.html

Email: studentpathways@weber.edu

Weber State University's General Studies & Exploratory Advising provides student-centered programs focused on retention and persistence to graduation. The center's dedicated staff provides academic advisement to students pursuing an Associate of Arts or Science in General Studies, and oversees programs on multiple WSU campuses supporting academic skills training, early college access and academic interventions. General Studies & Exploratory Advising programs support students throughout their academic journey from orientation to graduation as part of the University's mission to offer excellent educational experiences to all students. General Studies & Exploratory Advising is also responsible for the administration of the Starfish Early Alert, the Bounce Back Program, and the Academic Advising Referral Service.

Office hours at Ogden Campus (Student Services Center, Room 140):
8:00 a.m. - 5:00 p.m. Monday through Friday

New Student Orientation

Location: Student Service Center, Room 140

Telephone: 801-626-6752

Website: weber.edu/orientation

All students new to WSU are required to complete New Student Orientation (NSO). NSO includes modules and a Weber Welcome event. Both are required* for all new, first-time, Early College or degree-seeking undergraduate students before they can register for classes. Students complete modules through their eWeber portal and will become familiar with:

- Student services, student involvement and activities, and Weber State's campuses
- eWeber account and how to register for classes
- Procedures for obtaining parking permits, Wildcards, and purchasing textbooks
- Policies and procedures
- General Education requirements

- Program-specific degree information
- Dates and times for Weber Welcome events

The Weber Welcome experience will help connect students with student leaders, faculty and staff and resources, easing the transition into the WSU community.

*New Student Orientation modules/Weber Welcome events are not required for Concurrent Enrollment, Post-baccalaureate or Graduate Students.

First Year Experience Program

Location: Student Services Center, Room 140

Telephone: 801-626-6752

Email: fye@weber.edu

Website: weber.edu/fye

The First Year Experience (FYE) Program is designed to help incoming students make a successful transition into the university community. The program assists students in making progress toward fulfilling the following educational and personal goals:

- Acquiring a sense of competence as a student and becoming successful in college.
- Mastering academic skills, such as note taking, textbook reading, test taking, writing, and time management.
- Demonstrating knowledge and use of campus resources.
- Demonstrating effective interpersonal skills with a variety of people.
- Developing a sense of belonging to the WSU community through the connections with other students, teachers, mentors and WSU employees.
- Enhancing mental, physical, spiritual and social health.

Program Components

To aid students in achieving these goals, the FYE Program includes the following components:

- **FYE 1105 - Foundations of College Success (3)**
This course assists incoming students in making a successful transition to college. Topics include the purpose of higher education, goal setting, time management, study and test taking skills, critical thinking, stress management, academic advisement, career and major exploration, using campus resources, and understanding student responsibilities.
- **FYE 3170 - First Year Experience Mentor Leadership Seminar (2)**
In this seminar course, FYE Peer Mentors are taught to effectively help Foundations of College Success (FYE 1105) students in making a successful transition to college. FYE Mentor requirements are available at weber.edu/fye. Course enrollment limited to FYE Peer Mentors. May be repeated once for 2 more credits and additionally for zero credits.

Program Requirements

Any WSU student is welcome to participate in the program by taking FYE 1105.

Program of Study (Major/Minor) Declaration

Website: <https://portalapps.weber.edu/PrgStudyApp/Default.aspx>

All degree-seeking students must select a program of study. When students declare their program of study, they indicate their degree, major, (and minor if applicable), and catalog year. To declare or change a program of study, students should use Change My Major application to submit a declaration request for their chosen major and minor. Once submitted, requests will be reviewed and approved by the academic department. For students interested in a selective program, formal acceptance into the program is an additional step after they have been declared. Please contact the academic department of the selective program for more information.

Registration

University Registrar: Cori Horne

Assistant Registrar for Registration: Rylee Parker

Location: Student Services Center, Room 101

Telephone: 801-626-6100

Website: weber.edu/registration

Email Address: registration@weber.edu

The University offers classes during fall, spring, and summer semesters. Students must register each semester to attend classes. Class schedule information for specific semesters is available on the WSU home page (weber.edu). The web-based class schedule provides information about the dates and times classes are offered for the selected semester. See the Academic Calendar of this catalog for registration dates and beginning and ending dates for each semester.

Registration Process - New Students

To register for classes, new students should:

1. Complete the admissions process - new students who have applied for admission (available online at weber.edu/admissions), but have not received an acceptance notice by mail, should contact the Admissions Office at 801-626-6050.
2. Complete mandatory New Student Orientation Requirements. For more information, see weber.edu/orientation.
3. See the Academic Calendar in this catalog to determine when registration begins each semester; Log in to the eWeber portal *and access the "Registration Time - Check Status" app to find your registration time.
4. Plan a course schedule - some alternate classes should be selected in case first selections are closed.
5. Log in to the eWeber portal and access either "Register for Classes Add/Drop" or "Registration Schedule Builder" to register for classes.
6. Pay tuition and fees. Log in to the eWeber student portal* to pay tuition and fees online. Electronic statements and up-to-date balances are available in the student account at any time.

*To log in, go to weber.edu and enter your Wildcat Username and password.

A Wildcat ID and password are required before registering online in your eWeber student portal. You can sign up for a Wildcat ID online at weber.edu/eservices. For assistance contact Computing Support at 801-626-7777.

Registration Process - Continuing Students

To register for classes, continuing students should:

1. See the Academic Calendar to determine when registration begins each semester; Log in to the eWeber portal *and access the "Registration Time - Check Status" app to find your registration time.
2. Plan a course schedule - some alternate courses should be selected in case first selections are closed.
3. Log in to the eWeber portal and access either "Register for Classes Add/Drop" or "Registration Schedule Builder" to register for classes.
4. Pay tuition and fees - log in to the eWeber student portal* to pay tuition and fees online. Electronic statements and up-to-date balances are available in the student account at any time.

*To log in, go to weber.edu, and enter your Wildcat Username and password.

A Wildcat ID and password are required before registering online in your eWeber student portal. You can sign up for a Wildcat ID online at weber.edu/help/kb/wildcataccount.html. For assistance contact Help Desk Support at 801-626-7777.

Registration Times

- Registration appointments are issued to new and continuing students one week before registration beg. with "Priority registration is used in fall and spring semesters to ensure that students closer to complete.
- Registration times are based on a student's total earned hours (hours earned with a passing letter grade and hours earned through credit by examination). Current semester totals do not count toward earned hours.
- Students can check their registration time in the "Registration Time - Check Status" app by logging into the eWeber portal. Registration times are also sent to students by email and text prior to the opening of registration.

First Registration Phase - (Registration by Appointment)

- During this registration phase, students may register starting at 7 a.m. on their appointed day.
- On their assigned day, students should access the registration system on the Internet at weber.edu and enter their Wildcat Username and password.
- Tuition and fees may be paid by cash, check, VISA, DiscoverCard, or MasterCard. Log in to the eWeber student portal to pay tuition and fees online. Electronic statements and up-to-date balances are available in the student account at any time. A paper billing statement will be mailed at the student's request by sending an email to cashiers@weber.edu.
- Refer to Bursar's Office to obtain information about payment deadlines and tuition and fee amounts. It is the student's responsibility to understand the registration, payment, withdrawal, and refund schedule and to make sure account balances are paid in-full and on-time to avoid late fees or other charges.

Second Registration Phase - (Open Registration)

Once appointment registration is complete, "open registration" continues and all students are allowed access to register and/or make changes to their class schedules on a first-come-first-served basis.

- During the second phase of registration, all students may register or make changes by accessing the registration system on the Internet at weber.edu and entering their Wildcat Username and password.
- Tuition and fees may be paid by cash, check, VISA, DiscoverCard, or MasterCard. Log in to the eWeber student portal to pay tuition and fees online. Electronic statements and up-to-date balances are available in the student account at any time. A paper billing statement will be mailed at the student's request by sending an email to cashiers@weber.edu.

- Refer to the Bursar's Office to obtain information about payment deadlines and tuition and fee amounts. It is the student's responsibility to understand the registration, payment, withdrawal, and refund schedule and to make sure account balances are paid in-full and on-time to avoid late fees or other charges.

Changes in Registration

- Students may add classes online through the 5th business day of the semester or block. Instructor approval will be required to add a class beginning on the 6th business day of the semester or block. Students should contact their instructor to get this approval and will be able to add the course online.
- Students may drop classes online by emailing registration@weber.edu by the deadline dates (see the Academic Calendar online). There are different deadlines for refunds and grading when withdrawing from classes.
- If students need instructor or department permission to make a change in their registration, any required forms can be found on our website, or permission can be emailed to our office. For more information, please visit weber.edu/registration.
- Students are strongly encouraged to plan their class schedules in consultation with an advisor to avoid unnecessary changes and ensure efficient progress toward completion of degree requirements.
- Students receiving financial aid should be careful not to reduce their credit hour load below the minimum number of hours required by their award level.

Closed Classes

- Only academic departments and instructors have the authority to admit students to closed classes.
- Students may contact the individual department and/or the instructor for specific procedures regarding admission to closed classes.

Credit/No Credit (CR/NC) Registration

The basic objective of credit/no credit grading is to allow students the opportunity to enroll in classes outside their major or minor on a pass (CR)/ fail (NC) basis without affecting their GPA. The following rules apply:

- Freshmen students may take no more than one class per term on a credit/no credit basis.
- Students with 30 or more credit hours who have a cumulative GPA of 2.0 or above may register for no more than two classes per term on credit/no credit basis.
- A maximum of 20 hours of credit/no credit in elective courses may be used for graduation.
- Classes taken on a credit/no credit basis will not satisfy major, minor, general education, or specific course requirements. The University Curriculum and General Education Committee have designated a few exceptions to this rule. Please see the academic department for information on these course exceptions.
- Grades on the credit/no credit system are not included in computing the term or cumulative grade point average. A grade of credit is recorded only for letter grades of C- and above. Grades less than C-, including UW, will be recorded as no credit.
- Students who change their Program of Study must submit the appropriate form to the Records Office and request the grade be changed to the letter grade issued by the instructor if a credit/no credit course applies to the new Program of Study.
- If a student has previously taken a course for a letter grade, the same course may not be retaken for credit/no-credit.
- Choice of credit/no credit registration should be made at the beginning of the term, but a student may change classes to credit/no credit status until the CR/NC deadline. This date can be found in the University's Academic Calendar.

- The instructor is not notified when a student takes a class for a credit/no credit grade. The instructor will assign a letter grade on the Final Grade Report and then the Records Office will convert the letter grades to credit or no credit.
- For more information, please visit weber.edu/registration.

Audit Course Registration

The basic objective of taking a class as audit is to allow students the opportunity to attend a class without earning either a grade or credit for the class.

- Students registering to audit a class will pay tuition and fees per the current tuition and fee schedule.
- Students in regulated programs, i.e. Financial Aid and Athletics, are subject to the respective program guidelines for audit registration.
- Some courses may not be open to audit students because of classroom space limitations. Students must receive instructor permission to audit a class.
- Choice of audit registration should be made at the beginning of the term, but a student may change classes to audit status until the audit deadline. This date can be found in the University's Academic Calendar.
- Students auditing classes are expected to attend on a regular basis. Students may officially withdraw from the audited class according to the deadline. Audit students failing to attend class may be issued a "W" grade at the discretion of the instructor.
- Senior Citizens (Utah residents ages 62 and over) may audit a course as a Lifetime Learner for a \$10.00 fee per semester, on a space available basis, by applying at the Admissions Office. Lifetime Learner's selecting this option for courses do not have the option to receive a letter grade nor credit on their transcript for these courses.
- For more information, please visit weber.edu/registration.

Registration Credit Hour Loads

- It is recommended that undergraduate students planning to graduate with a bachelor's degree in four years register for at least 15 credit hours per semester.
- Undergraduate students are classified as full-time if they register for 12 or more credit hours, as three-quarter time with 9 credit hours, and as half-time with 6 credit hours.
- Graduate students are classified as full-time if they register for 9 or more credit hours, and as half-time if they register for 5 or more credit hours.

Overload Registration

- Students may register for a maximum of 20 credit hours without special permission.
- Students with a cumulative GPA of 3.50 or better may petition for a maximum of 24 credit hours, and students with a cumulative GPA of 3.75 or better may petition for additional credit hours. Petition forms are available at weber.edu/registration.
- For more information, please visit weber.edu/registration.

Withdrawal

- Students can withdraw from individual classes online according to the deadlines on the Academic Calendar.
- Students who want to completely withdraw from the semester or block may do so online according to the deadlines on the Academic Calendar. Students who need help may send an email request to registration@weber.edu from their Weber email account ending in @mail.weber.edu, or send a signed

written request via fax (801-626-6679) or mail (3885 West Campus Drive Dept. 1102, Ogden, UT 84408). Requests should always include the student name, W#, and a clear statement explaining the request. Go to the Cashier's Office page online (www.weber.edu/bursar/RefundDates) and check the Refund Policy and Deadlines before making a decision to drop classes. You will be accountable to the refund schedule for any tuition and fee costs associated with the time you spent registered for your classes.

- From the 16th to 50th business day of a semester, or 16th to 30th business day of a block, students may withdraw from classes online or by emailing registration@weber.edu from their Weber email account ending in @mail.weber.edu. Courses dropped during this period will appear on the transcript with a "W" notation.

State Authorization

WSU/Utah is a member of the National Council for State Authorization Reciprocity Agreement (NC-SARA) and Weber State University (WSU) is an approved SARA institution, which means we adhere to established standards for offering post-secondary e-learning programs in all member states.

All WSU fully online programs are currently authorized in all states; however there may be restrictions in certain non-SARA states regarding internships and practicums.

Per federal law, students who have petitions/complaints against the school relating to fraud, false advertising, or other deceptive practices can report their petitions/complaints to Weber State University by following the Student Petition/Complaint Process..

Class Standing

New Freshmen	Students with 0 earned credit hours
Advanced Freshmen	Students with 1-29 credit hours
Sophomores	Students with 30-59 credit hours
Juniors	Students with 60-89 credit hours
Seniors	Students with 90 credit hours or more
Graduates	Students who have previously received a bachelor's degree

Course Numbering System

0001-0999	Non-credit, Developmental (ND) (do not satisfy degree requirements and are non-transferable)
1000-2999	Lower division
3000-4999	Upper division
5000-5999	Post-baccalaureate

6000-6999 Graduate (Master's Degree)

7000-7999 Doctorate

Individual course descriptions are listed within each departmental section.

Davis Campus and Additional Locations

In addition to classes taught on the main campus, course work is also available at several off-campus locations including:

- WSU Davis Campus, 2750 University Park Blvd, Layton
- WSU Morgan Center, 241 E. Young St., Morgan
- Clearfield High School, 938 S. 1000 E., Clearfield
- Davis Area Technical College, 550 E. 300 S., Kaysville
- Kaysville Center at Davis High School, 325 South Main, Kaysville
- Roy High, 2150 W. 4800 S., Roy
- Salt Lake Community College, 4600 Redwood Rd., Salt Lake City

Tuition, Fees and Refunds

Bursar: Michael Richter

Location: Miller Administration, Room 204

Cashiers' Office: Student Services Center, second floor (SC 209)

Telephone: 801-626-8006

Website: weber.edu/bursar

Email: cashiers@weber.edu

Tuition and Fees

Weber State University reserves the right to assess tuition and fees as approved by the Board of Regents. Current policies, procedures, tuition and fee tables, payment deadlines, refund schedules and other important information are available at weber.edu/bursar (click on the link for Tuition and Fee Tables).

- Tuition is established by the Utah System of Higher Education and is subject to change without notice.
- Full-time students (12-18 credit hours) are assessed full tuition.
- Part-time students (less than 12 credit hours) are assessed tuition on a per credit hour basis.
- Students that enroll in more than 18 hours will be assessed tuition on a per credit hour basis for the additional hours.

Please also see Surcharge.

Tuition and Fee Schedule

Tuition and fees are established each year in late spring. Current tuition and fees will be posted on the Internet at weber.edu/bursar/TuitionFee_Tables.html.

HB248 Tuition Disclosure 2024-2025

Full-time undergraduate resident students at Weber State University paying a semester of tuition amount of \$3,053 contribute an estimated 53% of the full cost of instruction of \$5,722. The remaining support of \$2,669 is provided by

state tax or other funds. Full-time undergraduate resident students at Weber State University pay a semester of student fees in the amount of \$467.99 contribute 100% of the costs.

Tuition and Fee Assessment

Weber State University does not drop courses for non-payment or non-attendance. Students are responsible for dropping courses they do not plan to attend. Tuition and fees will not be waived for nonattendance. Once registered, each student is obligated to pay for their courses unless the student has dropped courses or the student completes a total withdraw from school during the 100% refund period. If a student drops or completely withdraws from school after the 100% refund period, the student is obligated to pay tuition and fees according to the current semester refund schedule. Also, a student must pay for or drop courses by the payment deadline to avoid late fees and interest. (See Withdrawal for further information.)

Tuition and Fees for Online and Independent Study Courses

Refer to continue.weber.edu/wsuoonline/tuition.aspx for tuition and fee information for WSU Online and Independent Study courses, or call 1-800-848-7770 and choose "Online & Independent Study Student Services" from the phone menu.

Course (Lab) Fees

Some courses require additional fees for materials and/or resources.

Rentals and Deposits

Rentals and/or deposits are required on certain items and are paid to the Cashier. Any applicable refunds must be obtained from the Cashier prior to June 30.

Surcharge

In 2003 the Utah System of Higher Education passed a policy designed to encourage students to make reasonable progress toward completion of degree requirements. The policy states that students who exceed 135% of the credits required for completion of their baccalaureate degree will be charged the full cost of instruction. For example, a student whose program of study requires 126 semester credit hours will be allowed a maximum of 170 semester hours in which to complete degree requirements ($126 \text{ credits} \times 1.35 = 170 \text{ credit hours}$). Any work beyond the allowed 135% will be charged at the full cost of instruction.

Credit hours that do not count toward the 170 hours are concurrent enrollment, advanced placement, and credit by examination. Individuals are also exempt from the surcharge if:

- the credits are necessary for the student to complete the student's program of study; and the excess credits are a result of circumstances where a substantial number of credits from a transferring institution could not be applied to the program of study;
- the excess credits are a result of a reasonable enhancement of the student's major by the addition of a minor or emphasis to the program of study; or
- the excess credits are the result of a re-entry into the educational system by a student who may have accumulated a large number of credits, or even completed degrees, but where employment requirements obligate his or her return to college.

More information is available by contacting the Cashier's Office at 801-626-8006 (SC 209).

Agreement to Pay Tuition Charges

When a student registers for courses at Weber State University the student agrees to the terms of the "Agreement to Pay Tuition Charges." The agreement states:

In consideration of the University's allowing me to register for courses, thus incurring the attendant costs to the University, both direct and indirect, I promise to pay Weber State University (WSU), Ogden, Utah, tuition and fees (principal) assessed to me for courses for which I have registered by the published payment due date for each semester. Also, I agree to pay for any additional fees and interest charges that are assessed to my account each semester. I hereby agree to pay a late payment fee of \$40 if my account balance is not paid by the published payment due date, together with interest at the rate of 12% per annum on the unpaid balance. In the event I default on this agreement and it becomes necessary to place this account for collection, I also agree to pay collection fees, not to exceed 50.00% of the original principal balance, plus any court and/or attorney fees resulting from the enforcement of this agreement. Any collection costs stated above are in addition to the principal, fees and interest due on my account. In the event of default of any of the terms of this agreement, I hereby give to the WSU Controller, or his/her designee, Power of Attorney to apply all monies due me from WSU to any delinquent portion of this note until the principal, fees, interest and costs are paid in full. I agree that WSU may repay my account balance from any TITLE IV funds due me. I understand that the principal amount is calculated based on my class-load each semester at WSU. All outstanding tuition account balances are considered qualified educational loans under I.R.C § 221 and are extended with the express understanding that future repayment shall be made to the university. I further understand that my acceptance of these terms represents my acknowledgement and acceptance of my tuition account balance qualifying as a qualified education loan under I.R.C. § 221, and as such, is exempt from discharge under federal bankruptcy code 11 U.S.C. § 523(a)(8).

Billing Statement

Tuition and fees statements are available on the eWeber student portal. Electronic statements and up-to-date balances are available in the student account at any time. Students are responsible for viewing up-to-date balance or e-statements in the student account. It is the student's responsibility to make sure account balances are paid in-full and on-time. A paper billing statement will only be mailed at the student's request by sending an email to cashiers@weber.edu.

Payment Schedule

- Payment deadlines are listed on the Internet at weber.edu/bursar.
- Tuition and fees may be paid by cash, check VISA, DiscoverCard, MasterCard or American Express.
- Monthly payment plans are available to help students who are not able to pay in full when tuition is due. (See Monthly Payment Plan Option below.)

Late Payment Fee

A late payment fee will be assessed to all students who have not paid their tuition and fees in-full or have not signed up for a monthly payment plan (see weber.edu/bursar/Late_fees.html for the amount and schedule for assessment of the fee.) If a student has an outstanding balance after their financial aid or scholarships have been applied, the student is responsible to pay this amount by the payment deadline to avoid the late payment fee and interest charges. The late payment fee and interest are nonrefundable and will not be waived.

If a student changes his/her schedule by adding classes, the student has until Friday at 4:00 p.m. of that week to pay the balance or the late payment fee will be assessed to the student account. Students should check their account balance each time a change is made to his/her schedule to determine the new balance due.

Interest Assessment

Interest will begin the fourth week of the semester on any unpaid balance. The annual rate is 12%. A student will not be assessed interest as long as the student is in a Monthly Payment Plan that covers all tuition and fees and current on all payments. Interest on unpaid balances will be assessed in addition to the late payment fee.

Monthly Payment Plan Option

The Monthly Payment Plan is a program intended to help students who are not able to pay their account in full by the tuition and fee deadline. Instead of one large payment, tuition and fees are broken down into equal monthly payments. Enrollment in a plan is available at the time of registration prior to the beginning of each semester. See weber.edu/bursar/available_plans.html for details about monthly payment plans.

Personal Checks or eChecks

Personal checks or eChecks returned by a financial institution for any reason are subject to a service charge and may result in the withholding of student records and/or dropping of courses.

Delinquent Accounts-Collection Fees

Students with unpaid tuition and fees, room and board, parking fines or other fees due to the University may have a hold placed on their records until such obligations are paid in full. The hold will prevent the student from registering for future semesters, viewing transcripts or grades, delay receiving a diploma and limit use of the Wildcard and certain student services.

Unpaid accounts will be processed by University collections. A collection fee of up to ten percent of the outstanding balance may be assessed to the student. Interest and monthly collection fees will also be assessed on any unpaid balance. In the event additional collection efforts become necessary, WSU may refer a past due account to an outside collection agency. All delinquent accounts are subject to collection fees, interest, plus all court costs and reasonable attorney fees. The collection agency and/or WSU will report delinquent accounts to a credit reporting agency.

Third Party/Sponsored Payments

Students are responsible for ensuring that appropriate documentation for third party/sponsored payments is submitted to the main cashier's office prior to the start of classes each semester. Students must comply with the terms of the agreement and verify that all tuition and fees changes are paid by the sponsor agreement. It is the student's responsibility to verify that any course or tuition and fee changes will be paid by the sponsor and that these changes are reported to the accounts receivable office for proper processing. If the sponsor does not provide funding by the end of the semester, the student will be responsible for payment of tuition and fees. The account will be considered delinquent if unpaid at the end of the semester. (See Delinquent Accounts above.) Contact 801-626-6263 for information on how to submit vouchers or contracts.

Administrative Withdrawals

The University reserves the right to administratively withdraw a student from a current semester if a student has an unpaid tuition and fee balance from a prior semester or if the student provides a dishonored check or other payment to pay for tuition and fees. The prior semester courses will not be dropped or withdrawn.

Financial Petitions

Tuition and fee assessment is based on the registration date of the course and date of withdrawal from the course. The withdrawal dates are published on the Academic Calendar each semester. If, due to extenuating or for other acceptable circumstances, the student must drop a course after the published deadline, the student must complete the "Exception to University Policy-Tuition and Fee Assessment Petition" weber.edu/bursar/Petition.html and submit supporting documentation.

Tuition and fees are assessed according to approved tuition and fee tables. The assessment is based on the number of registered credit hours or liable hours for each student. For example, if the student signs up for 12 credit hours, he or she is liable for paying for 12 hours according to the tuition and fee table.

Deadlines for Filing Petition

The deadline for filing a petition is the last day of the semester of enrollment. The burden of proof rests with the student to submit documentation of circumstances that prevented the student from adhering to the University policies and procedures. For more information and forms refer to: weber.edu/bursar/Petition.html

Refunds and Reimbursements

Student fees and course fees are refunded based on the University refund schedule (see weber.edu/bursar). Late fees and withdrawal fees are nonrefundable. In most cases, if a credit card is used to pay for tuition and fees, refunds and residual funds will be credited to the credit card. Students may opt to have any refund sent electronically to a bank account of their choice by setting up a refund profile at weber.edu/bursar/Refund_Dates.html. All other refunds will be mailed to the student. Admission fees and recording fees are nonrefundable.

Refunds for dropped courses will be processed after the third week of class.

Financial Aid Withdrawals and Return of Title IV Funds

See Withdrawals and Return of Title IV Funds in the Financial Aid section.

Division of Online & Continuing Education

The Division of Online & Continuing Education (DOCE) is the entrepreneurial and innovative arm of Weber State University. To empower students to achieve their personal, professional and educational goals, the division builds trusted partnerships with students, industry and other campus entities in order to create innovative programming.

Location: Hurst Center for Lifelong Learning - 1265 Village Dr. Dept 4006, Ogden UT 84408-4006

Telephone: 801-626-6600 or toll-free 800-848-7770, option 4

Website: weber.edu/doce

Programs

The Division of Online & Continuing Education offers both credit and noncredit programs. Credit programs focus on courses related to degree and certificate attainment while noncredit programs provide professional training, certification, credentialing and personal enrichment.

Staff members work to provide expanded educational options that bridge gaps and eliminate barriers in achieving each student's educational goals.

Credit Programs:

WSU Online

Independent Study

Non-Credit Offerings:

Rocky Mountain Center for Occupational & Environmental Health

Law Enforcement Academy

Professional Development

Microcredentials

Locations:

WSU Center for Continuing Education

WSU Community Education Center

WSU Davis

WSU Farmington Station

WSU Morgan Center

WSU Davis

Telephone: 801-395-3555

Location: 2750 University Park Boulevard, Layton, UT 84041 (Directions) (Map)

Website: weber.edu/davis

The WSU Davis campus provides a wide range of higher educational opportunities to the residents of Davis County and surrounding areas. With a population of over 350,000 residents, Davis County is Utah's third largest county. It is also home to Hill Air Force Base, Utah's largest employer. Davis County residents comprise more than 40 percent of the student body at Weber State University. In addition to providing learning opportunities close to where these students live and work, WSU Davis is an integral part of the larger community, enriching the social, cultural and economic lives of the citizens of Davis County.

From its campus in Layton, WSU Davis offers a full range of general education courses and a wide range of associate's, bachelor's, and master's degrees. Information about degree and certificate programs available at WSU Davis can be found at weber.edu/davis. Students may take classes at both WSU Davis and the Ogden campus concurrently, depending upon their needs and schedule. One of the hallmarks of the Davis campus is the special attention given to meeting the needs of military, veteran, nontraditional, and working students.

WSU Davis provides a complete university experience for students, using both visiting and resident faculty to provide instruction and advisement. Extensive student services and support activities are also available, including computer classrooms, a computer laptop lounge with PC's and printing support, a computer lab including Macs and PC's with printers and scanners, a library, a bookstore, a testing center, enrollment services, academic advisement, academic support, financial aid, tutoring, student activities, counseling services, a fitness center, a stress-relief center, event spaces, and a wide range of other student services.

WSU Davis is also home to the Northern Utah Academy for Math, Engineering and Science (NUAMES), an early college charter high school that works in partnership with Weber State University.

Degree Paths at WSU Davis

Associate's Degrees

Automotive Service Technology (AAS)

Computer Science (AAS)

Construction Management (AAS)

Criminal Justice (AS)

General Studies (AS)/General Studies (AA)

Interior Design (AAS)

Management Information Systems (AS)

Cybersecurity and Network Management (AAS)

Nursing (AS)

Pre-Architecture (AAS)

Web and User Experience (AAS)

Bachelor's Degrees

Automotive Technology (BS)

Architectural Design (BS)

Computer Science (BS)

Construction Management (BS), Facilities Management Emphasis

Family Studies (BS)

Interior Design (BS)

Management Information Systems (BS)

Cybersecurity and Network Management (BS)

Nursing, RN-to-BSN (BS)

Respiratory Therapy (BS)

Web and User Experience (BS)

Master's Degrees

Master of Accounting (MAcc)

Master of Business Administration (MBA)

Master of Science in Computer Science (MS)

Master of Health Administration (MHA)

Master of Science in Respiratory Therapy (MSRT)

Master of Taxation (MTax)

Graduate Certificates

Aerospace Management Post Baccalaureate Certificate

Design-Build Essentials Certificate of Proficiency

Business Analytics Post Baccalaureate Certificate

Business Development Post Baccalaureate Certificate

Contract Management in Business Post Baccalaureate Certificate

Cybersecurity Post Baccalaureate Certificate

Facilities Management Certificate of Proficiency

Enrollment Services

Telephone: 801-395-3480

Location: Bldg. D2, Suite 241

Website: weber.edu/WSUDavis/davis-enrollment-services.html

Enrollment Services at WSU Davis offers a one stop shop that provides assistance in the following areas:

- Admissions
- Early college
- Concurrent enrollment advising
- Financial aid/scholarships
- General studies academic advisement
 - Schedule a virtual appointment
- Records
- Registration
- Dual enrollment
 - Concurrent enrollment administration
 - Early college administration
 - Academic advising

Library

Telephone: 801-395-3472

Location: Bldg. D2, Room 212 (Information Commons)

To be successful in a global information society, students must understand how to access, use and critically evaluate information. The librarians provide instruction and a full range of information, circulation, and interlibrary loan services that enable students to effectively access and utilize digital and print information resources to meet their academic, professional and lifelong learning needs.

Wildcat Store Bookstore

Telephone: 801-395-3457

Location: DSC, Room 124

- Weber State apparel and memorabilia
- Textbooks and other course related materials
- Cashier services
- Apple authorized campus store
- Tech accessories
- Local gifts
- Gift cards

- Classroom supplies
- Snacks and drinks

Student Health & Wellness

Telephone: 801-626-7503

Website: weber.edu/studentwellness

Student Wellness provides one-on-one consultations to help students reach their health and wellness goals. Staff are available at WSU Davis by appointment only.

Student Involvement & Leadership

Telephone: 801-395-3441

Location: DSC, Suite 221

Website: weber.edu/studentinvolvement

- Assists students in expanding and enriching their holistic student experience
- Provides an environment for students to learn and practice leadership skills
- Provides an environment for students to meet, organize and share common interests
- Through the Davis Student Council plans and implements social, service, cultural and educational programs
- Leadership opportunities include:
 - Leadership development programs
 - Student programming and events
 - Student organizations
 - Student volunteer opportunities

Wildcard & UTA Ed Pass

Telephone: 801-395-3460

Location: Bldg. D2, Suite 262 (Davis Student Services)

- The Wildcard desk provides new, replacement, and digital student ID cards.
- UTA Ed Passes allow transportation on all UTA buses, FrontRunner and TRAX.

Career Services

Telephone: 801-395-3460

Location: Bldg. D2, Suite 262 (Davis Student Services)

Career Services provides career counseling and employment advising to individuals through personality and career assessments. Help is also provided with resume and interview preparation and networking strategies.

Counseling & Psychological Services

Telephone: 801-626-6406

Location: Bldg. D2 Suite 262 (Davis Student Services)

Counseling and Psychological Services provides high-quality, culturally-sensitive, professional psychotherapy for students struggling with anxiety, depression, relationship problems, stress, grief, or other concerns.

Disability Services

Telephone: 80-626-6413

Location: Bldg. D2, Suite 262 (Davis Student Services)

Disability Services provides testing accommodations and determines appropriate accommodations based upon documentation of the disability and works closely with faculty and staff to ensure that any given accommodation is appropriate and necessary for the situation.

Military-Affiliated Student Center

Telephone: 801-626-6039

Location: Bldg. D2, Suite 262 (Davis Student Services)

The Military-Affiliated Student Center is the liaison between Weber State University and the U.S. Department of Veterans Affairs for educational benefits for veterans and dependents who are eligible for the G.I. Bill. In addition, the office assists veterans and their dependents in identifying sources of support for their educational needs and provide a variety of support services to assist in making education a successful experience for veterans.

Veterans Study Lounge & Veterans Upward Bound

Telephone: 801-395-3408

Location: Bldg. D2, Suite 231

The Veterans Study Lounge provides a quiet, dedicated space for veterans to study, print for free, get a snack, and get tutoring and academic support.

Veterans Upward Bound is designed to motivate and assist veterans in the development of academic skills by providing tutoring in English, writing, math and computer literacy.

Davis Tutoring & Writing Center

Telephone: 801-395-3569

Location: Bldg. D2, Room 214

Website: <https://weber.edu/tutoring/davis-tutoring-writing-center.html>

Tutoring:

- Peer tutoring is offered in a range of subjects
- Both drop-in hours and appointments are available
- Tutors are certified through the College Reading and Learning Association (CRLA)

Supplemental Instruction

- Supplemental Instruction (SI) provides study groups for historically difficult courses.
- Facilitators are trained student leaders who have successfully completed the course.
- SI stresses how to learn as well as what to learn.

Academic Peer Coaching

- Peers Coaches help students become academically successful.
- Coaches can help with skills like time management, textbook reading, test-taking, and note-taking.

Student Support & Resource Center

Telephone: 801-395-3464

Location: Bldg. D2, Room 307

Website: <https://weber.edu/support-resources>

The student support & Resource Center supports students who need a little extra assistance with food or completing FAFSA. Enjoy a private study space equipped with everything you need, from a private computer to printing services. Locations are available in both Ogden and Davis campuses. Child care is offered at the Ogden location.

Some of the services offered are:

- Lounge
- Kitchen
- Free hot chocolate, coffee, and tea
- Computer lab
- Free printing
- Study area
- Advisors and Peer mentors
- Scholarships
- Leadership opportunities
- Community pantry (available food items, varies by semester)

Financial Literacy

Telephone: 801-395-3464

Location: Bldg. D2, Room 307

Website: <http://weber.edu/support-resources/financial.html>

As part of the Student Support & Resource Center, Financial Literacy is available to help students with all things finance. From budgeting to savings, help with understanding loans and credit card debt and FAFSA application support, Financial Literacy has the student covered. Reach out for help with building wealth, understanding credit scores, tax resources and more. Schedule and appointment through the website.

Weber Cares Pantry

Telephone: 801-395-3460

Location: Bldg. D2, Suite 262 (Davis Student Services)

The Weber Cares Program, part of the Student Support & Resource Center, aims to combat food insecurity and support academic success by offering food at no cost through the Weber Cares Pantry. No appointment is required to

visit our pantry; walk-ins are welcome. Just check in at the Davis Student Services front desk. Pantry packs are also available.

Student Support Services & SSS-STEM

Telephone: 801-395-3568

Location: Building D2, Room 220

Student Support Services and SSS-STEM aids full-time, first-generation, low-income STEM students. Enjoy up to five hours of free weekly tutoring per class, access scholarships and grant aid, quiet and group study spaces, plus advising and success workshops.

Davis Testing Center

Telephone: 801-395-3495

Location: DSC, Room 231

Website: weber.edu/TestingCenter/davis.html

- Administers tests for WSU students through Canvas as well as paper exams.
- The Davis Testing Center provides testing for the English and Math placement tests (Accuplacer and ALEKS). This center also administers College Credit Exam tests CLEP, DSST, and BYU FLATS. The National Police Officer Test (NPOST) and exams for other institutions are offered at this location as well.

Computer Lab & Laptop Lounge

Telephone: 801-395-3492

D2 Location (Computer Lab): Bldg. D2, Room 205 (Information Commons)

Website: weber.edu/ComputerLabs/davis-d2.html

- Our D2 Info Commons Computer Lab features dual-monitor PCs and Mac stations with academic and design software already downloaded, color and black and white printers, scanners, and helpful lab assistants to support students with technology and digital access questions, especially with Adobe and ePortfolios.
- This location also supports our laptop checkout program where current WSU students can loan a PC laptop for one semester. For more information about our laptop checkout program, visit our website.

DSC Location (Laptop Lounge): DSC Atrium (1st Floor)

Website: <https://www.weber.edu/ComputerLabs/davis-d3.html>

- Our DSC Laptop Lounge features PC stations with academic and design software already downloaded, especially with Adobe and ePortfolios, color and black and white printers, and helpful lab assistants to support students with technology and digital access questions.

Northern Utah Academy for Math, Engineering, and Sciences (NUAMES)

Telephone: 801-395-3350

Location: Bldg. DSC, Suite 316

Website: NUAMES.org

NUAMES is an early college high school that offers students the opportunity for a rigorous and supportive early college experience on a university campus. NUAMES focuses on STEM education: science, technology, engineering and math. NUAMES is a public state charter school composed of grades 10-12, and is consistently ranked as one of the top performing high schools in the state of Utah.

- Fully accredited high school
- Partnership with Weber State University
- Early college scholarships available to qualified students
- Opportunity to earn associate's degree upon graduation from NUAMES

State GEAR UP

Telephone: 801-395-3547

Location: Bldg. D2, Room 308

Website: weber.edu/stategearup

GEAR UP (Gaining Early Awareness & Readiness for Undergraduate Programs) provides college readiness support for targeted students in the Weber and Davis school districts. First-year services are also provided for GEAR UP students pursuing post-secondary education. The GEAR UP program includes the following services:

- Financial aid/scholarship advising
- FAFSA completion
- ACT preparation
- Academic enrichment
- Campus visits
- Family outreach

Davis Fitness Center Campus Recreation

Telephone: 801-395-3422

Location: DSC, Room 150

Website: weber.edu/campusrecreation

The mission of WSU Campus Recreation is to encourage lifelong learning, develop healthy active lifestyles, foster leadership, build a diverse community, and enhance interpersonal relationships. This is accomplished by providing quality facilities and experiential education through dynamic programming that focuses on WSU students, faculty/staff, and the greater community. We create opportunities that inspire engagement in healthy, active lifestyles!

Program Areas:

- Aquatics & safety (drop-in swim, swimming lessons, CPR/AED/first aid certification classes)
- Fitness (drop-in strength and cardio equipment, drop-in group exercise classes, personal fitness training)
- Intramural sports (tournament and league play)
- Outdoor program (Equipment Rental Center, trips and clinics, Challenge Course, drop-in climbing wall activities)
- Sport clubs (student-led teams from archery to wrestling)
- Special events (Turkey Triathlon, Mt. Ogden Hike, Dive-in Movies, Ogden Climbing Festival)

Degree Requirements

General Requirements All Degrees

1. Students must earn a cumulative GPA of at least 2.00 for all WSU work.
2. Graduation credit hours must be earned after students have matriculated. Credit hours earned prior to matriculation must be approved by the Graduation Office.
3. All financial obligations to the university must be cleared.

Requirements for Minors

The term "minor" refers to a collection of related courses that are a student's secondary field of academic concentration or specialization while completing a bachelor degree. Minors may be completed with any bachelor degree. Many majors require the completion of a minor; this is designated under the requirements for each major.

Requirements for Graduate Degrees

WSU offers twenty graduate degree programs, including nineteen master's degree programs and one doctoral degree program. Information concerning admission to and requirements for these programs is located in the sections of this catalog for the colleges indicated below.

Also refer to the WSU Graduate Programs policy at weber.edu/ppm/Policies/11-1_GraduatePrograms.html.

- Master of Arts in English (MA), Literature Emphasis Telitha E. Lindquist College of Arts & Humanities
- Master of Professional Communication (MPC) Telitha E. Lindquist College of Arts & Humanities
- Master of Accounting (MAcc) John B. Goddard School of Business & Economics
- Master of Business Administration (MBA) John B. Goddard School of Business & Economics
- Master of Taxation (MTax) John B. Goddard School of Business & Economics
- Masters of Education (MEd) Jerry and Vickie Moyes College of Education
- Master of Science in Athletic Training (MS) Jerry and Vickie Moyes College of Education
- Master of Health Administration (MHA) Dr. Ezekiel R. Dumke College of Health Professions
- Master of Science in Nursing (MSN) Dr. Ezekiel R. Dumke College of Health Professions
- Master of Science in Radiologic Sciences (MSRS) Dr. Ezekiel R. Dumke College of Health Professions
- Master of Science in Criminal Justice (MCJ) College of Social & Behavioral Sciences
- Master of Science in Computer Engineering (MSCE) College of Engineering, Applied Science & Technology
- Master of Science in Electrical Engineering (MSEE) College of Engineering, Applied Science & Technology
- Master of Social Work (MSW), College of Social & Behavioral Sciences
- Doctor of Nursing Practice (DNP) Dr. Ezekiel R. Dumke College of Health Professions

Requirements for Bachelor's Degrees

1. A minimum of 120 credit hours.
2. A minimum of 40 upper-division credit hours (courses numbered 3000 and above).
3. A minimum of 30 hours in residency (WSU courses).
4. At least a 2.0 (C) WSU grade point average (GPA).
5. Completion of WSU general education, diversity, major and minor requirements.
6. One of the following bachelor's degrees must be specified and the WSU general education, major and minor requirements completed. Some departments may specify completion of specific general education courses.
 - Bachelor of Arts (BA)

- Bachelor of Fine Arts (BFA)
This degree may be earned only by Visual Arts majors; see the Visual Arts Department section for the application process.
- Bachelor of Music (BM)
Bachelor of Music Education (BME)
These degrees may only be earned by Music majors; contact the School of Performing Arts for more information.
- Bachelor of Science (BS)
- Bachelor of Integrated Studies (BIS)
See the Interdisciplinary Studies (BS) section of this catalog for information about program requirements and the application process.

Language Requirement

The **Bachelor of Arts** degree includes a language requirement which may be met by one of the following options:

- **Option 1 - World Language**

One of the following

- Documentation of a proficiency level of "Intermediate Low" or better through an examination administered by the WSU Department of World Languages & Cultures or through an examination by a recognized testing agency.
- Completion of WSU world language course 2020 with a grade of "C" or higher, or comparable transfer credit.
- Completion of any upper-division WSU world language course with a grade of "C" or higher, or comparable transfer credit.
- Students for whom English is a second language may meet the BA world language requirement by:
 - verifying their proficiency in their (non-English) native language in cooperation with the Department of World Languages & Cultures
and
 - verifying their proficiency in English as a Second language by passing the ESL Special Examination.
- Documentation of a minimum proficiency level in American Sign Language through an examination administered by the American Sign Language/Interpreting Program at Salt Lake Community College. The signer must produce and maintain American Sign Language with "continuity and precision."
- Completion of WSU American Sign Language course 2020 with a grade of "C" or higher, or comparable transfer credit.
- Completion of twelve semester-hours of one world language.

Refer to the World Languages & Cultures section of this catalog for additional information on obtaining world language credit.

- **Option 2 - World Language with Language Arts**

Note: This option is only available when specified by the major course requirements.

- Completion of at least six semester-hours of one world language with further course work up to six semester-hours in the language arts beyond the composition requirement in the general education core. Language arts course work may include literature, creative writing, rhetoric, music composition, etc. This option will include a total of 12 credit hours. Students should refer to the major for specific requirements.

The **Bachelor of Music** degree and **Bachelor of Music Education** degree requirement is for two semesters of world language chosen from French, German, Italian, and Spanish. The requirement may be satisfied by taking two semesters of the same language, or one semester each of two different languages.

Requirements for Associate's Degrees

AA/AS Degree Requirements

If you are earning an Associate's Degree in General Studies, contact the Student Success Center (see weber.edu/ssc).

1. A minimum of 60 credit hours.
2. A minimum of 20 hours in residency (WSU courses).
3. At least a 2.0 (C) WSU grade point average (GPA).
4. Completion of WSU general education requirements.

The **Associate of Arts** Degree must include a world language or ASL (American Sign Language) requirement which may be met by one of the following:

- a. Documentation of a proficiency level of "Novice High" or better through an examination administered by the WSU Department of World Languages & Cultures or through an examination by a recognized testing agency.
- b. Completion of WSU world language course 1020 with a grade of "C" or higher, or comparable transfer credit.
- c. Completion of any WSU world language course at a level beyond the first year with a grade of "C" or higher, or comparable transfer credit.
- d. Documentation of three years of the same language completed in high school with a minimum grade of "B".
- e. Documentation of a minimum proficiency level in American Sign Language through an examination administered by the American Sign Language/Interpreting program at SLCC. The signer must "demonstrate proficiency in temporal aspect, spatial agreement and in describing things around her/him and the deaf culture."
- f. Completion of WSU American Sign Language course 1020 with a grade of "C" or higher, or comparable transfer credit.

AAS Degree Requirements

1. A minimum of 60 credit hours.
2. A minimum of 20 hours in residency (WSU courses).
3. At least a 2.0 (C) WSU grade point average (GPA).
4. General education requirements are specified by each program and include at least the following:
 - a. **ENGL 1010** or **ENGL 2010** and one other course in oral or written communication (6 credit hours);
 - b. **Math** or discipline-specific statistics as designated by specific programs (3 credit hours);
 - c. One course in each of the three following areas (9 credit hours): **Creative Arts & Humanities** (CA or HU), **Life & Physical Sciences** (LS or PS), and **Social Sciences** (SS).

Requirements for Institutional Certificates

Students are awarded an Institutional Certificate when they complete a program of study fulfilling a 10 credit hour minimum in residence at Weber State. Course work for institutional certificates is designed in a specific area for career and technical education purposes or for professional development. Students enrolled in Institutional Certificate programs are awarded diplomas indicating they have completed an Institutional Certificate in a defined area. Institutional Certificates are designated as "Institutional Certificate" under the Degrees/Programs listing (see Programs Sorted by Degree). Refer to the listings under the academic department for specific requirements. At the discretion of the department credits earned as part of an Institutional Certificate may be applied to a degree. Students enrolled in Institutional Certificate programs may need to meet additional credit hour requirements in order to qualify for financial aid and should check with the Financial Aid Office.

Requirements for Graduate Certificates

A Graduate Certificate is a program of study, less than a year in length, made up of graduate-level course work, with a prerequisite of at least a Bachelor's degree. Students enrolled in Graduate Certificate programs are awarded diplomas

indicating they have completed a Graduate Certificate in a defined area. Institutional Certificates are designated as "Grad Cert" under the Degrees/Programs listing. Refer to the listings under the academic department for specific requirements.

Requirements for Certifications

Students are awarded departmental certifications for completing a course or series of courses in a specified area. Certifications are designated as "Certification" under the Degrees/Programs listing (see Programs Sorted by Degree). Refer to the listings under the academic department for specific requirements. Students enrolled in certification programs may need to meet additional credit hour requirements in order to qualify for financial aid and should check with the Financial Aid Office.

Course Attributes

Attributes are short acronyms embedded into course titles that identify specific elements of content and/or pedagogy within a course. Content refers to a focus on agreed-upon outcomes. Pedagogy refers to a focus on use of specific types of instructional approaches or strategies.

The purpose of the attributes is to support the organizational mission by increasing:

- Advising transparency for students
 - Identify required course work such as General Education courses.
 - Identify specific content and pedagogy that may inform appropriate course selection.
- Institutional identification by making visible engagement in specific learning outcomes and high impact practices, particularly for underrepresented students.
- Facilitation of interdisciplinary study and University curriculum initiatives.
- Third-party recognition of University accomplishments, such as Carnegie Foundation recognition of the Center for Community Engaged Learning (CEL) attribute.
- Leverage for graduates in applying to graduate school or for employment, by defining attributes on the back of transcripts and/or offering certificates or recognitions for completing a given number of courses. The scope of an attribute may be limited to courses within a specific department or college, or inclusive of courses across the University. A single course may not hold more than three attributes.

High Impact Educational Experiences

High Impact Educational Experiences promote student learning through curricular and co-curricular activities that are intentionally designed to foster active and integrative student engagement by utilizing multiple impact strategies.

Attribute	Abbreviation	Description
Community Engaged Learning	CEL	Students will engage in meaningful community engagement that is connected to their specific course's academic objectives. CEL Website
Course Based Research	CRE	Students will engage in a significant research, scholarly, or creative works experience as a major component of this course. CRE Website
Internship	INT	Students will spend the bulk of their time engaging with industry professionals in experiential learning. INT Website
Sustainability	SUS	Students will concentrate on sustainability, including its social, economic, and environmental dimensions, or examine an issue or topic using sustainability as a lens. SUS Website
Global Learning	GLB	Students will develop global knowledge, global skills or global attitude as one of the learning outcomes/goals of the course. GLB Website

General Education

The purpose of the Weber State University General Education program is to provide students with foundational knowledge and intellectual tools that enhance and transcend their academic program of study. The big questions posed by General Education courses address significant issues about the world. General Education courses help students apply their learning and develop personal and social responsibility, which is demonstrated through signature assignments. More information is available in the Catalog's General Education Requirements and the General Education website.

Attribute	Abbreviation	Description
Composition	EN1	Students will develop practices of successful academic writing that will serve as a foundation for continued writing experiences across the curriculum. Students will focus on the writing process, writing for specific audiences, collaboration with peers, and on the interrelationship between reading and writing.
Composition	EN2	Students will focus on writing arguments, conducting library research, and documenting sources, practices which serve as a foundation for continued writing experiences across the curriculum. Students will further develop practices of successful academic writing introduced in EN1 courses, including the writing process, writing for specific audiences, and collaboration with peers.
American Institutions	AI	Students will demonstrate reasonable understanding of the history, principles, form of government, and economic system of the United States. Students will use primary documents, engage in a diversity of viewpoints, as well as interpret, communicate and integrate information about historical, political, and economic systems.
Quantitative Literacy	QL	Students will demonstrate quantitative reasoning skills beyond those found within required high school Mathematics courses and at an appropriate introductory university level. Students will focus on interpretation, representation, calculation, application/analysis, assumption, communication, and creation of quantitative evidence.
Cultural Competence	CC	Students will engage with human diversity/multiculturalism that is directly relevant to present-day society in a course that is comparative in nature (multi-cultural or cross-population), treats multiple aspects of diversity and/or culture (such as race, gender, age, class, etc.) in a single area of study, or is specific to a particular group of people or culture that is not present or is under-represented in the general social-economic-political framework of the United States.
Humanities	HU	Students will derive evidence from primary sources regarding the complexities and changes in human experience through analytical reading and critical thought; describe how human experience is shaped by social, cultural, linguistic, and/or historical circumstances; demonstrate attentiveness to linguistic, visual, and/or audio texts when communicating meaning/ or use appropriate verbal, perceptual, or imaginative skills when organizing meanings, developing a sense of self, and balancing potentially disparate values.
Creative Arts	CA	Students will discuss the scope and variety of the fine arts; recognize the aesthetic standards used in making critical judgments in various artistic fields; analyze and articulate understanding of a range of artistic processes; participate in an introductory performance, production or design experience in the arts; or demonstrate how the creative process is informed and limited by social and historical contexts.
Social Sciences	SS	Students will demonstrate understanding of social and behavioral science methods, concepts, and theories; formulate basic questions about social behavior and phenomena through interpretive and systematic analyses; develop empirically-derived and theoretically-informed explanations of human behavior in both its individual and collective dimensions; or demonstrate a critically-reasoned understanding of social patterns and individual variation congruent with and divergent from those patterns.
Physical Sciences	PS	Students will demonstrate understanding of science as a way of knowing about the physical world, demonstrate understanding of forces in the physical world, discuss the flow of matter and energy through systems; develop evidence-based arguments

		regarding the effect of human activity on the Earth; or describe how the Physical Sciences have shaped and been shaped by historical, ethical, and social contexts.
Life Sciences	LS	Students will demonstrate understanding of science as a way of knowing about the natural world; demonstrate basic understanding of how organisms live, grow, respond to their environment, and reproduce; discuss the organization and flow of matter and energy through biological systems; explain from evidence patterns of inheritance, structural unity, adaptation, and diversity of life on Earth; or describe how the Life Sciences have shaped and been shaped by historical, ethical, and social contexts.

College of Engineering, Applied Science & Technology

Dr. David L. Ferro, Dean

College Mission Statement: The primary goal of the College of Engineering, Applied Science & Technology (EAST) is to implement the mission of Weber State University and to prepare students for employment upon graduation by ensuring that they are productive, accountable, and responsible individuals able to function effectively in today's workplace. This goal is achieved by developing in students a cohesive, solid theoretical foundation bolstered by practical, hands-on experiences. The learning environment is further enhanced by extensive contact between faculty and students both in and out of the classroom. In addition, the liberal education component present in all programs equips students for lifelong learning in a changing world.

College Vision Statement: The vision of the College of Engineering, Applied Science & Technology is to be the leader in the state in technology and technology related programs through service to our students and the businesses and industries in our region. The mission of the college is to serve the State of Utah by

- Preparing students for employment upon graduation and ensuring that they are productive, accountable, and responsible individuals able to function effectively in today's workplace.
- Engaging in scholarly activities that expand the technological education our students receive and providing a service to business and industry.
- Utilizing the college's resources and faculty expertise to benefit students, business, industry, education, government, and society in general.

College Office Contact: Gina Naisbitt, 801-626-6303, Engineering Technology Building 110

College Advisors

Website: <https://www.weber.edu/east/advising>

EAST Advising: Aimee Golden	801-626-6369	Book Appointment
EAST Advising: Angela Payan	801-626-6577	Book Appointment
Automotive Technology: Jessica Slater	801-626-3225	Book Appointment
Professional Sales: Paige Young	801-626-7595	Book Appointment
School of Computing: Julie Christensen	801-626-6580	Book Appointment
School of Computing: Pat DeJong	801-626-6447	Book Appointment
Graduate Programs Advising		Book Appointment

Department Chairs

Automotive Technology: Prof. Jessica Slater	801-626-7917
Construction and Building Sciences: Dr. Thomas Hales	801-395-3432
Electrical and Computer Engineering: Dr. Fon Brown	801-626-7781

Engineering Technology: Assoc. Prof. Mark Baugh	801-626-6305
Mechanical Engineering: Dr. Daniel J. Magda	801-626-7636
Professional Sales: Dr. Nicole Flink	801-626-6913
School of Computing: Dr. Kyle Feuz	801-626-7864

The Alan E. Hall Center for Sales Excellence

Director: Brock Adams

Telephone: 801-626-6912 or 801-626-6970

The Alan E. Hall Center for Sales Excellence was established in 2013 through a grant funded by the Alan and Jeanne Hall Foundation to promote and explore sales excellence by collaboratively engaging academic and industry sales experts. The Center for Sales Excellence is the nexus of a community of learners and benefactors in sales expertise. It develops sales curricula and instruction for private and public institutions, creates online resources for sales, partners with industry to augment industry-specific sales skill-sets, promotes the development of improved sales technology and theory-based techniques, and links sales students with experienced sales professionals and organizations.

The National Center for Automotive Science and Technology

Director: Joe Thomas

Location: TE 201 **Telephone:** 801-626-7836

The Center for Automotive Science and Technology was established in 1997 to assist in developing a better understanding of vehicle emissions among academic, regulatory, and private sector entities, both locally and nationally. To do this, the Center provides training to automotive technicians, instructors, regulatory officials, field engineers, and consumer groups as well as doing applied research on vehicular emissions. Additionally, the Center gathers and disseminates information about the impact of emissions, design for emission abatement, and efficiency of vehicles. The Center is a cooperative endeavor of the University, the Utah Department of Environmental Quality, and multiple private companies.

Wadman Center for Excellence in Construction and Building Sciences

Location: WSU Davis, DSC-310 **Telephone:** 801-395-3427 **Email:** parsoncmt@weber.edu

Established in 2018, the Wadman Center for Excellence in Construction and Building Sciences supports department degree programs in Construction Management, Interior Design, Facilities Management, and Building Design & Construction. The Center, working with regional educational institutions, industry advisory boards, staff, faculty and alumni develops and implements student recruiting and marketing strategies for the Center's programs. The Center promotes and manages recruiting and marketing activities in coordination with WSU's existing EAST support services. These activities include fostering employer and alumni relations, supporting student recruiting, and hosting related student/program events. In addition, the Center promotes, sponsors, and hosts student-related activities each school year in support of department programs and student events. The Center will collaborate and coordinate critical continuing education programs with the WSU's Office of Continuing Education, providing industry training for licensing, industry continuing educational credit, and workshops and seminars relevant to construction and building science industries.

Computer Literacy Center

Director: Abdulmalek Al-Gahmi

Administrative Specialist: Angie Christensen

Location: EH 311 **Telephone:** 801-626-7384 **Web:** weber.edu/clc

The Computer Literacy Center is a university-wide student learning center established to ensure all students achieve the computational literacy necessary to succeed in university coursework, academic research, and the workplace of the future. Entering and continuing WSU students possess widely varying levels of experience and knowledge about computer applications and operation. The CLC is designed to support students from all backgrounds to attain levels of computer competency appropriate to their specific academic needs. The CLC also offers instructional support on advanced topics to prepare students for upper division courses and research investigations, and represents a key resource to ensure student competency in computer applications specifically defined by faculty to support university courses instructed by those faculty.

The Concept Center

Director: Taylor Foss

Location: TE 219 **Telephone:** 801-626-6670 **Web:** weber.edu/east/concept

The Concept Center is an innovative engineering research and design think tank that brings skilled students, experienced faculty, and local companies together on engineering research, product development, and design. The Concept Center at Weber State University is here to provide the engineering expertise needed to help established businesses improve production processes, assist small tech-based startups with a potentially valuable patent, and assist individuals to move great ideas forward. The Concept Center participants get low cost, creative, and effective solutions; and WSU students and faculty gain valuable experience.

Center for Technology Outreach

Director: Alicia Christensen & Luke Fernandez

Location: M3 **Telephone:** 801-626-7552 **Web:** weber.edu/eastoutreach

The College of Engineering, Applied Science & Technology values our role in providing a variety of engaging, fun, and instructive outreach programs. Through the Center for Technology Outreach we strive to reach out to students and community members of all ages through our Speaker Series and K-12 Programs.

The Speaker Series features interesting and informative voices from the expansive field of technology experts in Utah and around the US. Participants are intellectually enriched by the insight, understanding, and knowledge of people such as internet expert Radia Perlman, author Matt Richtel, and computer programmer and activist Richard Stallman. The Speaker Series is open to the public and all are welcome.

Encouraging, supporting and providing Science, Technology, Engineering and Math (STEM) opportunities to K-12 students is an important and valued component of our service to the community. The scope of our K-12 Outreach is multi-layered.

- *Introduction and Awareness:* Short-term events to build interest and awareness in technology such as Parent/Daughter Engineering Day, Family Engineering Day, and STEM Fests & Expo's.
- *Engage and Experience:* Programs designed to engage students in more committed STEM activities and increase their confidence and interest in pursuing STEM related majors and careers. These include, FIRST Tech Challenge Robotics, FIRST LEGO League, SeaPerch Underwater Robotics, Engineering and Technology Summer Camps, and more.
- *Educate and Support:* In-depth academic enrichment, designed with the goal of impacting the long-term education and career pathways of students. WSU PREP and Project Lead the Way both highlight the college's long-term investment in K-12 education and Utah's youth.

Noorda Interdisciplinary Center

Director: David Ferro

Location: ET 110 **Telephone:** 801-626-6303

The Noorda Interdisciplinary Center (NIC) for Engineering, Science & Society, created with the generous donations from the Noorda Foundation, and an element of the original agreement with that foundation, endeavours to find collaborations between various disciplines in science, engineering, technology, humanities, and social sciences; to allow for creating interdisciplinary programs; to engage in projects with the community examining social impacts and creating positive changes through engineering and science; to expose students to the social contexts within which they work and create; and to reignite passion and exploration with the larger community for an enlightened understanding of techno-scientific issues. The NIC is oriented towards outreach and teaching about and solving engineering grand challenges, that could correspond to Noorda Foundation goals like energy efficiency, generation, and storage, among others, that putting engineering into important social, historical, and economic contexts, including, for examples, the need to welcome sustainability, under-represented populations into engineering, promoting democracy, and cybersecurity.

Construction and Building Sciences Department

Department Chair: Thomas Hales

Location: WSU Davis DSC, Room 310

Telephone Contact: Liz Hill 801-395-3427

Email: Parsoncmt@weber.edu

Associate Professors: Kristen Arnold, Jeremy Farner; **Assistant Professor:** Thomas Hales; **Instructors:** Ashley Badali, Russell Butler, John Julander, Cameron Lewis, Shauna Morris, Pieter van der Have, Tim Willard

Construction and Building Science is a field of knowledge that draws upon physics, chemistry, engineering, architecture, construction and the life sciences. Construction and Building Science attempts to work with models of buildings and structures *as a system*, applying empirical techniques to the effective solution of design and construction problems. More specifically, contemporary construction and building science is a broad discipline that is concerned with the full life cycle of buildings and engineering projects, including: policy (codes and standards), planning, design, construction, commissioning, facilities management, restoration and retrofit, preservation and conservation, and demolition (deconstruction) and recycling.

The Construction and Building Sciences Department offer degrees in Building Design and Construction, Interior Design, Construction Management and Facilities Management.

Parson Construction Management

The Parson Construction Management program teaches the processes, procedures and management techniques necessary to function as a "Professional Constructor". It is designed to prepare students for immediate professional level employment or further study by developing a cohesive, solid technical foundation bolstered by practical, hands-on experiences, at the same time providing the education necessary for lifelong learning in a changing world. The process of learning is emphasized, as well as accumulation of knowledge. The multi-disciplinary curriculum is composed of courses in the areas of construction science, construction practice, business, and management as well as general education. The program is accredited by the Weber State University Accreditation.

The Parson Construction Management curriculum is a "2+2" design facilitating articulation with programs in architecture, commercial building construction, design graphics, facilities, interior design, and other building design and construction-related degrees.

Facilities Management-Emphasis

The Construction Management Program-Facilities Management Emphasis prepares graduates to manage and maintain the physical facilities for companies. Facilities managers may be responsible for leading activities in all or parts of the following: managing operations and maintenance of buildings, physical plant and utility distribution systems, grounds upkeep, road and parking lot maintenance, snow removal; recycling and waste management, energy conservation, sustainability; long range facility planning, remodeling of existing facilities and planning, design and construction of new facilities and systems; code compliance.

Building Design & Construction

The Building Design & Construction (BDC) degree prepares graduates to enter careers in the design, construction, operation or maintenance of the built environment. Graduates are prepared for careers in the building design, construction, testing, operation, and maintenance of building systems; they have the abilities to produce and utilize basic construction documents and to perform basic analysis and design of system components. Baccalaureate degree graduates will have the technical and managerial skills necessary for careers in which they will analyze and design systems, specify project methods and materials, perform cost estimates and analyses, and manage technical activities in support of building projects.

Interior Design

The four-year Interior Design degree provides student's academic preparation for employment in the design-build industry. Students develop skills in professional practice and sales, Auto CAD, Revit Architecture, drafting, sketching, rendering, space planning, specification of materials, building codes, history and theory. Drafting and technical skills are essential to the program of study. Students graduating with the Interior Design Professional Sales degree meet guidelines for the practice of residential and commercial interior design, are academically prepared to sit for the CKD (Certified Kitchen Design) exam, gain membership in professional organizations, become licensed, and after two years of experience in the field sit for the NCIDQ (National Council for Interior Design Qualification) exam. The Interior Design bachelor of science degree is accredited by the Council for Interior Design Accreditation (CIDA) and endorsed by the National Kitchen and Bath Association (NKBA).

Associate of Applied Science

Construction Apprenticeship (AAS)

- **Program Prerequisite:** Journeyman's License, Certificate of Completion from the Office of Apprenticeship (OA), or Certificate of Completion from the post-secondary institution offering an OA certified program.
- **Grade Requirements:** The student must earn an overall GPA of 2.00 (C) or better in all courses and must also earn a "C" or better in each of the core and elective courses (**a grade of "C-" is not acceptable**).
- **Credit Hour Requirements:** Students must complete a minimum total of 63 credit hours, which includes a minimum of 20 credit hours of WSU residency (WSU courses), and exactly 40 transfer credit hours granted for having completed a certified Office of Apprenticeship program.
- **Program Code:** 8113AAS
- **CIPC:** 460000

Advisement

All Construction Apprenticeship students are required to meet with an academic advisor in the WSU College of Engineering, Applied Science & Technology (EAST) to establish a program contract plan, *before* entering the program.

Admission Requirements

Regular university admission requirements apply and proof of a completed program prerequisite must be provided. Students will receive 40 hours of transfer elective credit toward an AAS in Construction Apprenticeship degree upon completion of all WSU graduation requirements.

Program Learning Outcomes

Upon completion of this program, the student:

- Will be able to explain the essential concepts of Construction Management.
- Will be able to communicate effectively, in both spoken and written formats.
- Will be able to explain the basics of construction contracts, along with the application of ethical principles in construction.
- Will possess basic computer skills used in construction.
- Will be able to demonstrate skills required in construction jobsite management.

Major Course Requirements for the AAS in Construction Apprenticeship Degree

NOTE: *Students must complete a minimum of 20 credit hours of WSU residency (WSU courses).*

Core General Education Requirements

See current catalog for requirements.

Breadth General Education Requirements

See current catalog for requirements.

Course Requirements

- CM 1220 - Construction Contracts **Credits: (3)**
- CM 2210 - Construction Jobsite Management **Credits: (3)**

Construction Management (AAS)

- **Grade Requirements:** A grade of "C" or better in all major courses, business courses, and support courses is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher. Also refer to the general grade requirements for graduation under Degree Requirements .
- **Credit Hour Requirements:** 66 total credit hours are required. A minimum of 20 hours in residence at WSU is required. A student must also complete a minimum of 18 hours of CM major courses at WSU to obtain an AAS degree.

- **Program Code:** 8085AAS
- **CIPC:** 522001

Advisement

All Construction Management Technology students are encouraged to meet with a faculty advisor at the beginning of their freshman and sophomore years for course and program advisement. Call the CMT program secretary at 801-395-3427 to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for this program. (Also refer to the Department Advisor Referral List.)

General Education

Refer to the Degree Requirements for Associate of Applied Science requirements. The following courses required for the Construction Management Technology AAS degree will also fulfill general education requirements: MATH 1080 (Quantitative Literacy).

Program Learning Outcomes

- **Planning, Organizing, Directing, and Controlling:** Students will learn planning, organizing, directing and controlling skills to ethically apply concepts that allow construction projects to be brought in safely on time, using scheduling concepts, within budget, by applying learned estimating skills, and to the owner/client's desired quality standard. These will be done while identifying and managing the inherent project and industry risks to keep the project and all entities involved free of legal issues via among other things a solid understanding of contracts and how they apply throughout the process.
- **Collaboration, Communication, Relationship Building, and Leadership:** Students will learn leadership skills and participate in multi-disciplinary teams. They will be part of presentation teams and learn to formulate business plans. Emphasis will be placed on relationship building and team building as well as all forms of effective communication and the thorough/comprehensive documentation necessary to succeed in the construction industry and manage risk.
- **Delivery Methods and the Design Process:** Students will learn various design principles, including sustainable and life-cycle concepts for both vertical and horizontal construction. They will apply layout principles and create basic designs. An understanding of building codes will be applied and all in the context of planning and delivering a project from program review to schematic design and design development to the final construction design documents.
- **Materials, Methods, Terminologies, and Applications:** Students will be exposed to how various computer applications are used within the industry but with emphasis on the broader concepts and not promotion of specific software programs. The most common materials, methods, and terminologies will be learned along with equipment uses and selection. Students will learn basic engineering principles and how they apply to these materials and methods.

Major Course Requirements for AAS Degree

Construction Management Technology Courses Required (33 credit hours)

- CM 1100 - Construction Management Orientation **Credits: (1)**
- CM 1150 - Construction Graphics **Credits: (3)**

- CM 1310 - Materials & Methods **Credits: (4)**
- CM 2990 - Construction Management Seminar **Credits: (1)**
- CM 1220 - Construction Contracts **Credits: (3)**
- CM 1550 - Construction Safety **Credits: (2)**
- CM 2260 - MEP **Credits: (3)**
- CM 2360 - Commercial Design and Codes **Credits: (3)**
- CM 2640 - Quantity Survey **Credits: (3)**
- CM 2210 - Construction Jobsite Management **Credits: (3)**
- CM 2340 - Civil Design and Layout **Credits: (3)**
- ENGR 1040 - Computer Aided Design **Credits: (3)**
- ENGR 2230 - Introduction to Land Surveying **Credits: (3)**

Support Courses Required (8 credit hours)

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- MATH 1080 QL - Pre-calculus **Credits: (5)**

Interior Design (AAS)

- **Grade Requirements:** A grade of "B" or better in courses required for this major (a grade of "B-" is not acceptable) in addition to an overall GPA of 3.0 or higher.
- **Credit Hour Requirements:** A total of 66 credit hours is required.
- **Assessment Requirements:** Students may be required to complete certain assessment instruments as part of the requirements for receiving the associate's degree.
- **Program Code:** 8087AAS
- **CIPC:** 500408

Advisement

All Interior Design students are required to meet with a faculty advisor each semester for course and program advisement. Call 801- 395-3427 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no admission or application requirements for this program.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. The following required support courses will also be applied toward general education requirements: COMM 2110 **(3)**, and ART 1010 **(3)** or ART 1030 **(3)**. Students also need to complete ENGL 1010 **(3)**, Quantitative Literacy (3), Life Science or Physical Science (3), Social Science (3), and Computer and Information Literacy (minimum 2). A minimum of 20 hours in residence is required.

Transfer Credits

No courses older than 10 years will be accepted for credit toward a degree in this program.

Program Learning Outcomes

- Design theory and evidence based design. Students are exposed to or will apply theory and research to design projects and problem solving.
- Professional Practice, Presentation and Sales Techniques. Students will be exposed to ethics in professional practice and will utilize professional verbal and visual selling techniques to present interior design concepts.
- Design Process, Construction Drawings and Technical Skills. Students apply the 5-phase design process and utilize technical skills in producing working construction drawings as part of course projects.
- Health, Safety and Welfare, Sustainability, Accessibility. Students will produce design solutions that are sustainable, protect health, safety and welfare, and provide accessibility to all occupants. Student work will feature specification of sustainable products and materials and concepts that adhere to standards, codes and ethical building practices.
- Culture, Diversity, Historical Precedent. Students will be exposed to or will illustrate diversity through various design concepts that address diverse familial groups and cultures as well as historical precedent.

Major Course Requirements for AAS Degree

Interior Design Courses Required (33 credit hours)

- ID 1010 CA - Introduction to Interior Design **Credits: (3)**
- ID 1020 - Presentation Techniques **Credits: (3)**
- ID 2010 SUS - Sustainability I: Textiles and Soft Materials **Credits: (3)**
- ID 2020 - Design Documentation, Visualization & Modeling, II **Credits: (3)**
- ID 2035 - Design Process/Space Planning **Credits: (3)**
- ID 2040 - Architectural Detailing **Credits: (3)**
- ID 2050 - Codes **Credits: (2)**
- ID 2860 - Practicum **Credits: (1-2)**
- ID 2990 - Interior Design Seminar **Credits: (1)**
- ID 2820 - Historical Interiors **Credits: (3)**
- ID 3020 - American and Modern Interiors **Credits: (3)**
- ID 2060 SUS - Sustainability II: Materials, Hard Surfaces, and Specifications **Credits: (3)**

Support Courses Required (12 credit hours)

- ART 1010 CA - Introduction to the Visual Arts **Credits: (3)** or
- ART 1030 CA - Studio Art for the Non-Art Major **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- PS 1143 - Principles of Selling and Persuasion **Credits: (3)**
- PS 3103 - Sales Personalities and Profiles **Credits: (3)**

Note:

Information Literacy as defined in this catalog is also required.

Pre-Architecture (AAS)

The Pre-Architecture program will allow students to prepare for job opportunities working for residential design firms and builders, commercial architectural design firms and contractors; trade contractors and engineering firms such as mechanical, electrical, and plumbing; civil engineering firms; and various other firms related to the construction of the built environment. It provides an alternative pathway for those interested in continuing their graduate education in various disciplines relating to the built environment.

- **Program Prerequisite:** None
- **Minor:** Not required
- **Grade Requirements:** A grade of "C" or better in courses used toward the major (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** 63 total credits
- **Program Code:** 8089AAS
- **CIPC:** 040901

Advisement

All program students should meet with a faculty advisor at least annually for course and program advisement. The department secretary can also assist students. Call 801-395-3427 for more information or to schedule an appointment. (Also, refer to the Department Advisor Referral List.)

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (Student Access and Success, Services and Information).

General Education

Refer to Degree Requirements for AAS general education requirements.

Program Learning Outcomes

- Experience residential and commercial Building Design in all phases of the design-build process. (building planning, site design, structural design, thermal & moisture protection, Mechanical-Electrical-Plumbing system design, building science & sustainability, and domestic architecture)
- Apply the Design Process during concept development, construction document development, and contract completion using the latest 2D and 3D software. (plans, elevations, sections, details, renderings, specifications)

Required Pre-Architecture Courses (45 Credits)

- ARCH 1040 CA - Introduction to Architecture **Credits: (3)**
- CM 1100 - Construction Management Orientation **Credits: (1)**
- CM 1310 - Materials & Methods **Credits: (4)**
- ID 1050 - Design Documentation, Visualization & Modeling I **Credits: (3)**
- ID 2990 - Interior Design Seminar **Credits: (1)**
- ARCH 1350 - Architectural Design Communications I **Credits: (3)**
- CM 1150 - Construction Graphics **Credits: (3)**
- ID 1020 - Presentation Techniques **Credits: (3)**

- ARCH 2000 - Architectural Communications II **Credits: (3)**
- CM 2340 - Civil Design and Layout **Credits: (3)**
- ID 2035 - Design Process/Space Planning **Credits: (3)**
- CM 1220 - Construction Contracts **Credits: (3)**
- CM 2360 - Commercial Design and Codes **Credits: (3)**
- CM 2640 - Quantity Survey **Credits: (3)**
- ID 2050 - Codes **Credits: (2)**
- ID 2820 - Historical Interiors **Credits: (3)**

Institutional Certificate

Design-Build Essentials Certificate of Proficiency

The Design-Build Certificate will allow students to prepare for job opportunities working for residential design firms and builders, commercial architectural design firms and contractors; trade contractors and firms such as civil, mechanical, electrical, and plumbing; various other firms related to the design and construction of the built environment. It provides a pathway for those interested in continuing their undergraduate education in Architecture, Construction Management, Interior Design, Sustainability, and various disciplines relating to the built environment.

- **Admission Requirements:** None
- **Grade Requirements:** Students must receive a grade of C or better in all courses. (A C- will require the course to be retaken)
- **Credit Hour Requirements:** A total of 17 credit hours is required.
- **Program Code:** 8107CP
- **CIPC:** 150101

Advisement

Call 801-395-3427 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Program Learning Outcomes

- Experience residential and commercial Building Design in all phases of the design-build process. (building planning, site design, structural design, thermal & moisture protection, Mechanical-Electrical-Plumbing system design, building science & sustainability, and domestic architecture)
- Apply the Design Process during concept development, construction document development, and contract completion using the latest 2D and 3D software. (plans, elevations, sections, details, renderings, specifications)

Course Requirements for Design-Build Certificate

Most courses can be taken online and this certificate could be completed in one semester if taken in Fall or Spring.

- ARCH 1350 - Architectural Design Communications I **Credits: (3)**
- ARCH 1040 CA - Introduction to Architecture **Credits: (3)**
- CM 1150 - Construction Graphics **Credits: (3)**
- CM 1100 - Construction Management Orientation **Credits: (1)**

- CM 1310 - Materials & Methods **Credits: (4)**
- ID 1050 - Design Documentation, Visualization & Modeling I **Credits: (3)**

Bachelor of Science

Architectural Design (BS)

The Architectural Design (BS) program prepares graduates to enter careers in the architectural design of the built environment. Graduates are prepared for careers in the architectural design and have the abilities to produce and utilize basic construction documents and to perform basic analysis and design of system components. Baccalaureate degree graduates will have the technical and managerial skills necessary for careers in which they will analyze and design systems, specify project methods and materials, perform cost estimates and analyses, and manage technical activities in support of architectural design projects.

The Architectural Design program will allow students to prepare for job opportunities working for residential design firms and builders, commercial architectural design firms and contractors; trade contractors and engineering firms such as mechanical, electrical, and plumbing; civil engineering firms; and various other firms related to the construction of the built environment. It provides an alternative pathway for those interested in continuing their graduate education in various disciplines relating to the built environment.

- **Program Prerequisites:** None
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses used toward the major (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** 121 total credits.
- **Program Code:** 8108BS
- **CIPC:** 150101

Advisement

All program students should meet with a faculty advisor at least annually for course and program advisement. The department secretary can also assist students. Call 801-395-3427 for more information or to schedule an appointment.

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (Enrollment Services and Information).

General Education

Refer to General Education Requirements for the University Bachelor of Science requirements.

Program Learning Outcomes

- Experience residential and commercial Building Design in all phases of the design-build process. (building planning, site design, structural design, thermal & moisture protection, Mechanical-Electrical-Plumbing system design, building science & sustainability, and domestic architecture)

- Apply the Design Process during concept development, construction document development, and contract completion using the latest 2D and 3D software. (plans, elevations, sections, details, renderings, specifications)
- Identify best architectural business practices for project management, programming & due diligence, and contracts.
- Understand Business Administration running a design firm (ethics, licensure, insurance, employment law, accounting, marketing)

Pre-Architecture AAS Required Courses

- ARCH 1040 CA - Introduction to Architecture **Credits: (3)**
- CM 1100 - Construction Management Orientation **Credits: (1)**
- CM 1310 - Materials & Methods **Credits: (4)**
- ID 1050 - Design Documentation, Visualization & Modeling I **Credits: (3)**
- ID 2990 - Interior Design Seminar **Credits: (1)**
- ARCH 1350 - Architectural Design Communications I **Credits: (3)**
- CM 1150 - Construction Graphics **Credits: (3)**
- ID 1020 - Presentation Techniques **Credits: (3)**
- ARCH 2000 - Architectural Communications II **Credits: (3)**
- CM 2340 - Civil Design and Layout **Credits: (3)**
- ID 2035 - Design Process/Space Planning **Credits: (3)**
- CM 1220 - Construction Contracts **Credits: (3)**
- CM 2360 - Commercial Design and Codes **Credits: (3)**
- CM 2640 - Quantity Survey **Credits: (3)**
- ID 2050 - Codes **Credits: (2)**
- ID 2820 - Historical Interiors **Credits: (3)**

Architectural Design BS Required Courses

- ARCH 3100 - Residential Design Studio **Credits: (3)**
- ARCH 3500 - Architectural Rendering & Animation Studio **Credits: (3)**
- ID 3025 - Professional Practice **Credits: (3)**
- ID 3020 - American and Modern Interiors **Credits: (3)**
- ARCH 3000 SUS - Sustainable Building Design & Codes **Credits: (3)**
- ARCH 3200 - Commercial Design Studio **Credits: (3)**
- ARCH 3660 - Structure for Architects & Construction Managers **Credits: (3)**
- CM 3115 - Construction Cost Estimating **Credits: (3)**
- ARCH 4350 - BIM Management & Coordination **Credits: (3)**
- ARCH 4600 SUS - Senior Project **Credits: (3)** (taken 2 times for a total of 6 credits)
- BSAD 3200 - Legal Environment of Business **Credits: (3)**

Construction Management (BS)

- **Program Prerequisite:** Declare a Program of Study in Construction Management
- **Minor:** Not required, Business minor is recommended.

- **Grade Requirements:** A grade of "C" or better in all major courses, business courses, and support courses is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher. Also refer to the general grade requirements for graduation under Degree Requirements.
- **Credit Hour Requirements:** A total of 121 credit hours is required for graduation. A total of 40 upper division credit hours is required (courses numbered 3000 and above).
- **Assessment Requirements:** The students will be required to take Associate Constructor (AC) exam administered by American Institute of Constructors (AIC). A minimum score of 192 out of 300 (64 percent) is required for graduation. The exam may be retaken if needed.
- **Program Code:** 8085BS
- **CIPC:** 522001

Advisement

All Construction Management students are encouraged to meet with a faculty advisor at the beginning of their freshman, junior, and senior years for course and program advisement. Call the CMT program secretary at 801-395-3427 to schedule an appointment. (Also refer to the Department Advisor Referral List).

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for this program.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Consult with an academic advisor for specific general education guidelines. The following courses required for the Construction Management BS degree will also fulfill general education requirements: MATH 1080 (Quantitative Literacy) and PHYS 2010 (Physical Science).

Major Course Requirements for BS Degree

Course requirements are subject to change. Check with program advisor for current requirements.

Construction Management Courses Required

- CM 1100 - Construction Management Orientation **Credits: (1)**
- CM 1150 - Construction Graphics **Credits: (3)**
- CM 1220 - Construction Contracts **Credits: (3)**
- CM 1310 - Materials & Methods **Credits: (4)**
- CM 1550 - Construction Safety **Credits: (2)**
- CM 2210 - Construction Jobsite Management **Credits: (3)**
- CM 2260 - MEP **Credits: (3)**
- CM 2340 - Civil Design and Layout **Credits: (3)**
- CM 2360 - Commercial Design and Codes **Credits: (3)**
- CM 2640 - Quantity Survey **Credits: (3)**
- CM 2990 - Construction Management Seminar **Credits: (1)**
- CM 3115 - Construction Cost Estimating **Credits: (3)**
- CM 3130 - Construction Planning & Scheduling **Credits: (3)**
- CM 3310 - Leadership in the Construction Industry **Credits: (2)**

- CM 3330 - Civil Materials and Testing **Credits: (3)**
- CM 3370 - Preconstruction Services **Credits: (3)**
- CM 4120 - Construction Accounting and Finance **Credits: (3)**
- CM 4150 - Construction Equipment and Methods **Credits: (3)**
- CM 4330 - Applied Structures **Credits: (4)**
- CM 4350 - Temporary Structures **Credits: (2)**
- CM 4510 - Design Charrette/CM Challenge **Credits: (1)**
- CM 4520 - ASC Student Competition **Credits: (1)**
- CM 4570 - Approaches to Construction Contracting **Credits: (2)**
- CM 4620 - Senior Project **Credits: (2)**
- CM 4899 - BS Graduation Assessment and Signoff **Credits: (0)**
- ENGR 1040 - Computer Aided Design **Credits: (3)**
- ENGR 2230 - Introduction to Land Surveying **Credits: (3)**

Support Courses Required

The following Support Courses are Required:

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- MATH 1080 QL - Pre-calculus **Credits: (5)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**
- PHYS 2010 PS - College Physics I **Credits: (5)**
- ARCH 3000 SUS - Sustainable Building Design & Codes **Credits: (3)**

Interior Design (BS)

The four-year Interior Design degree provides student's academic preparation for employment in the design-build industry.

Students develop skills in professional practice and sales, Auto CAD, Revit Architecture, drafting, sketching, rendering, space planning, specification of materials, building codes, history and theory. Drafting and technical skills are essential to the program of study.

In addition to classroom projects, students participate in various community service projects, interdisciplinary design charrettes, attend field trips, and participate locally in professional organizations such as ASID, IIDA and NKBA.

Students graduating with the Interior Design degree meet guidelines for the practice of residential and commercial interior design, are academically prepared to sit for the IDFX exam, gain membership in professional organizations, become licensed, and after two years of experience in the field sit for the NCIDQ (National Council for Interior Design Qualification) exam. The Interior Design is **accredited by the Council for Interior Design Accreditation (CIDA)** and is endorsed by the National Kitchen and Bath Association (NKBA).

Because the practice of interior design is complex, technical, and demanding, this program provides students with the technical skills, design and sales skills necessary to compete in the profession.

- **Program Prerequisite:** None.
- **Minor:** Not required.

- **Grade Requirements:** A grade of "B" or better in courses required for this major (a grade of "B-" is not acceptable) in addition to an overall GPA of 3.0 or higher.
- **Credit Hour Requirements:** A total of 124 hours is required for this program for graduation.
- **Program Code:** 8087BS
- **CIPC:** 500408

Transfer students and students coming into the program with an AAS, AA, or AS will take at least six semesters to complete the program.

Advisement

All Interior Design students are required to meet with a faculty advisor each semester for course and program advisement. Contact the department administrative assistant at 801.395.3427 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no admission or application requirements for this program.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. MATH 1030 (3) is recommended to fulfill the Quantitative Literacy requirement. The following required support courses will also be applied toward general education requirements: ART 1010 (3) or ART 1030 (3) and COMM 2110 (3).

Transfer Credits:

No courses older than 10 years will be accepted for credit toward a degree in this program.

Program Learning Outcomes

- Design theory and evidence based design. Students are exposed to or will apply theory and research to design projects and problem solving.
- Professional Practice, Presentation and Sales Techniques. Students will be exposed to ethics in professional practice and will utilize professional verbal and visual selling techniques to present interior design concepts.
- Design Process, Construction Drawings and Technical Skills. Students apply the 5-phase design process and utilize technical skills in producing working construction drawings as part of course projects.
- Health, Safety and Welfare, Sustainability, Accessibility. Students will produce design solutions that are sustainable, protect health, safety and welfare, and provide accessibility to all occupants. Student work will feature specification of sustainable products and materials and concepts that adhere to standards, codes and ethical building practices.
- Culture, Diversity, Historical Precedent. Students will be exposed to or will illustrate diversity through various design concepts that address diverse familial groups and cultures as well as historical precedent.

Major Course Requirements for BS Degree

Interior Design Courses Required (65-66 credit hours)

- ID 1010 CA - Introduction to Interior Design **Credits: (3)**

- ID 1020 - Presentation Techniques **Credits: (3)**
- ID 1050 - Design Documentation, Visualization & Modeling I **Credits: (3)**
- ID 2010 SUS - Sustainability I: Textiles and Soft Materials **Credits: (3)**
- ID 2020 - Design Documentation, Visualization & Modeling, II **Credits: (3)**
- ID 2035 - Design Process/Space Planning **Credits: (3)**
- ID 2040 - Architectural Detailing **Credits: (3)**
- ID 2050 - Codes **Credits: (2)**
- ID 2860 - Practicum **Credits: (1-2)**
- ID 2990 - Interior Design Seminar **Credits: (1)**
- ID 3000 - Lighting Design **Credits: (3)**
- ID 2820 - Historical Interiors **Credits: (3)**
- ID 3020 - American and Modern Interiors **Credits: (3)**
- ID 3025 - Professional Practice **Credits: (3)**
- ID 2060 SUS - Sustainability II: Materials, Hard Surfaces, and Specifications **Credits: (3)**
- ID 3040 - Design Rendering **Credits: (2)**
- ID 3045 - Residential Design **Credits: (3)**
- ID 3060 - Kitchen & Bath **Credits: (3)**
- ID 2080 - Design Documentation, Visualization & Modeling, III **Credits: (3)**
- ID 4020 - Commercial Design **Credits: (3)**
- ID 4025 - Senior Program Development **Credits: (2)**
- ID 4030 - Senior Project **Credits: (3)**
- ID 4040 - Portfolio Design **Credits: (2)**
- ID 4830 - Directed Readings **Credits: (1-3)** 1 credit hour required
- ID 4860 INT - Internship for Interior Design **Credits: (3)**

Support Courses Required (26 credit hours)

- ART 1010 CA - Introduction to the Visual Arts **Credits: (3)** or
- ART 1030 CA - Studio Art for the Non-Art Major **Credits: (3)**
- ID 4010 - Commercial Studio **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- PS 1143 - Principles of Selling and Persuasion **Credits: (3)**
- PS 3103 - Sales Personalities and Profiles **Credits: (3)**
- PS 3203 - Customer Service Techniques **Credits: (3)**
- PS 3363 - Contract and Sales Negotiation Techniques **Credits: (3)**
- PS 3702 - Developing Team Leadership Skills **Credits: (2)**
- PS 3903 - Sales Presentation Strategies and Techniques **Credits: (3)**

Note:

Students are required to attend and participate in activities outside of the classroom and at least one workshop per year, for which a fee may be attached.

Emphasis Option for Bachelor of Interdisciplinary Studies

Architectural Design Emphasis (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

The Architectural Design Emphasis will allow students to prepare for job opportunities working for residential design firms and builders, commercial architectural design firms and contractors; trade contractors and engineering firms such as mechanical, electrical, and plumbing; civil engineering firms; and various other firms related to the construction of the built environment. It provides an alternative pathway for those interested in continuing their graduate education in various disciplines relating to the built environment.

- **Program Prerequisite:** Enroll in the BIS Program with an interview with the BIS Program Coordinator. Call 801-626-7713 to talk with the BIS secretary and schedule an appointment.
- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable.)
- **Credit Hour Requirements:** 18 total BDC/ARCH credits.
- **Program Code:** 8106
- **CIPC:** 150101

Advisement

All program students should meet with a faculty advisor at least annually for course and program advisement. The department secretary can also assist students. Call 801-395-3427 for more information or to schedule an appointment. (Also, refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (Student Access and Success, Services and Information).

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements.

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements

Select 18 credits from the list below:

- ARCH 1040 CA - Introduction to Architecture **Credits: (3)**
- ARCH 1350 - Architectural Design Communications I **Credits: (3)**

- ARCH 2000 - Architectural Communications II **Credits: (3)**
- ARCH 2830 - Directed Studies **Credits: (3)**
- ARCH 3000 SUS - Sustainable Building Design & Codes **Credits: (3)**
- ARCH 3100 - Residential Design Studio **Credits: (3)**
- ARCH 3200 - Commercial Design Studio **Credits: (3)**
- ARCH 3500 - Architectural Rendering & Animation Studio **Credits: (3)**
- ARCH 3660 - Structure for Architects & Construction Managers **Credits: (3)**
- ARCH 4350 - BIM Management & Coordination **Credits: (3)**
- ARCH 4600 SUS - Senior Project **Credits: (3)**
- ARCH 4830 - Directed Studies **Credits: (1-3)**
- ARCH 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

Interior Design Emphasis (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

The Interior Design Program participates in the BIS degree program. For an Interior Design emphasis, students will take a minimum of 24 credit hours as approved by the Interior Design BIS advisor.

- Program Prerequisite: Enroll in the BIS Program with an interview with the BIS Program Coordinator. Call 801-626-7713 to talk with the BIS secretary and schedule an appointment.
- Grade Requirements: Receive a minimum grade of "B" in each IDT course and also receive a minimum grade of "C" in each additional course taken for the three emphases in addition to a minimum cumulative GPA of 2.5. Classes listed on the BIS contract must be taken for a letter grade; special exams, CLEP or credit/no credit are not allowed for contract classes.
- **Program Code:** 8087
- **CIPC:** 521804

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d) diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Courses Required for the Interior Design BIS Emphasis

Required Courses (19 credit hours)

Note: The following are required courses for the BIS degree. No substitutions are allowed.

- ID 1010 CA - Introduction to Interior Design **Credits: (3)**
- ID 2020 - Design Documentation, Visualization & Modeling, II **Credits: (3)**
- ID 2035 - Design Process/Space Planning **Credits: (3)**

- ID 2050 - Codes **Credits: (2)**
- ID 3025 - Professional Practice **Credits: (3)**
- ID 2060 SUS - Sustainability II: Materials, Hard Surfaces, and Specifications **Credits: (3)**
- ID 4040 - Portfolio Design **Credits: (2)**

Elective Courses

Students should choose 5 hours from the following courses to compliment the required courses listed above.

- ID 1020 - Presentation Techniques **Credits: (3)**
- ID 2010 SUS - Sustainability I: Textiles and Soft Materials **Credits: (3)**
- ID 2040 - Architectural Detailing **Credits: (3)**
- ID 2860 - Practicum **Credits: (1-2)**
- ID 2990 - Interior Design Seminar **Credits: (1)**
- ID 3000 - Lighting Design **Credits: (3)**
- ID 2820 - Historical Interiors **Credits: (3)**
- ID 3060 - Kitchen & Bath **Credits: (3)**

Minor

Architectural Design Minor

The Architectural Design minor will allow students to prepare for job opportunities working for residential design firms and builders, commercial architectural design firms and contractors; trade contractors and engineering firms such as mechanical, electrical, and plumbing; civil engineering firms; and various other firms related to the construction of the built environment. It provides an alternative pathway for those interested in continuing their graduate education in various disciplines relating to the built environment.

Grade Requirements: A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).

Credit Hour Requirements: A minimum of 18 credit hours of BDC/ARCH courses.

- **Program Code:** 8106
- **CIPC:** 150101

This program offers students who major in another discipline the option to obtain a minor in Architectural Design.

Required Courses (18 credit hours)

Select the courses that will best augment your Architectural Design skills.

- ARCH 1040 CA - Introduction to Architecture **Credits: (3)**
- ARCH 1350 - Architectural Design Communications I **Credits: (3)**
- ARCH 2000 - Architectural Communications II **Credits: (3)**
- ARCH 3000 SUS - Sustainable Building Design & Codes **Credits: (3)**
- ARCH 3100 - Residential Design Studio **Credits: (3)**
- ARCH 3200 - Commercial Design Studio **Credits: (3)**
- ARCH 3500 - Architectural Rendering & Animation Studio **Credits: (3)**
- ARCH 3660 - Structure for Architects & Construction Managers **Credits: (3)**
- ARCH 4350 - BIM Management & Coordination **Credits: (3)**

- ARCH 4600 SUS - Senior Project **Credits: (3)** (can be taken twice for 6 credits total)
- ARCH 4830 - Directed Studies **Credits: (1-3)**

Construction Management Minor

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable) in addition to an overall GPA of 2.0 or better in all CM courses.
- **Credit Hour Requirements:** 18 total credit hours are required as listed below. All prerequisites must be satisfied with courses taken.
- **Program Code:** 8085
- **CIPC:** 522001

Advisement

It is recommended to contact your academic advisor for advice and help to properly add this minor to your degree and to avoid misadvisement.

Course Requirements for Minor

Construction Management Courses Required (9 Credit Hours)

- CM 1150 - Construction Graphics **Credits: (3)**
- CM 1310 - Materials & Methods **Credits: (4)**
- CM 2640 - Quantity Survey **Credits: (3)**

Construction Management Courses Elective - (9 Credit Hours)

Complete 9 additional credit hours of any offered Construction Management (CM) courses with at least 6 of those being upper division (3000+). All prerequisites must be satisfied with courses taken.

Interior Design Minor

- **Grade Requirements:** A grade of "B" or better in all courses used toward the minor.
- **Credit Hour Requirements:** A total of 21 credit hours required.
- **Program Code:** 8087
- **CIPC:** 500408

This program offers students who major in another field the option to obtain a minor in Interior Design.

No courses older than 10 year will be accepted for credit towards the minor.

Course Requirements for Interior Design Minor

Courses Required (minimum of 21 credit hours)

- ID 1010 CA - Introduction to Interior Design **Credits: (3)**
- ID 2020 - Design Documentation, Visualization & Modeling, II **Credits: (3)**

- ID 2035 - Design Process/Space Planning **Credits: (3)**
- ID 2040 - Architectural Detailing **Credits: (3)**
- ID 3025 - Professional Practice **Credits: (3)**
- ID 2060 SUS - Sustainability II: Materials, Hard Surfaces, and Specifications **Credits: (3)**
- ID 4020 - Commercial Design **Credits: (3)**

Department of Automotive Technology

Department Chair: Jessica Slater

Location: WSU Davis, Computer & Automotive Engineering Building

Administrative Assistant: Christy Call, 801-395-3226

Advisor: Jessica Slater, jessicarees@weber.edu or jessicaslater.youcanbook.me

Outreach Coordinator: Jennifer Vesper, jennifervesper@weber.edu

Website: weber.edu/automotive

Professors: John Kelly; **Assistant Professor:** Brandon Stevenson, Caid Kroeger; **Instructors:** Scott Holland, Jessica Slater

The Automotive Technology Department curriculum is a "2 + 2" design leading to both an Associate of Applied Science degree and a Bachelor of Science degree. Stackable Certificates of Proficiency are available at the AAS and BS degree levels.

Automotive and Vehicle Engineering Technology

With an Automotive and Vehicle Engineering Technology degree emphasizing Electrical Engineering Technology, students develop expertise in vehicle electronics, electrical systems, and emerging technologies like electric and autonomous vehicles. This specialized degree blends automotive engineering principles with advanced electrical and electronic systems.

Automotive Service Technology

With an Automotive Service Technology AAS degree, students gain a broad range of skills and knowledge essential for diagnosing, repairing, and maintaining modern vehicles. Lab and classroom courses align with the ASE Education Foundation's Master Automotive Service Technician (MAST) standards.

The ASE Education Foundation accredits our AAS degree. Upon completion of the program and the required work experience as set by ASE, students may sit in on A1-A8 or T1-T8, G1, xEV Level 1 and 2, and L3 certifications provided by ASE.

The Automotive Technology BS degree prepares graduates for employment in various automotive-related industries such as field service operations, fleet management, and technical support. In addition to specific technical training, supporting courses foster the interpersonal, verbal, and written communication skills needed to advance in the automotive service industry. An AA/AS/AAS in automotive technology is a prerequisite to the BS degree.

Student Organization

The Auto Tech Club encompasses the Weber Racing team. Each year, Weber Racing designs, builds, races, and mock-sells a mini Baja vehicle. They compete in Baja SAE races across the country. All majors are welcome to join.

Associate of Applied Science

Automotive and Vehicle Engineering Technology (AAS)

Automotive and Vehicle Engineering Technology studies the diagnosis, service, and repair of electrical automotive and transportation systems. In addition to specific technical training, supporting courses foster the interpersonal, verbal, and written communication skills needed to advance in the automotive service industry.

- **Grade Requirements:** Minimum grade of "C " in courses required for this major in addition to an overall GPA of 2.00 or higher.
- **Credit Hour Requirements:** A total of 68 credit hours are required.
- **Assessment Requirements:** Students will be required to complete certain assessment instruments as part of the overall requirements for receiving their associate's degree. Please see the program advisor for specific information regarding the assessment.
- **Program Code:** 8117AAS
- **CIPC:** 150803

Advisement

Advisor: Jessica Slater; Schedule an Appointment

Automotive students should meet each semester with the program advisor.

Use Grad MAPs to plan your degree

Admission Requirements

Submit the online application to the program along with a copy of the applicants driving record. Submitting an application does not guarantee admission to the program. The advisor will contact the student if they qualify for admittance into the program.

General Education

1. A minimum of 63 credit hours.
2. A minimum of 20 hours in residency (WSU courses).
3. At least a 2.0 (C) WSU grade point average (GPA).
4. General education requirements
 - ENGL 1010 or ENGL 2010 and one other course in oral or written communication (6 credit hours);
 - Math (3 credit hours);
 - Social Sciences (SS) (3 credit hours)

Program Learning Outcomes

- Students will demonstrate the proper use of safety equipment when performing any type of vehicle repair
- Students will locate and utilize vehicle electronic service information for all repair procedures
- Students will explain the theory of operation of vehicle systems and components
- Students will demonstrate the proper use of special service tools and hand tools when performing any type of vehicle repair
- Students will apply a proper diagnostic approach when analyzing a vehicle system fault
- Students will apply a proper repair procedure when repairing a vehicle fault
- Students will demonstrate a proper repair verification procedure when a vehicle has been prepared

Major Course Requirements for AAS Degree

Support Courses Required for All Tracks (13 credit hours)

- CHEM 1010 PS - Introductory Chemistry **Credits: (3)** or
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)** and
- MATH 1060 QL - Trigonometry **Credits: (3)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)**

Track Requirements

Select one of the following tracks (see the faculty advisor for suggested course sequence):

Automotive and Vehicle Engineering Technology Track

Required Automotive Service Courses (28 credit hours)

- AUSV 1000 - Introduction to Automotive Service **Credits: (2)**
- AUSV 1010 - Automotive Technology Orientation **Credits: (1)**
- AUSV 1021 - Automotive Braking Systems 1 **Credits: (2)**
- AUSV 1022 - Steering and Suspension Systems 1 **Credits: (2)**
- AUSV 1120 - Automotive Engines 1 **Credits: (2)**
- AUSV 1320 - Automotive Electronics 1 **Credits: (2)**
- AUSV 1323 - Automotive Electronics 2 **Credits: (2)**
- AUSV 1325 - Electrical Fundamentals 3 **Credits: (3)**
- AUSV 1600 - EV1 - Intro to Hybrid & EV Safety **Credits: (2)**
- AUSV 2100 - Vehicle Communications **Credits: (3)**
- AUSV 2120 - Automotive Electrical and Body Control Systems **Credits: (3)**
- AUSV 2520 - Automatic Transmissions **Credits: (4)**

Required Electrical Engineering Technology Courses (18 credit hours)

- AVET 2110 - Semiconductor Circuits **Credits: (4)**

- AVET 2120 - Power and Motors **Credits: (4)**
- AVET 2140 - Communications Systems **Credits: (4)**
- AVET 2160 - Troubleshooting **Credits: (3)**
- AVET 2170 - Industrial Controls **Credits: (3)**

Automotive Service Technology (AAS)

Automotive Service Technology studies the diagnosis, service, and repair of passenger vehicles and light trucks. In addition to specific technical training, supporting courses foster the interpersonal, verbal, and written communication skills needed to advance in the automotive service industry.

- **Grade Requirements:** Minimum grade of "C " in courses required for this major in addition to an overall GPA of 2.00 or higher.
- **Credit Hour Requirements:** A total of 68 credit hours are required.
- **Assessment Requirements:** Students will be required to complete certain assessment instruments as part of the overall requirements for receiving their associate's degree. Please see the program advisor for specific information regarding the assessment.
- **Program Code:** 8097AAS with one of the following cohorts: (ATEPS or ATEPF for Independent Shop ATEP) or HDTRUCK (Heavy Duty Truck)
- **CIPC:** 470600

Advisement

Advisor: Jessica Slater; Schedule an Appointment

Automotive students should meet each semester with the program advisor.

Admission Requirements

Submit the online application to the program along with a copy of the applicants driving record. Submitting an application does not guarantee admission to the program. The advisor will contact the student if they qualify for admittance into the program.

General Education

1. A minimum of 63 credit hours.
2. A minimum of 20 hours in residency (WSU courses).
3. At least a 2.0 (C) WSU grade point average (GPA).
4. General education requirements
 - **ENGL 1010** or **ENGL 2010** and one other course in oral or written communication (6 credit hours);
 - **Math** (3 credit hours);
 - **Creative Arts & Humanities** (CA or HU) (3 credit hours);
 - **Social Sciences** (SS) (3 credit hours)

Program Learning Outcomes

- Students will demonstrate the proper use of safety equipment when performing any type of vehicle repair
- Students will locate and utilize vehicle electronic service information for all repair procedures
- Students will explain the theory of operation of vehicle systems and components

- Students will demonstrate the proper use of special service tools and hand tools when performing any type of vehicle repair
- Students will apply a proper diagnostic approach when analyzing a vehicle system fault
- Students will apply a proper repair procedure when repairing a vehicle fault
- Students will demonstrate a proper repair verification procedure when a vehicle has been prepared

Major Course Requirements for AAS Degree

Support Courses Required for All Tracks (9 credit hours)

- CHEM 1010 PS - Introductory Chemistry **Credits: (3)**
OR
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- WEB 1700 - Introduction to Computer Applications **Credits: (3)**

Track Requirements

Select one of the following tracks (see the faculty advisor for a suggested course sequence):

Independent Shop ATEP Track

Automotive Service Courses Required (44 credit hours)

- AUSV 1000 - Introduction to Automotive Service **Credits: (2)**
- AUSV 1010 - Automotive Technology Orientation **Credits: (1)**
- AUSV 1021 - Automotive Braking Systems 1 **Credits: (2)**
- AUSV 1023 - Automotive Braking Systems 2 **Credits: (2)**
- AUSV 1022 - Steering and Suspension Systems 1 **Credits: (2)**
- AUSV 1025 - Steering and Suspension Systems 2 **Credits: (2)**
- AUSV 1220 - Automotive Manual Drivetrain Systems **Credits: (3)**
- AUSV 1320 - Automotive Electronics 1 **Credits: (2)**
- AUSV 1323 - Automotive Electronics 2 **Credits: (2)**
- AUSV 1325 - Electrical Fundamentals 3 **Credits: (3)**
- AUSV 1600 - EV1 - Intro to Hybrid & EV Safety **Credits: (2)**
- AUSV 2520 - Automatic Transmissions **Credits: (4)**
- AUSV 1120 - Automotive Engines 1 **Credits: (2)**
- AUSV 2100 - Vehicle Communications **Credits: (3)**
- AUSV 2020 - Engine Performance **Credits: (4)**
- AUSV 2120 - Automotive Electrical and Body Control Systems **Credits: (3)**
- AUSV 2600 - EV2 - Intro to Hybrid & EV Systems **Credits: (2)**
- AUSV 2860 INT - Automotive Shop Practice **Credits: (3-8)**

Heavy Duty Truck Track

Automotive Service Courses Required (41 credit hours)

- AUSV 1000 - Introduction to Automotive Service **Credits: (2)**
- AUSV 1010 - Automotive Technology Orientation **Credits: (1)**
- AUSV 1325 - Electrical Fundamentals 3 **Credits: (3)**
- AUSV 2120 - Automotive Electrical and Body Control Systems **Credits: (3)**
- AUSV 1071 - H D Truck Brakes **Credits: (4)**
- AUSV 1072 - H D Truck Steering & Suspension **Credits: (4)**
- AUSV 1170 - H D Truck Engines 1 **Credits: (4)**
- AUSV 1270 - H D Truck Drivetrain **Credits: (4)**
- AUSV 2170 - H D Truck Electrical 1 **Credits: (4)**
- AUSV 2270 - H D Truck Engines II **Credits: (4)**
- AUSV 2370 - H D Truck Preventative Maintenance **Credits: (1)**
- AUSV 2860 INT - Automotive Shop Practice **Credits: (3-8)**
- AUSV 2171 - H D Truck Electrical II **Credits: (4)**

Institutional Certificate

Advanced Hybrid and Electric Vehicle Certificate of Proficiency

The Certificate of Proficiency provides students with advanced hybrid and electric vehicle training to meet industry demands.

- **Grade Requirements:** Students must receive a grade of C or better in every course.
- **Credit Hour Requirements:** 16 credit hours.
- **Program Code:** 8101CP
- **CIPC:** 150803

Advisement

Advisor: Jessica Slater, Schedule an Appointment.

Automotive students should meet each semester with the program advisor.

Admission Requirements

Submit the online application to the program along with a copy of the applicants driving record. Submitting an application does not guarantee admission to the program. The advisor will contact the student if they qualify for admittance into the program.

Learning Outcomes

- Students will demonstrate the proper use of high-voltage safety equipment when performing any hybrid or electric vehicle repair.
- Students will locate and utilize vehicle electronic service information for all repair procedures.
- Students will explain the theory of operation of hybrid and electric vehicle systems and components.

- Students demonstrate the proper use of special high-voltage service tools and hand tools when performing any hybrid or electric vehicle repair.
- Students will apply a proper diagnostic approach when analyzing a hybrid or electric vehicle system fault.
- Students will apply a proper repair procedure when repairing a hybrid or electric vehicle fault.
- Students will demonstrate a proper repair verification procedure when a hybrid or electric vehicle has been repaired.
- Students will be able to present and explain informations summarizing hybrid and electric vehicle systems.

Automotive Technology Courses Required (16 credit hours)

- ATTC 3000 - Introduction to Automotive Technology **Credits: (1)**
- ATTC 3260 - Advanced Electrical Systems **Credits: (3)**
- ATTC 3760 - Advanced Automotive Technologies **Credits: (3)**
- ATTC 4520 - EV3 - Hybrid & Electric Vehicle Safety **Credits: (3)**
- ATTC 4530 - EV4 - Hybrid and Electric Vehicle Systems **Credits: (3)**
- ATTC 4560 - EV5 - Hybrid & Electric Vehicle Service & Maintenance **Credits: (3)**

Automotive Service Technology Certificate of Proficiency

The Certificate of Proficiency prepares students for entry-level automotive technician positions in dealerships or at independent shops.

- **Grade Requirements:** Students must receive a grade of C- or better in every course.
- **Credit Hour Requirements:** A total of 15 credit hours is required.
- **Program Code:** 8064CP
- **CIPC:** 150803

Advisement

Advisor: Jessica Slater

Email: jessicarees@weber.edu

Schedule an Appointment: <https://jessicaslater.youcanbook.me/>

Automotive students should meet each semester with the program advisor.

Admission Requirements

Submit the online application to the program along with a copy of the applicants driving record. Submitting an application does not guarantee admission to the program. The advisor will contact the student if they qualify for admittance into the program.

Program Learning Outcomes

- Students will demonstrate the proper use of safety equipment when performing any type of vehicle repair
- Students will locate and utilize vehicle electronic service information for all repair procedures

- Students will explain the theory of operation of vehicle systems and components
- Students will demonstrate the proper use of special service tools and hand tools when performing any type of vehicle repair
- Students will apply a proper diagnostic approach when analyzing a vehicle system fault
- Students will apply a proper repair procedure when repairing a vehicle fault
- Students will demonstrate a proper repair verification procedure when a vehicle has been prepared

Course Requirements for Automotive Service Technology Certificate of Proficiency

Automotive Service Courses Required (16 credit hours)

- AUSV 1000 - Introduction to Automotive Service **Credits: (2)**
- AUSV 1021 - Automotive Braking Systems 1 **Credits: (2)**
- AUSV 1022 - Steering and Suspension Systems 1 **Credits: (2)**
- AUSV 1120 - Automotive Engines 1 **Credits: (2)**
- AUSV 1320 - Automotive Electronics 1 **Credits: (2)**

Take one of the following courses

- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- ENGL 1010 EN1 - Introductory College Writing **Credits: (3)**
- WEB 1700 - Introduction to Computer Applications **Credits: (3)**

Hybrid and Electric Vehicle Maintenance Certificate of Proficiency

The Certificate of Proficiency prepares students for entry-level automotive technician positions in dealerships or at independent shops.

- **Grade Requirements:** Students must receive a grade of C- or better in every course.
- **Credit Hour Requirements:** 21 credit hours.
- **Program Code:** 8102CP
- **CIPC:** 150803

Advisement

Advisor: Jessica Slater, Schedule an Appointment.

Automotive students should meet each semester with the program advisor.

Admission Requirements

Submit the online application to the program along with a copy of the applicants driving record. Submitting an application does not guarantee admission to the program. The advisor will contact the student if they qualify for admittance into the program.

Automotive Service Courses Required (21 credit hours)

- AUSV 1320 - Automotive Electronics 1 **Credits: (2)**
- AUSV 1323 - Automotive Electronics 2 **Credits: (2)**
- AUSV 1325 - Electrical Fundamentals 3 **Credits: (3)**
- AUSV 1600 - EV1 - Intro to Hybrid & EV Safety **Credits: (2)**
- AUSV 2600 - EV2 - Intro to Hybrid & EV Systems **Credits: (2)**
- AUSV 2020 - Engine Performance **Credits: (4)**
- AUSV 2100 - Vehicle Communications **Credits: (3)**
- AUSV 2120 - Automotive Electrical and Body Control Systems **Credits: (3)**

Bachelor of Science

Automotive and Vehicle Engineering Technology (BS)

Transportation Engineering Technology studies the diagnosis, service, and repair of electrical automotive and transportation systems. In addition to specific technical training, supporting courses foster the interpersonal, verbal, and written communication skills needed to advance in the automotive service industry.

- **Program Prerequisites:** ENGL 1010 or placement into ENGL 2010; MATH 1050 plus 1060 or 1080, or placement into MATH 1210.
- **Minor:** Not required.
- **Grade Requirements:** Minimum grade of "C" in courses required for this major in addition to an overall GPA of 2.00 or higher.
- **Credit Hour Requirements:** A minimum of 125 to 126 credit hours is required depending upon the emphasis selected and what courses were taken as part of the associate degree. A minimum of 40 upper-division credit hours is required (courses numbered 3000 and above).
- **Program Code:** 8117BS
- **CIPC:** 150803

Advisement

Advisor: Jessica Slater; Schedule an Appointment

Automotive students should meet each semester with the program advisor.

Use Grad MAPs to plan your degree

Admission Requirements

Submit the online application to the program along with a copy of the applicants driving record. Submitting an application does not guarantee admission to the program. The advisor will contact the student if they qualify for admittance into the program.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. General education courses not taken as part of the associate degree may be taken during the bachelor's degree.

Program Learning Outcomes

- Students will demonstrate the proper use of safety equipment when performing any type of vehicle repair
- Students will locate and utilize vehicle electronic service information for all repair procedures
- Students will explain the theory of operation of vehicle systems and components
- Students will demonstrate the proper use of special service tools and hand tools when performing any type of vehicle repair
- Students will apply a proper diagnostic approach when analyzing a vehicle system fault
- Students will apply a proper repair procedure when repairing a vehicle fault
- Students will demonstrate a proper repair verification procedure when a vehicle has been prepared

Major Course Requirements for BS Degree

Required Automotive Technology Courses (24 credit hours)

- ATTC 3000 - Introduction to Automotive Technology **Credits: (1)**
- ATTC 3760 - Advanced Automotive Technologies **Credits: (3)**
- ATTC 3260 - Advanced Electrical Systems **Credits: (3)**
- ATTC 4520 - EV3 - Hybrid & Electric Vehicle Safety **Credits: (3)**
- ATTC 4530 - EV4 - Hybrid and Electric Vehicle Systems **Credits: (3)**
- ATTC 4540 - Automated Safety and Convenience Systems **Credits: (3)**
- ATTC 4710 - Capstone Research Methods **Credits: (2)**
- ATTC 4560 - EV5 - Hybrid & Electric Vehicle Service & Maintenance **Credits: (3)**
- ATTC 4720 - Capstone Research and Development **Credits: (3)**

Required Electrical Engineering Technology Courses (12 credit hours)

- AVET 3010 - Circuit Analysis **Credits: (4)**
- AVET 4030 - Controls & Systems **Credits: (4)**
- AVET 4040 - Signals and Systems **Credits: (4)**

Required Support Courses

- ENGL 3100 - Professional and Technical Writing **Credits: (3)** Or
- PS 3250 - Business Communication **Credits: (3)**
- MATH 1210 - Calculus I **Credits: (4)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**

Automotive Technology (BS)

The Automotive Technology program prepares graduates for employment in various automotive-related industries such as field service operations, fleet management, and technical support. In addition to specific technical training, supporting courses foster the interpersonal, verbal, and written communication skills needed to advance in the automotive industry.

- **Program Prerequisite:** The Automotive Technology bachelor's degree is a "2+2" program. An AA/AS/AAS in automotive technology is a prerequisite to the BS program.
- **Minor:** Not required.
- **Grade Requirements:** Minimum grade of "C " in courses required for this major in addition to an overall GPA of 2.00 or higher.
- **Credit Hour Requirements:** A minimum of 125 to 126 credit hours is required depending upon the emphasis selected and what courses were taken as part of the associate degree. A minimum of 40 upper-division credit hours is required (courses numbered 3000 and above).
- **Program Code:** 8100BS
- **CIPC:** 150803

Advisement

Advisor: Jessica Slater; Schedule an Appointment.

Automotive students should meet each semester with the program advisor.

Use Grad MAPs to plan your degree

Admission Requirements

Submit the online application to the program along with a copy of the applicants driving record. Submitting an application does not guarantee admission to the program. The advisor will contact the student if they qualify for admittance into the program.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. General education courses not taken as part of the associate degree may be taken during the bachelor's degree.

Program Learning Outcomes

- Students will explain the theory of operation of vehicle systems and components.
- Students will demonstrate the proper use of special service tools and hand tools when performing any type of vehicle repair.
- Students will apply a proper diagnostic approach when analyzing a vehicle system fault.
- Students will apply a proper repair procedures when repairing a vehicle fault.
- Students will demonstrate a proper repair verification procedure when a vehicle has been prepared.
- Students will be able to present and explain information summarizing advanced vehicle systems.

Major Course Requirements for BS Degree

Automotive Technology Courses Required (15credit hours)

- ATTC 3000 - Introduction to Automotive Technology **Credits: (1)**
- ATTC 3760 - Advanced Automotive Technologies **Credits: (3)**
- ATTC 3880 INT - Cooperative Practicum **Credits: (3)**
- ATTC 4710 - Capstone Research Methods **Credits: (2)**

- ATTC 4720 - Capstone Research and Development **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**

Automotive Electives (24 credit hours)

- ATTC 3020 - Introduction to Safety Management and Hazardous Materials **Credits: (3)**
- ATTC 3260 - Advanced Electrical Systems **Credits: (3)**
- ATTC 3520 - Fleet Management **Credits: (3)**
- ATTC 3620 - Automotive Business Practices **Credits: (3)**
- ATTC 4520 - EV3 - Hybrid & Electric Vehicle Safety **Credits: (3)**
- ATTC 4530 - EV4 - Hybrid and Electric Vehicle Systems **Credits: (3)**
- ATTC 4540 - Automated Safety and Convenience Systems **Credits: (3)**
- ATTC 4550 - Advanced Automotive Emissions **Credits: (3)**
- ATTC 4560 - EV5 - Hybrid & Electric Vehicle Service & Maintenance **Credits: (3)**
- ATTC 4760 - Alternate Fuel Systems **Credits: (3)**
- ATTC 3860 - Automotive Standards, Laws, and Regulations **Credits: (3)**

Support Courses Required (6 credit hours)

- PS 3203 - Customer Service Techniques **Credits: (3)**
- PS 3503 - Sales Planning and Forecasting **Credits: (3)**
- PS 3563 - Principles of Sales Supervision **Credits: (3)**
- PS 3702 - Developing Team Leadership Skills **Credits: (2)**
- PS 3903 - Sales Presentation Strategies and Techniques **Credits: (3)**
- PS 4203 - Ethical Sales and Service **Credits: (3)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Automotive Technology (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

BIS students that wish to include Automotive Technology as one of their emphasis areas should recognize that they should have a clear goal for their BIS program and capstone project. Students need to gain approval of courses for the emphasis from the Automotive Technology advisor. They will then work with a faculty mentor, in coordination with the other emphasis mentors, to develop the experiments, methods, and schedule for the project. The student is responsible for securing funding for the supplies needed for their project.

Grade Requirements: Minimum grade of "C" in courses required for this major in addition to an overall GPA of 2.00 or higher.

Credit Hour Requirements: A total of 19 credit hours is required.

Assessment Requirements: Students will be required to complete certain assessment instruments as part of the overall requirements for receiving their associate's degree. Please see the program advisor for specific information regarding the assessment.

- **Program Code:** 8004

Advisement

Advisor: Jessica Slater; Schedule an Appointment

Automotive Core Courses (10 credit hours)

- ATTC 3000 - Introduction to Automotive Technology **Credits: (1)**
- ATTC 3620 - Automotive Business Practices **Credits: (3)**
- ATTC 3760 - Advanced Automotive Technologies **Credits: (3)**
- ATTC 3860 - Automotive Standards, Laws, and Regulations **Credits: (3)**

Automotive Electives (9 credit hours)

Select 9 Credits From the Following List with Approval from the Advisor.

- ATTC 3020 - Introduction to Safety Management and Hazardous Materials **Credits: (3)**
- ATTC 3520 - Fleet Management **Credits: (3)**
- ATTC 4520 - EV3 - Hybrid & Electric Vehicle Safety **Credits: (3)**
- ATTC 4530 - EV4 - Hybrid and Electric Vehicle Systems **Credits: (3)**
- ATTC 4540 - Automated Safety and Convenience Systems **Credits: (3)**
- ATTC 4550 - Advanced Automotive Emissions **Credits: (3)**
- ATTC 4560 - EV5 - Hybrid & Electric Vehicle Service & Maintenance **Credits: (3)**
- ATTC 4760 - Alternate Fuel Systems **Credits: (3)**

Department of Electrical & Computer Engineering

Department Chair: Fon Brown

Location: Noorda Engineering Building, Room 245

Telephone Contact: Judith Smith, 801-626-6898

Email: judithsmith@weber.edu

Website: weber.edu/ece

Professors: Fon Brown, Justin Jackson; **Associate Professor:** Christian Hearn; **Assistant Professors:** Shellee Dyer, Tye Gardner, Eric Gibbons, Alyssa Mock, Jonathan West

The Department of Electrical & Computer Engineering houses three academic programs- Computer Engineering, Electrical Engineering and Biomedical Engineering.

Computer Engineering is the branch of engineering that integrates the fields of electrical engineering and computer science. Computer engineers use computer hardware and software to solve engineering problems. They are trained in computer architecture, embedded systems, software design, data structures, hardware interfacing, and hardware/software integration. The Computer Engineering program offers courses in basic circuitry, microelectronics, embedded systems, algorithms, data structures, and signal processing. An internship, which gives students engineering work experience, is also part of the program. In the senior year, students complete a two-semester capstone project that integrates their course work. The program prepares graduates to enter engineering industry or pursue advanced studies in the discipline.

Electrical Engineering is the branch of engineering that deals with the design and development of electronic devices and systems such as computers, telecommunications and controls. The Electrical Engineering Program offers courses

in basic analog and digital circuits, microelectronic systems, electromagnetics, embedded systems, and signal processing. An internship, which gives students engineering work experience, is also part of the program. In the senior year, students complete a two-semester capstone project that integrates their course work. The program prepares graduates to enter engineering industry or pursue advanced studies in the discipline.

Biomedical engineers learn to engineer solutions to problems at the intersection of engineering and the life sciences through classes in engineering, chemistry, microbiology, neuroscience and more. The program features a strong core in electrical engineering and a diverse set of elective choices, allowing students to prepare for engineering careers such as biomedical device design, biomedical research, or graduate school.

The Electrical & Computer Engineering Department offers both Bachelor of Science (BS) and Master of Science (MS) degrees in Electrical Engineering and Computer Engineering. The department also offers a Bachelor of Science (BS) degree in Biomedical Engineering.

ECE and BME Courses

Bachelor of Science

Biomedical Engineering (BS)

- **Program Prerequisite:** Not required.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in all BME and support courses is required for this major (a grade of "C-" is not acceptable). Students must have an overall GPA of 2.8 or higher to graduate.
- **Credit Hour Requirements:** A total of 111 credit hours is required for graduation.
- **Program Code:** 8105BS
- **CIPC:**140501

Program Educational Objectives

The Objectives of the ECE undergraduate programs in Biomedical Engineering are to educate graduates to become productive, accountable, and responsible professionals in engineering who will:

1. Apply their engineering skills, through theory and application, in industry, government, society, or in graduate school;
2. Practice high technical and ethical standards and communicate their work to colleagues, industry, and professional organizations;
3. Work effectively and contribute in interdisciplinary fields while encouraging expression and valuing diversity;
4. Understand the importance of lifelong learning and continuous professional growth in a changing world as shown through self-directed learning, specialized trainings, certifications, licensing, and graduate programs.

Accreditation

The Weber State University Biomedical Engineering program is pursuing accreditation by the Engineering Accreditation Commission (EAC) of ABET.

Advisement

All Biomedical Engineering students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6898 to schedule an appointment or schedule and appointment online.

Admission Requirements

See an academic advisor for the College of Engineering, Applied Science and Technology to declare your program of study (major). The program is split into two parts, a pre-professional program and a professional program.

Departmental Honors

For information on Departmental Honors, please see the Department of Electrical & Computer Engineering website or the Honors Program.

General Education

Refer to Degree Requirements for Bachelor of Science degrees. Consult with your advisor and refer to the major requirements below for specific general education courses required.

Major Course Requirements for BME (BS) Degree

The Biomedical Engineering program is comprised of three components: (1) Pre-professional Program, (2) Professional Program, and (3) Required Support Courses.

1. Pre-professional Program

Pre-professional Program Admission Requirements:

Students must have enrolled or have all the necessary prerequisites to enroll in MATH 1210, ENGL 2010, and CHEM 1210.

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**

- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**

- MICR 2054 LS - Principles of Microbiology **Credits: (4)**

- BME 1000 - Introduction to Biomedical Engineering **Credits: (2)** or
- ECE 1000 - Introduction to Electrical Engineering **Credits: (2)** or
- ENGR 1000 - Introduction to Engineering **Credits: (2)**

- ECE 1270 - Introduction to Electrical Circuits **Credits: (4)**

- ECE 1400 - Fundamentals of Engineering Computing **Credits: (4)**
- ECE 2260 - Circuits and Signals **Credits: (4)**
- ECE 2700 - Digital Circuits **Credits: (4)**
- BME 2000 - BME Sophomore Seminar **Credits: (1)**
- ENGR 2240 - Dynamic Systems Engineering **Credits: (4)**

2. Track Options

Biomedical Engineering Majors must satisfy the requirements for one of the following tracks. The Track selection allows students to prepare for electives tailored to their desired learning outcomes. Some electives may not be available without additional pre-requisite courses.

Traditional Track (20 Credits)

- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**

Select 5 courses from the electives list. At least 6 credits must be 4000-level and above. At least two courses must have an ECE or BME prefix, and at least one course must have a non-ECE prefix.

Neural Engineering Track (21 Credits)

- NEUR 2950 - Introduction to Neuroscience **Credits: (3)**
- NEUR 3950 - Cellular and Molecular Neuroscience **Credits: (3)**
- NEUR 3750 - Cognitive and Behavioral Neuroscience **Credits: (3)** or
- PSY 3730 - Perception **Credits: (3)**
- NEUR 3850 - Clinical Neuroscience **Credits: (3)** or
- PSY 3740 - Neuropsychopharmacology **Credits: (3)**

Select 3 courses from the electives list. At least 3 credits must be 4000-level or above. At least one course must have an ECE or BME prefix, and at least one course must have a NEUR or PSY prefix. Courses with an "OR" option may be taken as an elective if not chosen as a required course.

3. Professional Program

Professional Program Admission Requirements:

After completion of the pre-professional program, students are required to apply for admittance to the professional program. A minimum GPA of 2.8 in the Pre-Professional Required Courses listed above is required for application to the Professional Program.

- BME 3000 - Engineering Seminar **Credits: (1)**
- BME 3210 - Signals & Systems **Credits: (4)**
- BME 3600 - Biomedical Design and Standards **Credits: (4)**
- BME 3090 - Project Management **Credits: (3)**
- BME 3130 - Microelectronics and Instrumentation **Credits: (4)**
- ECE 3430 - Engineering Probability and Statistics **Credits: (3)**
- ECE 3610 - Digital Systems **Credits: (4)** or
- ECE 3710 - Embedded Systems **Credits: (4)**

- ECE 3890 INT - Internship **Credits: (1)**
- BME 4010 - Senior Project I **Credits: (2)**
- BME 4020 - Senior Project II **Credits: (2)**

4. Support Courses Required

- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- HTHS 1104 - Introductory Human Anatomy and Physiology **Credits: (3)** or
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** or
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- PUBH 3500 - Biomedical Research Support **Credits: (2)**

Biomedical Engineering Elective Courses

The following courses may be chosen as electives for any track. However, some electives are more suited to a specific track and thus students may not be able to take all listed electives without taking additional prerequisites. Each track has specific elective requirements.

- ECE 3310 - Electromagnetics **Credits: (4)**
- ECE 3610 - Digital Systems **Credits: (4) ***
- ECE 3710 - Embedded Systems **Credits: (4) ***
- ECE 5110 - Digital VLSI Design **Credits: (3)**
- ECE 5130 - Advanced Semiconductor Devices **Credits: (3)**
- ECE 5140 - Sensors and Instrumentation **Credits: (3)**
- ECE 5150 - Thin Film Engineering **Credits: (3)**
- ECE 5210 - Digital Signal Processing **Credits: (4)**
- ECE 5220 - Image Processing **Credits: (3)**
- ECE 5230 - Engineering Applications in Deep Learning **Credits: (3)**
- ECE 5310 - Radar Systems **Credits: (3)**
- ECE 5320 - Antennas and Wave Propagation **Credits: (3)**
- ECE 5410 - Communication Circuits and Systems **Credits: (3)**
- ECE 5420 - Digital Communication **Credits: (3)**
- ECE 5440 - Optical Communication Systems **Credits: (3)**
- ECE 5510 - Advanced Power Systems **Credits: (3)**
- ECE 5620 - Digital System Testing **Credits: (3)**
- ECE 5640 - Model-based Systems Engineering **Credits: (3)**
- ECE 5710 - Real-Time Systems **Credits: (4)**
- ECE 5730 - Robotics **Credits: (4)**
- ECE 5800 - Individual Studies **Credits: (1-4)**
- ECE 5900 - Special Topics **Credits: (1-4)**
- CS 5600 - Machine Learning **Credits: (3)**
- CS 5610 - Computer Architecture **Credits: (3)**
- CHEM 3070 - Biochemistry I **Credits: (3)**

- CHEM 3080 - Biochemistry II **Credits: (3)**
- NEUR 3750 - Cognitive and Behavioral Neuroscience **Credits: (3)**
- NEUR 3850 - Clinical Neuroscience **Credits: (3)**
- NEUR 3950 - Cellular and Molecular Neuroscience **Credits: (3)**
- NEUR 4444 - Human Neuroanatomy **Credits: (3)**
- PSY 3730 - Perception **Credits: (3)**
- PSY 3740 - Neuropsychopharmacology **Credits: (3)**
- MICR 3254 - Immunology **Credits: (4)**
- MICR 3305 - Medical Microbiology **Credits: (5)**
- MICR 4354 - Industrial Microbiology and Biotechnology **Credits: (4)**

**At most one 3000-level course with an ECE prefix may be counted as an elective.*

Computer Engineering (BS)

Program Prerequisite: Not required.

Minor: Not required.

Grade Requirements: A grade of "C" or better in all ECE and support courses is required for this major (a grade of "C-" is not acceptable). Students must have an overall GPA of 2.5 or higher to graduate.

Credit Hour Requirements: A total of 124 credit hours is required for graduation.

Program Code: 8074BS

CIPC: 140901

Program Educational Objectives

The Objectives of the ECE undergraduate programs in Electrical and Computer Engineering are to educate graduates to become productive, accountable, and responsible professionals in engineering who will:

1. Apply their engineering skills, through theory and application, in industry, government, society, or in graduate school;
2. Practice high technical and ethical standards and communicate their work to colleagues, industry, and professional organizations;
3. Work effectively and contribute in interdisciplinary fields while encouraging expression and valuing diversity;
4. Understand the importance of lifelong learning and continuous professional growth in a changing world as shown through self-directed learning, specialized trainings, certifications, licensing, and graduate programs.

Accreditation

The Weber State University Computer Engineering program is accredited by the Engineering Accreditation Commission (EAC) of ABET.

Advisement

All Computer Engineering students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6898 for the name of your advisor and to schedule an appointment. Individual student records are accessible through the WSU Home Page.

Admission Requirements

The Computer Engineering program is split into two parts, a pre-professional program and a professional program. Students who satisfy the pre-professional program admission requirements (below) should meet with an academic advisor to declare their major and be admitted into the pre-professional program.

Retake Policy

Students in the pre-professional and professional programs may be placed on probation if they withdraw (without justification) or earn a grade lower than C twice in any one ECE course. Students on probation require a department override to register for any ECE course. If a student fails to pass a course (with a grade of C or higher) a third time, he or she will be dismissed from the program.

Departmental Honors

For information on Departmental Honors, please see the Electrical & Computer Engineering website at weber.edu/ece or the Honors Program.

General Education

Refer to Degree Requirements for Bachelor of Science degrees. Consult with your advisor and refer to the major requirements below for specific general education courses required.

Program Learning Outcomes

- An ability to apply knowledge of mathematics, science and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.
- A recognition of the need for, and an ability to engage in, life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

Major Course Requirements for Computer Engineering BS Degree

The Computer Engineering program is comprised of three components: (1) Pre-professional Program, (2) Professional Program, and (3) Required Support Courses.

1. Pre-professional Program

Pre-Professional Program Admission Requirements

Students must have enrolled or have all the necessary prerequisites to enroll in MATH 1210 - Calculus I and ENGL 2010 EN2 - Intermediate College Writing.

Pre-Professional Required Courses

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- ENGR 2240 - Dynamic Systems Engineering **Credits: (4)** or both
- MATH 2270 - Elementary Linear Algebra **Credits: (3)** and
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- ECE 1000 - Introduction to Electrical Engineering **Credits: (2)** or
- ENGR 1000 - Introduction to Engineering **Credits: (2)**
- ECE 1270 - Introduction to Electrical Circuits **Credits: (4)**
- ECE 1400 - Fundamentals of Engineering Computing **Credits: (4)**
- ECE 2260 - Circuits and Signals **Credits: (4)**
- ECE 2700 - Digital Circuits **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2130 - Computational Structures **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**

2. Professional Program

Professional Program Admission Requirements

After completion of the pre-professional program, students are required to apply for admittance to the professional program. A minimum GPA of 2.8 in the Pre-Professional Required Courses listed above is required for application to the Professional Program.

- CS 3100 - Operating Systems **Credits: (4)**
- ECE 3000 - Engineering Seminar **Credits: (1)**
- ECE 3090 - Project Management **Credits: (3)**
- ECE 3110 - Microelectronics I **Credits: (4)** Or
- ECE 3130 - Microelectronics and Instrumentation **Credits: (4)**
- ECE 3210 - Signals and Systems **Credits: (4)**
- ECE 3430 - Engineering Probability and Statistics **Credits: (3)**
- ECE 3610 - Digital Systems **Credits: (4)**
- ECE 3620 - Microprocessor Architecture **Credits: (3)**
- ECE 3710 - Embedded Systems **Credits: (4)**
- ECE 3890 INT - Internship **Credits: (1)**
- ECE 4010 CEL - Senior Project I **Credits: (2)**
- ECE 4020 CEL - Senior Project II **Credits: (2)**

ECE and CS Elective Courses (Select Four Courses)

Select four courses totalling 12 or more credit hours from the following list.

- ECE 3120 - Microelectronics II **Credits: (4) ****
- ECE 3310 - Electromagnetics **Credits: (4) ****
- ECE 3510 - Power Systems **Credits: (4) ****
- ECE 3730 - Fundamentals of Robotics **Credits: (4) ****
- ECE 4100 - Control Systems **Credits: (4)**
- ECE 5110 - Digital VLSI Design **Credits: (3)**
- ECE 5130 - Advanced Semiconductor Devices **Credits: (3)**
- ECE 5140 - Sensors and Instrumentation **Credits: (3)**
- ECE 5160 - Power Electronics **Credits: (4)**
- ECE 5210 - Digital Signal Processing **Credits: (4)**
- ECE 5220 - Image Processing **Credits: (3)**
- ECE 5230 - Engineering Applications in Deep Learning **Credits: (3)**
- ECE 5410 - Communication Circuits and Systems **Credits: (3)**
- ECE 5420 - Digital Communication **Credits: (3)**
- ECE 5440 - Optical Communication Systems **Credits: (3) ***
- ECE 5620 - Digital System Testing **Credits: (3)**
- ECE 5640 - Model-based Systems Engineering **Credits: (3)**
- ECE 5710 - Real-Time Systems **Credits: (4)**
- ECE 5730 - Robotics **Credits: (4) ***
- ECE 5750 - Quantum Computer Engineering **Credits: (3)**
- ECE 5800 - Individual Studies **Credits: (1-4)**
- ECE 5900 - Special Topics **Credits: (1-4)**
- CS 4110 - Concepts of Formal Languages and Algorithms for Computing **Credits: (4)**
- CS 4280 - Computer Graphics **Credits: (4) ***
- CS 5100 - Distributed Operating Systems **Credits: (3)**
- CS 5200 - The Internet of Things **Credits: (3)**
- CS 5420 - Advanced Algorithms **Credits: (3)**
- CS 5500 - Introduction to Artificial Intelligence **Credits: (3)**
- CS 5600 - Machine Learning **Credits: (3)**
- CS 5610 - Computer Architecture **Credits: (3)**
- CS 5740 - Computer Systems Security **Credits: (3)**
- CS 5820 - Compiler Design **Credits: (3)**
- CS 5840 - Formal System Design **Credits: (3)**
- CS 5850 - Parallel Programming and Architecture **Credits: (3)**
- MATH 4160 - Introduction to Mathematical Cryptography **Credits: (3)**

** Course has prerequisites external to the Computer Engineering program.*

*** At most one 3000-level course may be counted as an Elective.*

3. Support Courses Required

- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**

Electrical Engineering (BS)

Program Prerequisite: Not required.

Minor: Not required.

Grade Requirements: A grade of "C" or better in all ECE and support courses is required for this major (a grade of "C-" is not acceptable). Students must have an overall GPA of 2.5 or higher to graduate.

Credit Hour Requirements: A total of 125 credit hours is required for graduation.

Program Code: 8071BS

CIPC: 141001

Program Educational Objectives

The Objectives of the ECE undergraduate programs in Electrical and Computer Engineering are to educate graduates to become productive, accountable, and responsible professionals in engineering who will:

1. Apply their engineering skills, through theory and application, in industry, government, society, or in graduate school;
2. Practice high technical and ethical standards and communicate their work to colleagues, industry, and professional organizations;
3. Work effectively and contribute in interdisciplinary fields while encouraging expression and valuing diversity;
4. Understand the importance of lifelong learning and continuous professional growth in a changing world as shown through self-directed learning, specialized trainings, certifications, licensing, and graduate programs.

Accreditation

The Weber State University Electrical Engineering program is accredited by the Engineering Accreditation Commission (EAC) of ABET.

Advisement

All Electrical Engineering students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6898 for the name of your advisor and to schedule an appointment. Individual student records are accessible through the WSU Home Page.

Admission Requirements

The Electrical Engineering program is split into two parts, a pre-professional program and a professional program. Students who satisfy the pre-professional program admission requirements (below) should meet with an academic advisor to declare their major and be admitted into the pre-professional program.

Retake Policy

Students in the pre-professional and professional programs may be placed on probation if they withdraw (without justification) or earn a grade lower than C twice in any one ECE course. Students on probation require a department override to register for any ECE course. If a student fails to pass a course (with a grade of C or higher) a third time, he or she will be dismissed from the program.

Departmental Honors

For information on Departmental Honors, please see the Department of Electrical & Computer Engineering website at weber.edu/ece or the Departmental Honors.

General Education

Refer to Degree Requirements for Bachelor of Science degrees. Consult with your advisor and refer to the major requirements below for specific general education courses required.

Program Learning Outcomes

- An ability to apply knowledge of mathematics, science and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.
- A recognition of the need for, and an ability to engage in, life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

Major Course Requirements for EE BS Degree

The Electrical Engineering program is comprised of three components: (1) Pre-professional Program, (2) Professional Program, and (3) Required Support Courses.

1. Pre-professional Program

Pre-professional Program Admission Requirements

Students must have enrolled or have all the necessary prerequisites to enroll in MATH 1210 - Calculus I and ENGL 2010 EN2 - Intermediate College Writing.

Pre-Professional Required Courses

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**

- ENGR 2240 - Dynamic Systems Engineering **Credits: (4)** or both
- MATH 2270 - Elementary Linear Algebra **Credits: (3)** and
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**

- CHEM 1230 PS - Engineering Chemistry **Credits: (4)** or both
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**

- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**

- ECE 1000 - Introduction to Electrical Engineering **Credits: (2)** or
- ENGR 1000 - Introduction to Engineering **Credits: (2)**
- ECE 1270 - Introduction to Electrical Circuits **Credits: (4)**
- ECE 1400 - Fundamentals of Engineering Computing **Credits: (4)**
- ECE 2260 - Circuits and Signals **Credits: (4)**
- ECE 2700 - Digital Circuits **Credits: (4)**

2. Professional Program

Professional Program Admission Requirements

After completion of the pre-professional program, students are required to apply for admittance to the professional program. A minimum GPA of 2.8 in the Pre-Professional Required Courses listed above is required for application to the Professional Program.

Professional Program Required Courses

- ECE 3000 - Engineering Seminar **Credits: (1)**
- ECE 3110 - Microelectronics I **Credits: (4)**
- ECE 3120 - Microelectronics II **Credits: (4)**
- ECE 3210 - Signals and Systems **Credits: (4)**
- ECE 3310 - Electromagnetics **Credits: (4)**
- ECE 3430 - Engineering Probability and Statistics **Credits: (3)**
- ECE 3510 - Power Systems **Credits: (4)** or
- ECE 3610 - Digital Systems **Credits: (4)**
- ECE 3710 - Embedded Systems **Credits: (4)**
- ECE 3890 INT - Internship **Credits: (1)**
- ECE 3090 - Project Management **Credits: (3)**
- ECE 4010 CEL - Senior Project I **Credits: (2)**
- ECE 4020 CEL - Senior Project II **Credits: (2)**
- ECE 4100 - Control Systems **Credits: (4)** or
- ECE 5210 - Digital Signal Processing **Credits: (4)**

Electrical Engineering Elective Courses (minimum of 12 credit hours)

Select four courses totalling at least 12 credit hours from the following options:

- ECE 3510 - Power Systems **Credits: (4)** *
- ECE 3610 - Digital Systems **Credits: (4)** *
- ECE 3620 - Microprocessor Architecture **Credits: (3)** *
- ECE 3730 - Fundamentals of Robotics **Credits: (4)** *
- ECE 4100 - Control Systems **Credits: (4)**
- ECE 5110 - Digital VLSI Design **Credits: (3)**
- ECE 5120 - Analog VLSI Design **Credits: (3)**
- ECE 5130 - Advanced Semiconductor Devices **Credits: (3)**

- ECE 5140 - Sensors and Instrumentation **Credits: (3)**
- ECE 5150 - Thin Film Engineering **Credits: (3)**
- ECE 5160 - Power Electronics **Credits: (4)**
- ECE 5210 - Digital Signal Processing **Credits: (4)**
- ECE 5220 - Image Processing **Credits: (3)**
- ECE 5230 - Engineering Applications in Deep Learning **Credits: (3)**
- ECE 5310 - Radar Systems **Credits: (3)**
- ECE 5320 - Antennas and Wave Propagation **Credits: (3)**
- ECE 5410 - Communication Circuits and Systems **Credits: (3)**
- ECE 5420 - Digital Communication **Credits: (3)**
- ECE 5440 - Optical Communication Systems **Credits: (3)**
- ECE 5510 - Advanced Power Systems **Credits: (3)**
- ECE 5620 - Digital System Testing **Credits: (3)**
- ECE 5640 - Model-based Systems Engineering **Credits: (3)**
- ECE 5710 - Real-Time Systems **Credits: (4)**
- ECE 5730 - Robotics **Credits: (4)**
- ECE 5750 - Quantum Computer Engineering **Credits: (3)**
- ECE 5800 - Individual Studies **Credits: (1-4)**
- ECE 5900 - Special Topics **Credits: (1-4)**
- CS 5610 - Computer Architecture **Credits: (3)**
- MATH 4160 - Introduction to Mathematical Cryptography **Credits: (3)**

**At most one 3000-level course may be counted as an elective.*

3. Support Courses Required

- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**

Post Baccalaureate Certificate

Materials Science and Engineering Post Baccalaureate Certificate

The Materials Science and Engineering Post-graduate Certificate at Weber State University is designed to meet the growing demands of Utah's industries. With a focus on advanced materials and material properties, this program equips students with the specialized skills ensuring that the curriculum directly reflects industry needs. The certificate offers a stackable structure, allowing students to gain immediate employability while providing a clear pathway for further graduate studies. Through this program, students will develop expertise in materials science, preparing them for impactful careers in Utah's rapidly evolving technology sectors.

Grade Requirements: A Post-Baccalaureate Certificate in Materials Science and Engineering student must complete all program courses, including electives, with a grade of "B-" or higher. In addition, the overall program GPA must be 3.0 or higher.

Credit Hour Requirements: The program requires a minimum of 12 semester hours beyond a bachelor's degree in engineering or related field. Credits applied to graduation from another program are not accepted.

Program Code: 8120PBC

CIPC: 141801

Program Learning Outcomes

- Demonstrate an understanding of core graduate-level theoretical knowledge in materials science.
- Demonstrate the ability to design a system, component or process.
- Demonstrate the ability to identify, formulate and solve engineering problems in materials science applications.
- Demonstrate the ability to apply master's level knowledge to the specialized area of materials science and engineering.

Advisement

For questions concerning academic advisement, the primary source of contact is the program director. Students should meet with the director at least once a year while enrolled. For issues regarding registration and scheduling, students should contact the Administrative Specialist for the Department of Electrical & Computer Engineering

Admission Requirements

Applicants for admission into the Master of Science in Electrical Engineering program must possess a bachelor's degree or be in the final stage of completing the degree. An overall GPA of 3.0 is required from the undergraduate program in which the bachelor's degree is earned.

Applicants will submit:

- Completed application
- Current resume
- Official transcripts from every institution of higher education attended
- GRE scores are required for all applicants except those with an ABET-accredited engineering bachelor's degree or a 3.2 GPA or higher in a prior STEM degree. Scores will be used to make admission decisions but no specific minimum score is required.

Additional Admission Requirements for International Students

All international students and any applicant educated outside the U.S. must demonstrate proficiency in English. Those whose native language is not English, or whose language of instruction for their undergraduate degree was not English, will be required to submit a score from the Test of English as a Foreign Language (TOEFL) or International Language Testing System (IELTS) which is not more than two years old. Applicants are required to have an internet-based TOEFL score of 79 (with a minimum of 17 in each category) or a minimum IELTS score of 6.5.

Application

The application for admission to the Master of Science in Electrical Engineering program must be submitted online. Official transcripts from each institution of higher education attended and all test scores must be sent directly to the WSU Department of Engineering.

Application deadlines are posted at <https://www.weber.edu/east/ms-programs/>.

Major Course Requirements for Post-Baccalaureate Certificate in Materials Science and Engineering

Leveling Courses

After being accepted, students who have not graduated from an ABET accredited Electrical Engineering program must demonstrate the ability to pass the following Math courses and 3 of the 4 ECE courses:

- ECE 3110 - Microelectronics I **Credits: (4)**
- ECE 3210 - Signals and Systems **Credits: (4)**
- ECE 3310 - Electromagnetics **Credits: (4)**
- ECE 3610 - Digital Systems **Credits: (4)**

- MATH 3410 - Probability and Statistics I **Credits: (3)**

- MATH 2250 - Linear Algebra and Differential Equations **Credits: (4)** OR BOTH
- MATH 2270 - Elementary Linear Algebra **Credits: (3)** AND
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**

Core Coursework

Required Courses

- ECE 6170 - Advanced Materials Science and Engineering **Credits: (3)**

Electives

Choose 3 of the following courses:

Professional Program Admission Requirements

- ECE 6110 - Digital VLSI Design **Credits: (3)**
- ECE 6130 - Advanced Semiconductor Devices **Credits: (3)**
- ECE 6140 - Sensors and Instrumentation **Credits: (3)**
- ECE 6150 - Thin Film Engineering **Credits: (3)**
- ECE 6170 - Advanced Materials Science and Engineering **Credits: (3)**
- ECE 6440 - Optical Communication Systems **Credits: (3)**
- ECE 6640 - Model-Based Systems Engineering **Credits: (3)**
- ECE 6750 - Quantum Computer Engineering **Credits: (3)**
- *Additional Electives and Special Topics Courses to be offered in collaboration with interdisciplinary departments and industrial partners (All will be 3 credits)*
- ECE 6900 - Special Topics **Credits: (1-4)**

Master of Science

Master of Science in Computer Engineering (MSCE)

- **Grade Requirements:** An MSCE student must complete all program courses, including electives, with a grade of "B-" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hour Requirements:** The program requires a minimum of 30 semester hours beyond a bachelor's degree in computer engineering.
- **Program Code:** 8073MSCE
- **CIPC:** 140901

Once enrolled, a student must register for at least one MSCE course each semester, except summers, until graduation. Students who fail to do so must petition for readmission into the program.

Admissions Requirements

Applicants for admission into the Master of Science in Computer Engineering program must possess a bachelor's degree or be in the final stage of completing the degree. An overall GPA of 3.0 is required from the undergraduate program in which the bachelor's degree is earned.

Applicants will submit:

- Completed application
- Current resume
- Official transcripts (domestic applicants) or credential evaluation reports (international applicants) for all institutions of higher education (except Weber) that pertain to the bachelor's degree
- GRE scores are required for all applicants except those with an ABET-accredited engineering bachelor's degree or a 3.2 GPA or higher in a prior STEM degree. Scores will be used to make admission decisions but no specific minimum score is required.

Additional Admission Requirements for International Students

All international students and any applicant educated outside the U.S. must demonstrate proficiency in English. Those whose native language is not English, or whose language of instruction for their undergraduate degree was not English, will be required to submit an official score from the Test of English as a Foreign Language (TOEFL) or International Language Testing System (IELTS) which is not more than two years old. Applicants are required to have an internet-based TOEFL score of 79 (with a minimum of 17 in each category) or a minimum IELTS score of 6.5.

Application

The application for admission to the Master of Science in Computer Engineering program must be submitted online. Official transcripts from each institution of higher education attended and all test scores must be sent directly to the WSU Department of Engineering.

Application deadlines are posted at <https://weber.edu/msce>.

Advisement

For questions concerning academic advisement, the primary source of contact is the program director. Students should meet with the director at least once a year while enrolled. For issues regarding registration and scheduling, students should contact either the Administrative Specialist for the Department of Electrical & Computer Engineering.

Program Learning Outcomes

- Demonstrate the ability to apply knowledge of math, science and engineering.
- Demonstrate the ability to design a system, component or process.

- Demonstrate the ability to identify, formulate and solve engineering problems.
- Demonstrate the ability to apply master's level knowledge to the specialized area of computer engineering.

Leveling Courses

After being accepted, students who have not graduated from an ABET accredited Computer Engineering program must demonstrate the ability to pass the following Math courses and 5 of the 6 ECE or CS courses:

- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**
- CS 2810 - Computer Architecture/Organization **Credits: (4)**
- CS 3100 - Operating Systems **Credits: (4)**
- ECE 3110 - Microelectronics I **Credits: (4)**
- ECE 3210 - Signals and Systems **Credits: (4)**
- ECE 3610 - Digital Systems **Credits: (4)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 2250 - Linear Algebra and Differential Equations **Credits: (4)** or both
- MATH 2270 - Elementary Linear Algebra **Credits: (3)** and
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**

Course Requirements for MSCE

Seven of the following courses (minimum 21 credit hours) are required. At least two courses must have a CS prefix and at least two courses must have an ECE prefix.

- ECE 6110 - Digital VLSI Design **Credits: (3)**
- ECE 6130 - Advanced Semiconductor Devices **Credits: (3)**
- ECE 6140 - Sensors and Instrumentation **Credits: (3)**
- ECE 6160 - Power Electronics **Credits: (4)**
- ECE 6170 - Advanced Materials Science and Engineering **Credits: (3)**
- ECE 6210 - Digital Signal Processing **Credits: (4)**
- ECE 6220 - Image Processing **Credits: (3)**
- ECE 6230 - Engineering Applications in Deep Learning **Credits: (3)**
- ECE 6410 - Communication Circuits and Systems **Credits: (3)**
- ECE 6420 - Digital Communication **Credits: (3)**
- ECE 6440 - Optical Communication Systems **Credits: (3)**
- ECE 6620 - Digital System Testing **Credits: (3)**
- ECE 6640 - Model-Based Systems Engineering **Credits: (3)**
- ECE 6710 - Real-Time Systems **Credits: (4)**
- ECE 6730 - Robotics **Credits: (4)**
- ECE 6750 - Quantum Computer Engineering **Credits: (3)**
- ECE 6800 - Individual Studies **Credits: (1-3)**
- ECE 6900 - Special Topics **Credits: (1-4)**
- CS 6100 - Distributed Operating Systems **Credits: (3)**
- CS 6200 - The Internet of Things **Credits: (3)**
- CS 6420 - Advanced Algorithms **Credits: (3)**
- CS 6500 - Advanced Artificial Intelligence **Credits: (3)**

- CS 6600 - Machine Learning **Credits: (3)**
- CS 6610 - Computer Architecture **Credits: (3)**
- CS 6740 - Computer Systems Security **Credits: (3)**
- CS 6820 - Compiler Design **Credits: (3)**
- CS 6840 - Formal System Design **Credits: (3)**
- CS 6850 - Parallel Programming and Architecture **Credits: (3)**

Thesis or Design Project, or Additional Coursework (9 credit hours)

MSCE students are required to either (a) perform original research that results in a thesis, (b) complete a substantial engineering design project and complete 3 additional credits of approved coursework, or (c) take an additional 9 credits of approved coursework.

For students taking the thesis option, a total of 6 to 9 credits of ECE 6020 is required for a thesis. If a student enrolls in fewer than 9 credits of ECE 6020, then an additional 3 credits of coursework (see above) is required. Students must be enrolled in ECE 6020 at the time of their defense.

For students taking the project option, one additional course (see above) is required and a total of 6 or more credits of ECE 6010 is required for a project. Students must be enrolled ECE 6010 at the time of their final design review.

The thesis or project report must meet formatting requirements and be submitted to the Department of Electrical and Computer Engineering for approval prior to graduation.

For students taking the coursework option, a total of 9 or more credits of 6000-level coursework with an ECE prefix are required.

- ECE 6010 - Design Project **Credits: (2-6)**
- ECE 6020 - Thesis **Credits: (2-6)**

Master of Science in Electrical Engineering (MSEE)

- **Grade Requirements:** An MSEE student must complete all program courses, including electives, with a grade of "B-" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hour Requirements:** The program requires a minimum of 30 semester hours beyond a bachelor's degree in electrical engineering. Credits applied to graduation from another program are not accepted.
- **Program Code:** 8084MS
- **CIPC:** 141001

Once enrolled, a student must register for at least one MSEE course each semester, excepting summers, until graduation. Students who fail to do so must petition for readmission into the program.

Admissions Requirements

Applicants for admission into the Master of Science in Electrical Engineering program must possess a bachelor's degree or be in the final stage of completing the degree. An overall GPA of 3.0 is required from the undergraduate program in which the bachelor's degree is earned.

Applicants will submit:

- Completed application

- Current resume
- Official transcripts from every institution of higher education attended
- GRE scores are required for all applicants except those with an ABET-accredited engineering bachelor's degree or a 3.2 GPA or higher in a prior STEM degree. Scores will be used to make admission decisions but no specific minimum score is required.

Additional Admission Requirements for International Students

All international students and any applicant educated outside the U.S. must demonstrate proficiency in English. Those whose native language is not English, or whose language of instruction for their undergraduate degree was not English, will be required to submit a score from the Test of English as a Foreign Language (TOEFL) or International Language Testing System (IELTS) which is not more than two years old. Applicants are required to have an internet-based TOEFL score of 79 (with a minimum of 17 in each category) or a minimum IELTS score of 6.5.

Application

The application for admission to the Master of Science in Electrical Engineering program must be submitted online. Official transcripts from each institution of higher education attended and all test scores must be sent directly to the WSU Department of Engineering.

Application deadlines are posted at <https://weber.edu/msee>.

Advisement

For questions concerning academic advisement, the primary source of contact is the program director. Students should meet with the director at least once a year while enrolled. For issues regarding registration and scheduling, students should contact the Administrative Specialist for the Department of Electrical & Computer Engineering

Program Learning Outcomes

- Demonstrate the ability to apply knowledge of math, science and engineering.
- Demonstrate the ability to design a system, component or process.
- Demonstrate the ability to identify, formulate and solve engineering problems.
- Demonstrate the ability to apply master's level knowledge to the specialized area of electrical engineering.

Leveling Courses

After being accepted, students who have not graduated from an ABET accredited Electrical Engineering program must demonstrate the ability to pass the following Math courses and 3 of the 4 ECE courses:

- ECE 3110 - Microelectronics I **Credits: (4)**
- ECE 3210 - Signals and Systems **Credits: (4)**
- ECE 3310 - Electromagnetics **Credits: (4)**
- ECE 3610 - Digital Systems **Credits: (4)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 2250 - Linear Algebra and Differential Equations **Credits: (4)** or both
- MATH 2270 - Elementary Linear Algebra **Credits: (3)** and
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**

Course Requirements for MSEE

Seven of the following courses (minimum 21 credit hours) are required.

- ECE 6110 - Digital VLSI Design **Credits: (3)**
- ECE 6120 - Analog VLSI Design **Credits: (3)**
- ECE 6130 - Advanced Semiconductor Devices **Credits: (3)**
- ECE 6140 - Sensors and Instrumentation **Credits: (3)**
- ECE 6150 - Thin Film Engineering **Credits: (3)**
- ECE 6170 - Advanced Materials Science and Engineering **Credits: (3)**
- ECE 6210 - Digital Signal Processing **Credits: (4)**
- ECE 6220 - Image Processing **Credits: (3)**
- ECE 6230 - Engineering Applications in Deep Learning **Credits: (3)**
- ECE 6310 - Electromagnetics II **Credits: (3)**
- ECE 6320 - Antennas and Wave Propagation **Credits: (3)**
- ECE 6410 - Communication Circuits and Systems **Credits: (3)**
- ECE 6420 - Digital Communication **Credits: (3)**
- ECE 6440 - Optical Communication Systems **Credits: (3)**
- ECE 6510 - Advanced Power Systems **Credits: (3)**
- ECE 6620 - Digital System Testing **Credits: (3)**
- ECE 6640 - Model-Based Systems Engineering **Credits: (3)**
- ECE 6710 - Real-Time Systems **Credits: (4)**
- ECE 6730 - Robotics **Credits: (4)**
- ECE 6750 - Quantum Computer Engineering **Credits: (3)**
- ECE 6800 - Individual Studies **Credits: (1-3)**
- ECE 6900 - Special Topics **Credits: (1-4)**
- CS 6610 - Computer Architecture **Credits: (3)**

Thesis, Design Project, or Additional Coursework (9 credit hours)

MSEE students are required to either (a) perform original research that results in a thesis, (b) complete a substantial engineering design project and complete 3 additional credits of approved coursework, or (c) take an additional 9 credits of approved coursework.

For students taking the thesis option, a total of 6 to 9 or more credits of ECE 6020 is required for a thesis. If a student enrolls in less than 9 credits of ECE 6020, three additional credits of coursework (see above) is required. Students must be enrolled in ECE 6020 at the time of their defense.

For students taking the project option, one additional course (see above) is required and a total of 6 or more credits of ECE 6010 is required for a project. Students must be enrolled ECE 6010 at the time of their final design review.

The thesis or project report must meet formatting requirements and be submitted to the Department of Electrical and Computer Engineering for approval prior to graduation.

For students taking the coursework option, a total of 9 or more credits of 6000-level coursework with an ECE prefix are required.

- ECE 6010 - Design Project **Credits: (2-6)**
- ECE 6020 - Thesis **Credits: (2-6)**

Department of Manufacturing and Systems Engineering

- Manufacturing Systems Engineering
- Manufacturing Engineering Technology
- Product Design and Development: An Engineering Technology
- Programs
- Courses

Department Chair: Mark Baugh

Location: Engineering Technology Building, Room 214

Telephone Contact: Sheri Eddington, 801-626-6305

Professors: Mark Baugh, George Comber, Kelly Harward, Kerry Tobin, Glen West; **Associate Professors:** Megumi Usui; **Assistant Professor:** David Wetzel; **Instructors:** Nicole Falkenberg, Taylor Foss, Samuel Hunter, Justin Knighton

Department of Manufacturing and System Engineering (M&SE) education focuses primarily on the aspects of science and engineering aimed at preparing graduates for practice in that portion of the technological spectrum closest to product improvement, industrial processes, and operational functions. The M&SE programs at Weber State prepare individuals for a wide variety of positions in industrial, manufacturing, production, product design and development businesses and industries. The study of engineering and engineering technology requires a knowledge of mathematical, scientific, and engineering principles in combination with a strong applications-orientation in support of engineering activities. The M&SE department offers a variety of AAS and BS degrees in the following engineering and engineering technology programs:

- Manufacturing Systems Engineering (BS) Manufacturing Engineering Technology (AAS, BS)
 - Concentration:
 - Production Operations and Control
 - Welding
 - Plastics and Composites
- Product Design and Development: An Engineering Technology (AAS, BS)
- Controls Technology (AAS)

The BS degrees in these programs are accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

Manufacturing Systems Engineering

Program Coordinator: Mary Foss

Location: Engineering Technology Building, Room 214

Telephone Contact: Sheri Eddington, 801-626-6305

Manufacturing Systems (process) Engineering is the branch of Industrial and Systems engineering that addresses the analysis and design of systems involving the human interaction with machines or nature. Such systems are highly complex and require modeling of the variability introduced by the human element. Operations are optimized and made more robust by incorporating these models into the overall system design. The focus of the Bachelor of Science in Manufacturing Systems Engineering (MSE) is on the training of students in facility design and modeling / simulations, including material handling.

The Manufacturing Systems (process) Engineers is an eclectic professional that turn ideas into reality. They play key roles in the creation of almost every single product that you see or use, from biomedical to computers, from sport equipment to aerospace. The challenges of creating new processes and using new materials to meet future needs, relieving human drudgery by automating dangerous and onerous production processes, and forming and leading teams of engineering experts are all examples of a few of the numerous opportunities for which the Manufacturing Systems Engineering Program prepares its students.

Manufacturing Engineering Technology

Program Coordinator: Mark Baugh

Location: Engineering Technology Building, Room 214

Telephone Contact: Sheri Eddington, 801-626-6305

The Weber State Manufacturing Engineering Technology (MFET) program has long been recognized as one of the outstanding manufacturing technology programs in the country. Students may choose among three concentration areas; Production Operations and Controls, Welding, or Plastics and Composites. The Production Operations and Controls Concentration is designed to prepare the student for professional employment in industry by giving them fundamental knowledge and skills in a broad range of manufacturing disciplines, manufacturing processes and automation. These include process selection and planning, tool and machine design, material selection and treatment, programmable logic controllers, mechatronics, robotics, Six Sigma, and lean manufacturing. State-of-the-art laboratories give students hands-on experiences with CNC machine tools, robotics, programmable logic controllers, systems integration and the latest in a variety of CAD/ CAM systems. Yearlong required senior projects have included industrial equipment, drones, crash simulators for the Utah Highway Patrol, electric vehicles, innovative products, computer integrated manufacturing cells and many fun projects that help students gain confidence in their abilities while gaining additional insight and skills in both teamwork and human relations.

The Manufacturing Engineering Technology Welding Concentration is designed to produce welding engineering technology graduates that are involved in the concept, design, engineering, and metallurgy of weldments and implementation of welding processes in any manufacturing or technical industry. The MFET Welding Concentration has six main areas of study: welding and manufacturing, design and structural, metallurgical, quality assurance, electrical, and management. Courses are designed to give students the background to solve welding related issues in a variety of industry settings. Students will learn how to set up welding quality systems with procedures and qualifications. Most classes have labs where students receive hands on training to complement the classroom instruction. Students complete a senior project with a team that brings together their experience and education.

The Manufacturing Engineering Technology Plastics and Composite Concentration prepares students for professional employment in the plastic/composite industry. Students will learn firsthand about the complex interdependence between plastic/composite process, materials, tooling, and part design. The design portion of the concentration will provide the knowledge and skills required to fulfill a number of career roles that focus on the product development process, which includes plastic part design. Another phase of this education delves into the differences between the many types of plastics as well as the properties which differentiate plastics from other materials. This emphasis will also expose the students to a wide variety of tooling from the many plastic disciplines. This includes injection, thermoforming, blow molding, extrusion dies and high/low tech composite molds. This exposure provides the students with a keen understanding of the function, construction, and multi-component interactions involved in well-constructed plastics tooling.

Product Design and Development: An Engineering Technology

Program Coordinator: Megumi Usui

Location: Engineering Technology Building, Room 214

Telephone Contact: Sheri Eddington, 801-626-6305

The Product Design and Development program prepares students to develop product design and development drawings. 3D models, reports, presentations, technical illustrations, interactive multimedia, and animations for industry. Students will develop their graphical skills, techniques, concepts, and management skills through exercises and projects. They will work in mechanical, electrical, and structural disciplines. Students will use calculators, computers, handbooks, and engineering reference materials while applying various mathematical concepts from geometry, algebra, and trigonometry.

Courses

Associate of Applied Science

Controls Technology (AAS)

Grade Requirements: A grade of "C" or better in all required and support courses (a grade of "C-" is acceptable). Students must have an overall GPA of 2.5 or higher to graduate.

Credit Hour Requirements: A minimum of 69 credit hours is required with a minimum of 23 credit hours in the major with a block of 25 credit hours for the Applied Technology College (ATC) Industrial Automation Maintenance Technician (IAMT) certification. Transfer students are required to take a minimum of 20 credit hours at Weber State University.

- **Program Code:** 8079AAS
- **CIPC:** 150406

Advisement

All Engineering Technology students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6305 to schedule an appointment.

Admission Requirements

See the department secretary to declare your program of study (major - see Enrollment Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. Consult with your advisor for specific general education guidelines.

Course Requirements for Controls Technology AAS Degree

Required Engineering Technology Courses (23 credit hours)

- EET 1130 - Digital Systems **Credits: (4)**
- EET 1140 - DC Circuits **Credits: (3)**
- EET 2010 - AC Circuits **Credits: (3)**
- AVET 2120 - Power and Motors **Credits: (4)**
- AVET 2170 - Industrial Controls **Credits: (3)**
- MFET 2410 - Quality Concepts and Statistical Applications **Credits: (3)**
- MFET 4580 - Process Automation II & Robotics **Credits: (1)**
- MFET 4585 - Process Automation II Lab **Credits: (2)**

Required Support Course (25 credit hours)

Students must complete the Industrial Automation Maintenance certification consisting of at least 900 hours at the collaborating ATCs: DATC, OWATC, BATC. The certificate will transfer as a block of 25 credit hours toward the Controls Technology degree.

Required General Education Courses (21 credit hours)

- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- ECON 1010 SS - Economics as a Social Science **Credits: (3)**
- ENGL 1010 EN1 - Introductory College Writing **Credits: (3)**
- MATH 1010 - Intermediate Algebra **Credits: (4-5)**
- MATH 1060 QL - Trigonometry **Credits: (3)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- WEB 1701 - Document Creation **Credits: (1)**
- WEB 1703 - Data Manipulation, Visualization, and Presentation **Credits: (1)**

Manufacturing Engineering Technology (AAS)

Areas of Concentration

Select one of the following areas of concentration

- Manufacturing Engineering Technology (AAS), Plastics and Composites Concentration
- Manufacturing Engineering Technology (AAS), Production Operations and Control Concentration
- Manufacturing Engineering Technology (AAS), Welding Engineering Technology Emphasis

Manufacturing Engineering Technology (AAS), Plastics and Composites Concentration

Manufacturing Engineering Technology

- **Grade Requirements:** A grade of "C" or better in all major courses, support courses, and technical electives is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher. Also refer to the general grade requirements for graduation in the Degree Requirements.
- **Credit Hour Requirements:** Credit hours vary as shown for different concentration areas: the AAS in Manufacturing Engineering Technology with a Production Operations and Control Concentration requires 66-68 credit hours, the AAS in Manufacturing Engineering Technology with a Welding Concentration requires 63-65 credit hours, and the AAS in Manufacturing Engineering Technology with a Plastics and Composites Concentration requires 63-65 credit hours. Transfer students are required to take a minimum of 20 credit hours at Weber State University.
- **Assessment Requirements:** Students will be required to complete certain assessment instruments as part of the overall requirements for receiving their associate's degree. Please see your advisor or your department for specific information regarding assessment.
- **Program Code:** Manufacturing (8037AAS), with Concentration in Plastics & Composites (8058), Production Ops & Control (8059), or Welding Engineering Technology (8118).
- **CIPC:** Manufacturing (150613), with Concentration in Plastics & Composites (150607), Production Ops & Controls (150613), or Welding (150614).

Advisement

All Manufacturing Engineering Technology students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6305 for the name of your advisor and to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. Information Literacy as defined in this catalog is also required for the AAS degree. Consult with your advisor for specific general education guidelines.

Course Requirements for the AAS Degree

Core Courses (44-48 credit hours)

AAS Degree requirements for an AAS Degree in Manufacturing Engineering Technology, Production Operations and Controls Concentration, an AAS Degree in Manufacturing Engineering Technology with a Welding Concentration, or an AAS Degree in Manufacturing Engineering Technology with a Plastics and Composites Concentration will be met by completing the first two years of the respective BS Degree. All AAS Degrees will have the following core courses in common.

Please see your academic advisor for additional general education requirements.

Manufacturing Engineering Technology Courses Required (15 credit hours)

- MFET 1000 - Manufacturing Engineering Technology Fundamentals **Credits: (3)**
- MFET 1210 - Machining Principles Lecture/Lab I **Credits: (3)**
- MFET 2310 - Statics for Engineering Technology **Credits: (3)**
- MFET 2410 - Quality Concepts and Statistical Applications **Credits: (3)**
- MFET 2500 - Process Automation I **Credits: (1)**
- MFET 2510 - Process Automation I Lab **Credits: (2)**

Technical Courses Required (10 credit hours)

- PDD 1010 - Introduction to Engineering & Technical Design (Solidworks) **Credits: (3)**
- PDD 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD **Credits: (3)**
- EET 1850 - Industrial Electronics **Credits: (4)** or
- MFET 1820 - Manufacturing Electricity and Electronics **Credits: (4)** (recommended for Welding Concentration)

Support Courses Required (19-22 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or

- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
* **Note: COMM 1020 or 2110 count towards Gen Ed as Humanities (HU) credits.**
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- PHYS 2010 PS - College Physics I **Credits: (5)** or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- MATH 1060 QL - Trigonometry **Credits: (3)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)**
- MATH 1110 QL - Calculus Concepts and Applications **Credits: (3)** or
- MATH 1210 - Calculus I **Credits: (4)**

Other Courses Required (4 credit hours)

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
(prerequisite is ENGL 1010 EN1 - Introductory College Writing **(3)** or equivalent)
- **Computer Information Literacy Credits: (1)**
- LIBS 1704 - Information Navigator **Credits: (1)**

Additional Courses Required by Concentration Area

Plastics and Composites Concentration (9 credit hours)

- MFET 2320 - Mechanics of Materials **Credits: (3)**
- MFET 2850 - CNC/CAM for Plastics and Composites Lecture/Lab **Credits: (3)**
- MFET 2860 - Plastics/Composites Materials & Properties **Credits: (3)**

Note:

* These courses will also fulfill general education requirements.

Manufacturing Engineering Technology (AAS), Production Operations and Control Concentration

Manufacturing Engineering Technology

- **Grade Requirements:** A grade of "C" or better in all major courses, support courses, and technical electives is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher. Also refer to the general grade requirements for graduation in the Degree Requirements.
- **Credit Hour Requirements:** Credit hours vary as shown for different concentration areas: the AAS in Manufacturing Engineering Technology with a Production Operations and Control Concentration requires 66-68 credit hours, the AAS in Manufacturing Engineering Technology with a Welding Concentration requires 63-65 credit hours, and the AAS in Manufacturing Engineering Technology with a Plastics and

Composites Concentration requires 63-65 credit hours. Transfer students are required to take a minimum of 20 credit hours at Weber State University.

- **Assessment Requirements:** Students will be required to complete certain assessment instruments as part of the overall requirements for receiving their associate's degree. Please see your advisor or your department for specific information regarding assessment.
- **Program Code:** Manufacturing (8037AAS), with Concentration in Plastics & Composites (8058), Production Ops & Control (8059), or Welding Engineering Technology (8118).
- **CIPC:** Manufacturing (150613), with Concentration in Plastics & Composites (150607), Production Ops & Controls (150613), or Welding (150614).

Advisement

All Manufacturing Engineering Technology students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6305 for the name of your advisor and to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. Information Literacy as defined in this catalog is also required for the AAS degree. Consult with your advisor for specific general education guidelines.

Course Requirements for the AAS Degree

Core Courses (44-48 credit hours)

AAS Degree requirements for an AAS Degree in Manufacturing Engineering Technology, Production Operations and Controls Concentration, an AAS Degree in Manufacturing Engineering Technology with a Welding Concentration, or an AAS Degree in Manufacturing Engineering Technology with a Plastics and Composites Concentration will be met by completing the first two years of the respective BS Degree. All AAS Degrees will have the following core courses in common.

Please see your academic advisor for additional general education requirements.

Manufacturing Engineering Technology Courses Required (15 credit hours)

- MFET 1000 - Manufacturing Engineering Technology Fundamentals **Credits: (3)**
- MFET 1210 - Machining Principles Lecture/Lab I **Credits: (3)**
- MFET 2310 - Statics for Engineering Technology **Credits: (3)**
- MFET 2410 - Quality Concepts and Statistical Applications **Credits: (3)**
- MFET 2500 - Process Automation I **Credits: (1)**
- MFET 2510 - Process Automation I Lab **Credits: (2)**

Technical Courses Required (10 credit hours)

- PDD 1010 - Introduction to Engineering & Technical Design (Solidworks) **Credits: (3)**
- PDD 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD **Credits: (3)**
- EET 1850 - Industrial Electronics **Credits: (4)** or
- MFET 1820 - Manufacturing Electricity and Electronics **Credits: (4)** (recommended for Welding Concentration)

Support Courses Required (19-22 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
** Note: COMM 1020 or 2110 count towards Gen Ed as Humanities (HU) credits.*
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- PHYS 2010 PS - College Physics I **Credits: (5)** or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- MATH 1060 QL - Trigonometry **Credits: (3)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)**
- MATH 1110 QL - Calculus Concepts and Applications **Credits: (3)** or
- MATH 1210 - Calculus I **Credits: (4)**

Other Courses Required (4 credit hours)

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
(prerequisite is ENGL 1010 EN1 - Introductory College Writing (3) or equivalent)
- **Computer Information Literacy Credits: (1)**
- LIBS 1704 - Information Navigator **Credits: (1)**

Additional Courses Required by Concentration Area

Production Operations and Controls Concentration (12 credit hrs)

- MFET 2150 - Metal Forming, Casting and Welding **Credits: (2)** and
- MFET 2150L - Metal Forming, Casting & Welding Lab **Credits: (1)**
- MFET 2320 - Mechanics of Materials **Credits: (3)**
- MFET 2440 - Computer Numeric Control (CNC) in Manufacturing **Credits: (2)** and
- MFET 2440L - CNC in Manufacturing Lab **Credits: (1)**
- PDD 2460 - Product Design Fundamentals Using 3D CAD **Credits: (3)**

Note:

** These courses will also fulfill general education requirements.*

Manufacturing Engineering Technology (AAS), Welding Engineering Technology Emphasis

Manufacturing Engineering Technology

- **Grade Requirements:** A grade of "C" or better in all major courses, support courses, and technical electives is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher. Also refer to the general grade requirements for graduation in the Degree Requirements.
- **Credit Hour Requirements:** Credit hours vary as shown for different concentration areas: the AAS in Manufacturing Engineering Technology with a Production Operations and Control Concentration requires 66-68 credit hours, the AAS in Manufacturing Engineering Technology with a Welding Concentration requires 63-65 credit hours, and the AAS in Manufacturing Engineering Technology with a Plastics and Composites Concentration requires 63-65 credit hours. Transfer students are required to take a minimum of 20 credit hours at Weber State University.
- **Assessment Requirements:** Students will be required to complete certain assessment instruments as part of the overall requirements for receiving their associate's degree. Please see your advisor or your department for specific information regarding assessment.
- **Program Code:** Manufacturing (8037AAS), with Concentration in Plastics & Composites (8058), Production Ops & Control (8059), or Welding Engineering Technology (8118).
- **CIPC:** Manufacturing (150613), with Concentration in Plastics & Composites (150607), Production Ops & Controls (150613), or Welding (150614).

Advisement

All Manufacturing Engineering Technology students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6305 for the name of your advisor and to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. Information Literacy as defined in this catalog is also required for the AAS degree. Consult with your advisor for specific general education guidelines.

Course Requirements for the AAS Degree

Core Courses (44-48 credit hours)

AAS Degree requirements for an AAS Degree in Manufacturing Engineering Technology, Production Operations and Controls Concentration, an AAS Degree in Manufacturing Engineering Technology with a Welding Concentration, or an AAS Degree in Manufacturing Engineering Technology with a Plastics and Composites Concentration will be met

by completing the first two years of the respective BS Degree. All AAS Degrees will have the following core courses in common.

Please see your academic advisor for additional general education requirements.

Manufacturing Engineering Technology Courses Required (15 credit hours)

- MFET 1000 - Manufacturing Engineering Technology Fundamentals **Credits: (3)**
- MFET 1210 - Machining Principles Lecture/Lab I **Credits: (3)**
- MFET 2310 - Statics for Engineering Technology **Credits: (3)**
- MFET 2410 - Quality Concepts and Statistical Applications **Credits: (3)**
- MFET 2500 - Process Automation I **Credits: (1)**
- MFET 2510 - Process Automation I Lab **Credits: (2)**

Technical Courses Required (10 credit hours)

- PDD 1010 - Introduction to Engineering & Technical Design (Solidworks) **Credits: (3)**
- PDD 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD **Credits: (3)**
- EET 1850 - Industrial Electronics **Credits: (4)** or
- MFET 1820 - Manufacturing Electricity and Electronics **Credits: (4)** (recommended for Welding Concentration)

Support Courses Required (19-22 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
*** Note: COMM 1020 or 2110 count towards Gen Ed as Humanities (HU) credits.**
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- PHYS 2010 PS - College Physics I **Credits: (5)** or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- MATH 1060 QL - Trigonometry **Credits: (3)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)**
- MATH 1110 QL - Calculus Concepts and Applications **Credits: (3)** or
- MATH 1210 - Calculus I **Credits: (4)**

Other Courses Required (4 credit hours)

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
(prerequisite is ENGL 1010 EN1 - Introductory College Writing **(3)** or equivalent)
- **Computer Information Literacy Credits: (1)**
- LIBS 1704 - Information Navigator **Credits: (1)**

Additional Courses Required by Concentration Area

Welding Engineering Technology (9 credit hours)

- MFET 2150 - Metal Forming, Casting and Welding **Credits: (2)** and
- MFET 2150L - Metal Forming, Casting & Welding Lab **Credits: (1)**
- PDD 2460 - Product Design Fundamentals Using 3D CAD **Credits: (3)**
- MFET 2670 - GMA, FCA and GTA Welding **Credits: (1)** and
- MFET 2670L - GMA, FCA and GTA Welding Lab **Credits: (2)**

Note:

** These courses will also fulfill general education requirements.*

Product Design and Development (AAS)

- **Grade Requirements:** A grade of "C" or better in all required technical courses, and support courses (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher.
- **Credit Hour Requirements:** 64-66 total hours (depending on which math option is chosen) are required (24) of which are required within the program. A minimum of 20 hours in residency (WSU courses).
- **Product Code:** 8080AAS
- **CIPC:** 151399

Advisement

Students are required to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6305 for more information or to schedule an appointment. Advisement may also be obtained in Engineering Technology, room 214.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to the Degree Requirements for Associate of Applied Science requirements.

Program Learning Outcomes

- An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly defined engineering problems in Product Design and Development Engineering Technology related to applied mechanical design using advanced software tools and techniques.
- An ability to design systems, components, or processes meeting specified needs for broadly defined engineering problems in Product Design and Development Engineering Technology.

- An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes
- An ability to function effectively as a member as well as a leader on technical teams
- An ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
- ABET Outcomes
 - (a) engineering materials, applied mechanics, and manufacturing methods.
 - (b) applied drafting practice emphasizing mechanical components and systems, as well as fundamentals of descriptive geometry, orthographic projection, sectioning, tolerancing and dimensioning, and basic computer aided drafting and design with technical depth in at least one of these areas.
 - (c) the application of physics and engineering materials having an emphasis in applied mechanics, or in-depth application of physics having emphasis in mechanical components and design.

Major Course Requirements for AAS Degree

Product Design and Development Courses Required (15 credit hours)

- PDD 1010 - Introduction to Engineering & Technical Design (Solidworks) **Credits: (3)**
- PDD 1030 - Introduction to Product Design and Development **Credits: (3)**
- PDD 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD **Credits: (3)**
- PDD 2460 - Product Design Fundamentals Using 3D CAD **Credits: (3)**
- PDD 2650 - Product Design & Development **Credits: (3)**

Technical Support Courses Required (12 credit hours)

- MFET 1210 - Machining Principles Lecture/Lab I **Credits: (3)**
- MFET 2150 - Metal Forming, Casting and Welding **Credits: (2)**
- MFET 2150L - Metal Forming, Casting & Welding Lab **Credits: (1)**
- MFET 2410 - Quality Concepts and Statistical Applications **Credits: (3)**
- MFET 2440 - Computer Numeric Control (CNC) in Manufacturing **Credits: (2)**
- MFET 2440L - CNC in Manufacturing Lab **Credits: (1)**

Technical Electives (2 credit hours minimum)

A minimum of 2 credit hours of technical electives chosen from the following list or approved by the program coordinator are required.

- PDD 2830 - Directed Readings **Credits: (1-3)**
- MFET 1000 - Manufacturing Engineering Technology Fundamentals **Credits: (3)**
- MFET 1820 - Manufacturing Electricity and Electronics **Credits: (4)**
- MFET 2670 - GMA, FCA and GTA Welding **Credits: (1)** and
- MFET 2670L - GMA, FCA and GTA Welding Lab **Credits: (2)**
- MFET 2860 - Plastics/Composites Materials & Properties **Credits: (3)**
- MFET 2870 - Design of Plastics/Composites Products **Credits: (3)**

Support Courses Required (16-18 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**

- MATH 1080 QL - Pre-calculus **Credits: (5)**
OR
- MATH 1050 QL - College Algebra **Credits: (4)** and
- MATH 1060 QL - Trigonometry **Credits: (3)**

- CHEM 1010 PS - Introductory Chemistry **Credits: (3)**
- PHYS 2010 PS - College Physics I **Credits: (5)**

Institutional Certificate

Product Design and Development Certificate of Proficiency

- **Grade Requirements:** A grade of "C" or better must be earned in all required PDD courses (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** 18 credit hours.
- **Program Code:** 8111CP
- **CIPC Code:** 151399

Advisement

Students are required to meet with an academic advisor at least annually for course and program advisement. Call 801-626-6305 for more information or to schedule an appointment. Advisement may also be obtained in Engineering Technology, room 214.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). No special admission or application requirements are needed for this program.

Program Learning Outcomes

- An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly defined engineering problems in Product Design and Development Engineering Technology related to applied mechanical design using advanced software tools and techniques.
- An ability to design systems, components, or processes meeting specified needs for broadly defined engineering problems in Product Design and Development Engineering Technology.
- An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes
- An ability to function effectively as a member as well as a leader on technical teams
- An ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.

Course Requirements

Required Courses (15 credit hours)

- PDD 1010 - Introduction to Engineering & Technical Design (Solidworks) **Credits: (3)**
- PDD 1030 - Introduction to Product Design and Development **Credits: (3)**
- PDD 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD **Credits: (3)**
- PDD 2460 - Product Design Fundamentals Using 3D CAD **Credits: (3)**
- PDD 2650 - Product Design & Development **Credits: (3)**

Elective Courses (3 credit hours)

Select one from the following courses:

- PDD 3100 - Tool Design **Credits: (3)**
- PDD 3210 - Machines and Mechanisms **Credits: (3)**
- PDD 3300 - Applied Kinematic Analysis **Credits: (3)**
- PDD 3460 - Parametric Design Graphics **Credits: (3)**
- PDD 3470 - Introduction to CATIA V5 **Credits: (3)**

Bachelor of Science

Design Engineering Technology (BS)

This major has been renamed Product Design and Development (BS).

Manufacturing Engineering Technology (BS)

Areas of Concentration

Select one of the following areas of concentration

- Manufacturing Engineering Technology (BS), Plastics and Composites Concentration
- Manufacturing Engineering Technology (BS), Production Operations and Controls Concentration
- Manufacturing Engineering Technology (BS), Welding Concentration

Manufacturing Engineering Technology (BS), Plastics and Composites Concentration

Manufacturing Engineering Technology

- **Program Prerequisite:** Not required.
- **Minor:** Not required.

- **Grade Requirements:** A grade of "C" or better in all major courses, support courses, and technical electives is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher. Also refer to the general grade requirements for graduation in the Degree Requirements section of this catalog. Seniors may petition to have one C- allowed in major and support courses. Approval from the Program Coordinator and Department Chair is required.
- **Credit Hour Requirements:** Credit hours vary as shown for different concentration areas: the BS in Manufacturing Engineering Technology with a Production Operations and Control Concentration requires 126.5 credit hours, the BS in Manufacturing Engineering Technology with a Welding Concentration requires 123.5 credit hours, and the BS in Manufacturing Engineering Technology with a Plastics and Composites Concentration requires 125.5 credit hours. A total of 40 upper division credit hours is also required (courses numbered 3000 and above). Transfer students are required to take a minimum of 30 credit hours at Weber State University.
- **Program Code:** Manufacturing (8037BS), with Concentration in Plastics & Composites (8058), Production Ops & Controls (8059), or Welding (8060).
- **CIPC:** Manufacturing (150613), with Concentration in Plastics & Composites (150607), Production Ops & Controls (150613), or Welding (150614).

Advisement

All Manufacturing Engineering Technology students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6305 for the name of your advisor and to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). Refer to the Program Prerequisite listed above. There are no additional special admission or application requirements for this program.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Consult with your advisor for specific general education guidelines.

Program Learning Outcomes

- An ability to apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, or technology related to materials, manufacturing processes, tooling, automation, production operations, maintenance, quality, industrial organization and management, and statistics. To solve broadly defined engineering problems. (Also addresses MFET Program Criteria).
- An ability to design systems, components, or processes meeting specified needs for broadly defined engineering problems.
- Conduct, analyze, and interpret experiments and apply experimental results to improve processes in a realistic, sustainable, and cost-effective manner.
- An ability to function effectively as a member or leader on a technical team.
- An ability to apply written, oral, and graphical communication in both technical, nontechnical, and relevant financial environments; and an ability to identify and use appropriate technical literature.

Major Course Requirements for BS Degree

Plastics and Composites Concentration

To be taken in addition to the courses required for the AAS Degree in Manufacturing Engineering Technology with a Plastics and Composites Concentration.

Manufacturing Engineering Technology Courses Required (48.5 credit hours)

- MFET 2870 - Design of Plastics/Composites Products **Credits: (3)**
- MFET 3340 - Applied Fluid Power **Credits: (2)** and
- MFET 3340L - Applied Fluid Power Lab **Credits: (1)**
- MFET 3350 - Plastic and Composite Manufacturing **Credits: (2)** and
- MFET 3350L - Plastic and Composite Manufacturing Lab **Credits: (2)**
- MFET 3550 - Manufacturing Supervision **Credits: (3)**
- MFET 3620 - Senior Capstone Project Planning **Credits: (.5)**
- MFET 3830 - Reinforced Plastics/Advanced Composite Lecture/Lab **Credits: (3)**
- MFET 3870 - Mold Design and Process Strategies Lecture/Lab **Credits: (3)**
- MFET 4580 - Process Automation II & Robotics **Credits: (1)** and
- MFET 4585 - Process Automation II Lab **Credits: (2)**
- MSE 4590 - Lean Manufacturing Systems **Credits: (3)**
- MFET 4610 - Senior Project Management & Cost Estimating **Credits: (3)**
- MFET 4610L - Senior Project Lab **Credits: (2)**
- MFET 4620L - Senior Project Lab **Credits: (2)**
- MFET 4995 - Certified Manufacturing Technologist (CMfgT) Exam Review **Credits: (1)**
- MET 3150 - Engineering Technology Materials **Credits: (3)**
- MET 4650 - Thermal Science **Credits: (3)**
- MSE 3700 - Manufacturing Systems I **Credits: (3)**
- MSE 3850 - Statistical Process Control and Reliability **Credits: (3)**
- MSE 3910 - Six Sigma Methods and Tools in Manufacturing **Credits: (3)**

Technical Electives (2 credit hours minimum)

A minimum of 2 credit hours of technical electives chosen from the following list are required.

- PDD 3470 - Introduction to CATIA V5 **Credits: (3)**
- MFET 3460 - Engineering Design using Solid Modeling **Credits: (2)** and
- MFET 3460L - Engineering Design using Solid Modeling Lab **Credits: (1)**
- MFET 3710 - Computer Aided Manufacturing and Rapid Prototyping **Credits: (2)** and
- MFET 3710L - Computer Aided Manufacturing and Rapid Prototyping Lab **Credits: (1)**
- MFET 3890 INT - Cooperative Work Experience **Credits: (1-3)** or
- MFET 4890 INT - Cooperative Work Experience **Credits: (1-3)**
- PS 3702 - Developing Team Leadership Skills **Credits: (2)**
- Other classes approved by your MFET advisor

Manufacturing Engineering Technology (BS), Production Operations and Controls Concentration

Manufacturing Engineering Technology

- **Program Prerequisite:** Not required.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in all major courses, support courses, and technical electives is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher. Also refer to the general grade requirements for graduation in the Degree Requirements section of this catalog. Seniors may petition to have one C- allowed in major and support courses. Approval from the Program Coordinator and Department Chair is required.
- **Credit Hour Requirements:** Credit hours vary as shown for different concentration areas: the BS in Manufacturing Engineering Technology with a Production Operations and Control Concentration requires 126.5 credit hours, the BS in Manufacturing Engineering Technology with a Welding Concentration requires 123.5 credit hours, and the BS in Manufacturing Engineering Technology with a Plastics and Composites Concentration requires 125.5 credit hours. A total of 40 upper division credit hours is also required (courses numbered 3000 and above). Transfer students are required to take a minimum of 30 credit hours at Weber State University.
- **Program Code:** Manufacturing (8037BS), with Concentration in Plastics & Composites (8058), Production Ops & Controls (8059), or Welding (8060).
- **CIPC:** Manufacturing (150613), with Concentration in Plastics & Composites (150607), Production Ops & Controls (150613), or Welding (150614).

Advisement

All Manufacturing Engineering Technology students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6305 for the name of your advisor and to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). Refer to the Program Prerequisite listed above. There are no additional special admission or application requirements for this program.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Consult with your advisor for specific general education guidelines.

Program Learning Outcomes

- An ability to apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, or technology related to materials, manufacturing processes, tooling, automation, production operations, maintenance, quality, industrial organization and management, and statistics. To solve broadly defined engineering problems. (Also addresses MFET Program Criteria).
- An ability to design systems, components, or processes meeting specified needs for broadly defined engineering problems.

- Conduct, analyze, and interpret experiments and apply experimental results to improve processes in a realistic, sustainable, and cost-effective manner.
- An ability to function effectively as a member or leader on a technical team.
- An ability to apply written, oral, and graphical communication in both technical, nontechnical, and relevant financial environments; and an ability to identify and use appropriate technical literature.

Major Course Requirements for BS Degree

Production Operations and Control Concentration

To be taken in addition to the courses required for the AAS Degree in Manufacturing Engineering Technology with a Production Operations and Control Concentration.

Required Courses for Major (45.5 credit hours)

- MFET 3340 - Applied Fluid Power **Credits: (2)** and
- MFET 3340L - Applied Fluid Power Lab **Credits: (1)**
- MFET 3350 - Plastic and Composite Manufacturing **Credits: (2)** and
- MFET 3350L - Plastic and Composite Manufacturing Lab **Credits: (2)**
- MFET 3550 - Manufacturing Supervision **Credits: (3)**
- MFET 3620 - Senior Capstone Project Planning **Credits: (.5)**
- MFET 3710 - Computer Aided Manufacturing and Rapid Prototyping **Credits: (2)** and
- MFET 3710L - Computer Aided Manufacturing and Rapid Prototyping Lab **Credits: (1)**
- MFET 4580 - Process Automation II & Robotics **Credits: (1)** and
- MFET 4585 - Process Automation II Lab **Credits: (2)**
- MFET 4610 - Senior Project Management & Cost Estimating **Credits: (3)**
- MFET 4610L - Senior Project Lab **Credits: (2)**
- MFET 4620L - Senior Project Lab **Credits: (2)**
- MFET 4995 - Certified Manufacturing Technologist (CMfgT) Exam Review **Credits: (1)**
- MET 3150 - Engineering Technology Materials **Credits: (3)**
- MET 3400 - Machine Design for Engineering Technology **Credits: (3)** Or
- PDD 3210 - Machines and Mechanisms **Credits: (3)**
- MSE 3700 - Manufacturing Systems I **Credits: (3)**
- MSE 3850 - Statistical Process Control and Reliability **Credits: (3)**
- MSE 3910 - Six Sigma Methods and Tools in Manufacturing **Credits: (3)**
- MSE 4590 - Lean Manufacturing Systems **Credits: (3)**
- PDD 3100 - Tool Design **Credits: (3)**

Technical Electives (3 credit hours)

A minimum of 3 credit hours of technical electives chosen from the following list are required.

- PDD 3460 - Parametric Design Graphics **Credits: (3)**

- PDD 3470 - Introduction to CATIA V5 **Credits: (3)**
- MFET 2850 - CNC/CAM for Plastics and Composites Lecture/Lab **Credits: (3)**
- MFET 2860 - Plastics/Composites Materials & Properties **Credits: (3)**
- MFET 2870 - Design of Plastics/Composites Products **Credits: (3)**
- MFET 3460 - Engineering Design using Solid Modeling **Credits: (2)** and
- MFET 3460L - Engineering Design using Solid Modeling Lab **Credits: (1)**
- MFET 3830 - Reinforced Plastics/Advanced Composite Lecture/Lab **Credits: (3)**
- MFET 3890 INT - Cooperative Work Experience **Credits: (1-3)** or
- MFET 4890 INT - Cooperative Work Experience **Credits: (1-3)**
- MFET 4850 - Integration of Automated Systems **Credits: (3)**
- PS 3103 - Sales Personalities and Profiles **Credits: (3)**
- PS 4203 - Ethical Sales and Service **Credits: (3)**
- Other classes approved by your MFET advisor

Note:

Please note that there are additional General Education requirements to complete the degree.

Manufacturing Engineering Technology (BS), Welding Concentration

Manufacturing Engineering Technology

- **Program Prerequisite:** Not required.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in all major courses, support courses, and technical electives is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher. Also refer to the general grade requirements for graduation in the Degree Requirements section of this catalog. Seniors may petition to have one C- allowed in major and support courses. Approval from the Program Coordinator and Department Chair is required.
- **Credit Hour Requirements:** Credit hours vary as shown for different concentration areas: the BS in Manufacturing Engineering Technology with a Production Operations and Control Concentration requires 126.5 credit hours, the BS in Manufacturing Engineering Technology with a Welding Concentration requires 123.5 credit hours, and the BS in Manufacturing Engineering Technology with a Plastics and Composites Concentration requires 125.5 credit hours. A total of 40 upper division credit hours is also required (courses numbered 3000 and above). Transfer students are required to take a minimum of 30 credit hours at Weber State University.
- **Program Code:** Manufacturing (8037BS), with Concentration in Plastics & Composites (8058), Production Ops & Controls (8059), or Welding (8060).
- **CIPC:** Manufacturing (150613), with Concentration in Plastics & Composites (150607), Production Ops & Controls (150613), or Welding (150614).

Advisement

All Manufacturing Engineering Technology students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6305 for the name of your advisor and to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). Refer to the Program Prerequisite listed above. There are no additional special admission or application requirements for this program.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Consult with your advisor for specific general education guidelines.

Program Learning Outcomes

- An ability to apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, or technology related to materials, manufacturing processes, tooling, automation, production operations, maintenance, quality, industrial organization and management, and statistics. To solve broadly defined engineering problems. (Also addresses MFET Program Criteria).
- An ability to design systems, components, or processes meeting specified needs for broadly defined engineering problems.
- Conduct, analyze, and interpret experiments and apply experimental results to improve processes in a realistic, sustainable, and cost-effective manner.
- An ability to function effectively as a member or leader on a technical team.
- An ability to apply written, oral, and graphical communication in both technical, nontechnical, and relevant financial environments; and an ability to identify and use appropriate technical literature.

Major Course Requirements for BS Degree

Welding Concentration

To be taken in addition to the courses required for the AAS Degree in Manufacturing Engineering Technology with a Welding Concentration.

Manufacturing Engineering Technology Courses Required (42.5 credit hours)

- MFET 2320 - Mechanics of Materials **Credits: (3)**
- MFET 3060 - Codes, Weld Inspection, and Quality Assurance **Credits: (3)**
- MFET 3550 - Manufacturing Supervision **Credits: (3)**
- MFET 3620 - Senior Capstone Project Planning **Credits: (.5)**
- MFET 3630 - Fusion Joining and Brazing Processes **Credits: (2)** and
- MFET 3630L - Fusion Joining and Brazing Processes **Credits: (1)**
- MFET 3750 - Welding Metallurgy I **Credits: (2)** and
- MFET 3750L - Welding Metallurgy I Lab **Credits: (1)**
- MFET 3760 - Welding Metallurgy II **Credits: (2)** and

- MFET 3760L - Welding Metallurgy II Lab **Credits: (1)**
- MFET 3820 - Nondestructive Testing **Credits: (3)**
- MFET 4090 - Welding Power Sources **Credits: (2)**
- MFET 4315 - Welding Robotics **Credits: (2)**
- MFET 4610 - Senior Project Management & Cost Estimating **Credits: (3)**
- MFET 4610L - Senior Project Lab **Credits: (2)**
- MFET 4620L - Senior Project Lab **Credits: (2)**
- MFET 4995 - Certified Manufacturing Technologist (CMfgT) Exam Review **Credits: (1)**
- MSE 3850 - Statistical Process Control and Reliability **Credits: (3)**
- MSE 3910 - Six Sigma Methods and Tools in Manufacturing **Credits: (3)**
- MSE 4590 - Lean Manufacturing Systems **Credits: (3)**

Technical Electives (6 credit hours minimum)

A minimum of 6 credit hours of technical electives chosen from the following list are required.

- PDD 3470 - Introduction to CATIA V5 **Credits: (3)**
- MFET 3350 - Plastic and Composite Manufacturing **Credits: (2)** and
- MFET 3350L - Plastic and Composite Manufacturing Lab **Credits: (2)**
- MFET 3460 - Engineering Design using Solid Modeling **Credits: (2)** and
- MFET 3460L - Engineering Design using Solid Modeling Lab **Credits: (1)**
- MFET 3890 INT - Cooperative Work Experience **Credits: (1-3)** or
- MFET 4890 INT - Cooperative Work Experience **Credits: (1-3)**
- PS 3702 - Developing Team Leadership Skills **Credits: (2)**
- Other classes approved by your MFET advisor

Manufacturing Systems Engineering (BS)

- **Program Prerequisite:** Not required, but a strong math background is suggested.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in all major courses, support courses, and technical electives is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.50 or higher. Also refer to the general grade requirements for graduation in the Degree Requirements section of this catalog.
- **Credit Hour Requirements:** Credit hours vary as shown for different emphasis areas: the BS in Manufacturing Systems Engineering requires 125.5 - 126 credit hours. A total of 40 upper division credit hours is also required (courses numbered 3000 and above). Transfer students are required to take a minimum of 30 credit hours at Weber State University.
- **Program Code:** 8083BS
- **CIPC:** 142701

Accreditation

The Weber State University Manufacturing Systems Engineering program will seek accreditation by the Engineering Accreditation Commission (EAC) of ABET upon first graduate.

Advisement

All Manufacturing Systems Engineering students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6305 for the name of your advisor and to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). Refer to the Program Prerequisite on the previous page. There are no additional special admission or application requirements for this program.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Consult with your advisor for specific general education guidelines.

Program Learning Outcomes

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- An ability to communicate effectively with a range of audiences
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Major Course Requirements for MSE BS Degree

Manufacturing Systems Engineering Required Courses (44 credit hours)

- MSE 1210 - Metal Processing and Joining for Engineers **Credits: (3)**
- MSE 3040 - Cost Estimating and Engineering Economic Analysis **Credits: (3)**
- MSE 3360 - Manufacturing Process and Materials Lab **Credits: (3)**
- MSE 3460 - Product Design and Development **Credits: (3)**
- MSE 3700 - Manufacturing Systems I **Credits: (3)**
- MSE 3710 - Computer Aided Manufacturing and Additive Manufacturing/Lab **Credits: (3)**
- MSE 3850 - Statistical Process Control and Reliability **Credits: (3)**
- MSE 3910 - Six Sigma Methods and Tools in Manufacturing **Credits: (3)**
- MSE 4010 - Facility Design and Material Handling **Credits: (3)**
- MSE 4590 - Lean Manufacturing Systems **Credits: (3)**

- MSE 4600 - Production Systems Modeling and Analysis/Lab **Credits: (3)**
- MSE 4610 - Project Management for Engineers **Credits: (3)**
- MSE 4615 - Lab: Senior Project Design I **Credits: (2)**
- MSE 4620 - Lab: Senior Project Design II **Credits: (3)**
- MSE 4700 - Manufacturing Systems Engineering II **Credits: (3)**

Technical Elective Course (Minimum 3 credit hours)

- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2250 - Linear Algebra and Differential Equations **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**

Pre-Engineering Required Courses (19 credits)

- ENGR 1000 - Introduction to Engineering **Credits: (2)**
- ENGR 2010 - Statics **Credits: (3)**
- ENGR 2030 - Dynamics **Credits: (3)**
- ENGR 2140 - Mechanics of Materials **Credits: (3)**
- ENGR 2160 - Materials Science and Engineering **Credits: (3)**
- ECE 2210 - Electrical Engineering for Non-majors **Credits: (4)**

Required Technical Courses (9 credit hours)

- PDD 1010 - Introduction to Engineering & Technical Design (Solidworks) **Credits: (3)**
- PDD 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD **Credits: (3)**
- MFET 3550 - Manufacturing Supervision **Credits: (3)**

Additional Manufacturing Systems Engineering Courses (required department approval)

- MSE 4800 - Individual Research Problems **Credits: (1-3)**
- MSE 4830 - Directed Readings for Manufacturing Systems Engineering **Credits: (1-3)**
- MSE 4890 INT - Cooperative Work Experience **Credits: (1-3)**
- MSE 4900 - Special Topics **Credits: (1-3)**
- MSE 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- MSE 5010 - Foundation of Systems Engineering **Credits: (3)**
- MSE 5020 - Engineering Project and Program Management **Credits: (3)**
- MSE 5140 - Design for Operational Feasibility **Credits: (3)**

Required Support Courses (minimum of 12 credit hours)

- MATH 1220 - Calculus II **Credits: (4)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)** (and Lab)

Suggested for continuing for a Master's degree in Industrial/Systems Engineering:

- MATH 2210 - Calculus III **Credits: (4)**

- MATH 2250 - Linear Algebra and Differential Equations **Credits: (4)**

Required General Education Courses (38.5-39 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)** (*prerequisite is ENGL 1010 or equivalent*)
- MATH 1210 - Calculus I **Credits: (4)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- American Institutions (AI) **Credits: (3)**
- Information Literacy **Credits: (.5-1)**
- Humanities and Creative Arts (HU/CA) **Credits: (6)**
- Social Science and Diversity (SS/DV) **Credits: (3)**
- Life Science (LS) **Credits: (3)**

Product Design and Development (BS)

- **Program Prerequisite:** Complete AAS degree in Product Design and Development (formerly DET): An Engineering Technology from Weber State University or equivalent degree or coursework from an accredited AAS program.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in all required technical courses, and support courses is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher. Also refer to the general grade requirements for graduation in the Degree Requirements section of this catalog.
- **Credit Hour Requirements:** A total of 124-126 credit hours (depending on which math option is chosen) is required for graduation. A total of 40 upper division credit hours is required (courses numbered 3000 and above.) A minimum of 30 hours in residency (WSU courses).
- **Program Code:** 8080BS
- **CIPC:** 151399

Advisement

All four-year design engineering technology students are required to meet at least annually with a faculty advisor for course and program advisement. Call 801-626-6305 for more information or to schedule an appointment. Advisement may also be obtained in Engineering Technology, room 214.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). Refer to the Program Prerequisite in the previous column. There are no additional special admissions or application requirements for this program.

General Education

Refer to the Degree Requirements for Bachelor of Science requirements.

Program Learning Outcomes

- Effective technical communication skills, including written, oral and graphical
- Have obtained the requisite knowledge and have acquired the technical skills to be successful in the discipline.
- The ability to function as a member of a project team.
- Problem solving skills related to the discipline.
- Knowledge of the national standards used in the discipline and the ability to apply national standards in the development of design documentation and graphics presentations.

Major Course Requirements for BS Degree

To be taken in addition to the requirements for the Product Design and Development (AAS).

Product Design and Development Courses Required (24 credit hours)

- PDD 3100 - Tool Design **Credits: (3)**
- PDD 3210 - Machines and Mechanisms **Credits: (3)**
- PDD 3300 - Applied Kinematic Analysis **Credits: (3)**
- PDD 3460 - Parametric Design Graphics **Credits: (3)**
- PDD 3470 - Introduction to CATIA V5 **Credits: (3)**
- PDD 4200 - Advanced Mechanical Design **Credits: (3)**
- PDD 4470 - Advanced CATIA V5 **Credits: (3)**
- PDD 4500 - Hydraulic and Pneumatic Applications **Credits: (3)**

Technical Support Courses Required (23.5 credit hours)

- MET 3150 - Engineering Technology Materials **Credits: (3)**
- MFET 2310 - Statics for Engineering Technology **Credits: (3)**
- MFET 2320 - Mechanics of Materials **Credits: (3)**
- MFET 3550 - Manufacturing Supervision **Credits: (3)**
- MFET 3620 - Senior Capstone Project Planning **Credits: (.5)**
- MFET 3710 - Computer Aided Manufacturing and Rapid Prototyping **Credits: (2)**
- MFET 3710L - Computer Aided Manufacturing and Rapid Prototyping Lab **Credits: (1)**
- MFET 4610 - Senior Project Management & Cost Estimating **Credits: (3)**
- MFET 4610L - Senior Project Lab **Credits: (2)**
- MFET 4620L - Senior Project Lab **Credits: (2)**
- MFET 4995 - Certified Manufacturing Technologist (CMfgT) Exam Review **Credits: (1)**

Technical Electives (6 credit hours minimum)

A minimum of 6 credit hours of upper division technical electives chosen from the following list or approved by the program coordinator are required.

- PDD 4830 - Directed Readings **Credits: (1-3)**

- PDD 4890 INT - Cooperative Work Experience **Credits: (1-3)**
- MET 3500 - Mechanical Measurements and Instrumentation **Credits: (3)**
- MFET 3340 - Applied Fluid Power **Credits: (2)**
- MFET 3340L - Applied Fluid Power Lab **Credits: (1)**
- MFET 3350 - Plastic and Composite Manufacturing **Credits: (2)**
- MFET 3350L - Plastic and Composite Manufacturing Lab **Credits: (2)**
- MFET 3460 - Engineering Design using Solid Modeling **Credits: (2)**
This course is recommended for PDD students.
- MFET 3460L - Engineering Design using Solid Modeling Lab **Credits: (1)**
This course is recommended for PDD students.
- MSE 3850 - Statistical Process Control and Reliability **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**

Support Courses Required (6 credit hours)

- Humanities Electives (3)*
- Life Science Elective (3)*

**These courses will also fulfill general education requirements.*

Emphasis Option for Bachelor of Interdisciplinary Studies

Production and Inventory Control (APICS) Concentration (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Refer to the Bachelor of Integrated Studies Program for the general and specific requirements for the BIS degree.
- **Credit Hour Requirements:** A total of 18 credit hours of courses is required for the APICS concentration portion of this degree.
- **Program Code:** 8041
- **CIPC:** 520203

BIS Option in Production and Inventory Control

The Manufacturing Engineering Technology department offers those courses required by APICS The Association for Operations Management for a continuing education certificate in Production and Inventory Control Technology. The following courses indicated with an asterisk (*) prepare one to take the APICS Certification Exam as well as receive the above certificate. In addition, if these courses are taken in conjunction with the other courses listed below or other courses approved by the department chair, all of these may then be used to fill one of the three areas required for a Bachelor of Integrated Studies degree. The courses must be taken for credit and the area of emphasis will be in Production and Inventory Control (not Manufacturing Engineering Technology).

The course of study described below must be approved by the MFET department chair.

Course Requirements for BIS Emphasis

Manufacturing Engineering Technology Courses Required (18 credit hours)

- MFET 3510 - Basics of Supply Chain Management **Credits: (2) ***
- MFET 3550 - Manufacturing Supervision **Credits: (3)**
- MFET 4050 - Detailed Scheduling and Planning I **Credits: (2) ***
- MFET 4150 - Execution and Control of Operations **Credits: (2) ***
- MFET 4250 - Detailed Scheduling and Planning **Credits: (2) ***
- MFET 4750 - Master Planning of Resources **Credits: (2) ***
- MFET 4770 - Strategic Management of Resources **Credits: (2) ***
- Electives to be determined by an MFET Advisor **(3)**

Note:

** Online course*

Minor

Product Design and Development Minor

- **Grade Requirements:** A grade of "C" or better must be earned in all required PDD courses (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** 18 credit hours for the Minor.
- **Program Code:** 8112
- **CIPC Code:** 151399

Advisement

Students are required to meet with an academic advisor at least annually for course and program advisement. Call 801-626-6305 for more information or to schedule an appointment. Advisement may also be obtained in Engineering Technology, room 214.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). No special admission or application requirements are needed for this program.

Program Learning Outcomes

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly defined engineering problems in Product Design and Development Engineering Technology related to applied mechanical design using advanced software tools and techniques.
2. An ability to design systems, components, or processes meeting specified needs for broadly defined engineering problems in Product Design and Development Engineering Technology.
3. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes

4. An ability to function effectively as a member as well as a leader on technical teams
5. An ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.

Course Requirements

Required Courses (15 credit hours)

- PDD 1010 - Introduction to Engineering & Technical Design (Solidworks) **Credits: (3)**
- PDD 1030 - Introduction to Product Design and Development **Credits: (3)**
- PDD 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD **Credits: (3)**
- PDD 2460 - Product Design Fundamentals Using 3D CAD **Credits: (3)**
- PDD 2650 - Product Design & Development **Credits: (3)**

Elective Courses (3 credit hours)

Select one from the following courses:

- PDD 3100 - Tool Design **Credits: (3)**
- PDD 3210 - Machines and Mechanisms **Credits: (3)**
- PDD 3300 - Applied Kinematic Analysis **Credits: (3)**
- PDD 3460 - Parametric Design Graphics **Credits: (3)**
- PDD 3470 - Introduction to CATIA V5 **Credits: (3)**

Post Baccalaureate Certificate

Model-based Systems Engineering (MBSE) Systems Architect Post Baccalaureate Certificate

The Industry-based Post-Bachelor's Certificate in Model-based Systems Engineering (MBSE) is a launching point for enhancing systems engineering skills in the systems engineering workplace and modern systems community, and continuing education toward a Master of Science in Systems Engineering.

This Certificate will prepare students and current industry Systems Engineering practitioners with current and emerging knowledge, skills, and abilities in model-based systems engineering (MBSE). At completion, students will be proficient with Magic Systems of Systems Architect, which is the current preferred MBSE software tool for the local industry partners. Additionally, students will gain valuable skills in implementing architecting complex systems using best practices, methods, and frameworks. This Certificate will give students a significant competitive advantage in the marketplace.

The Certificate will consist of four courses, totally 10 credit hours, and can be completed in one year (two semesters).

- **Program Prerequisite:** SE 6010 or equivalent from another university
- **Credit Hour Requirements:** 10
- **Program Code:** 8119PBC
- **CIPC:** 142701

Grade Requirements:

- A student's GPA for the cumulative Graduate Certificate coursework must be a minimum of 3.0.
- A student must earn a minimum of "B-" in courses included within the Certificate while meeting the cumulative 3.0 GPA minimum.
- Note: If the student wishes to transfer to the MSSE program, then a grade of "B" or higher is required.

Time Limit: A student is expected to complete all work within four semesters from the date of first enrollment in the certificate program. A student who fails to complete requirements within four semesters may be withdrawn and required to apply for readmission. Students exceeding this limit must submit a petition to the program requesting additional time to complete the certificate. Petitions must describe why they were unable to complete their certificate during the requisite time frame, the amount of work remaining, timeline for completion, and the term in which they expect to complete the certificate.

The program will place a notation of "below minimum academic requirements" on the academic record at the end of the term in which a student's cumulative GPA falls below a 2.0. The program may decide whether unsatisfactory academic standing may be a basis for placing a student on academic probation. A student with unsatisfactory academic standing will not be advanced and will not be awarded a graduate certificate.

Upon the recommendation of the program director, a student will be given an opportunity to correct the academic deficiency and return to satisfactory academic standing. A student with unsatisfactory academic standing must provide documentation including: reasons for the poor academic record; explain how conditions that produced this performance have changed; and present specific plans for improvement. A student whose cumulative GPA falls below a 2.0, is not making satisfactory progress toward the degree, and is failing to succeed in the plan of studies, may be denied permission to register, required to withdraw, or dismissed from the program.

Repeating a Course

A student may repeat a course with permission of the program and course instructor. A student may repeat a single course once and is granted only 2 total repeat opportunities.

Advisement

Contact program.

Admission Requirements

Minimum Qualifications

Applicants for admission into the MBSE Certificate program should have completed SE 6010 with a minimum of a "B" or have least 5 years of professional Systems Engineering experience.

SE 6010 taken prior to Fall 2024 is not eligible for transfer to meet the SE 6010 pre-requisite.

Preferred Qualifications

Preferred applicants have at least 7 years of professional Systems Engineering experience, possess a current INCOSE Systems Engineering certification, and possess a B.Sc. in engineering (EAC), engineering-technology (ETAC), or computing (CAC) from an ABET accredited program with a minimum of Calculus I and STEM Statistics. B.Sc. in any other related subject is on a case-by-case basis only. A minimum overall GPA of 3.0 is required from the undergraduate program in which the bachelor's degree is earned; a 3.3 is preferred. The program reviews the student portfolio, including bachelors program, calculus and statistics grades, rigor of courses taken (upper division), work experience, professional certifications, and participation in the systems community). Each application is reviewed on a case-by-case basis and acceptance and leveling courses are determined at the time of application review.

Applicants will submit:

- Official transcripts from every institution of higher education attended
- 3.0 GPA min to apply, 3.3+ preferred

- Academic Statement of Purpose
- 3 letters of recommendation:
 - Immediate supervisor
 - Another person within student's work organization whom is charge or intimately familiar with the student's responsibilities, future responsibilities, or individual development plan
 - Student's choosing

(The above letters need to clearly indicate experience in systems engineering and current or future need of digital engineering, MBSE, digital twins, digital threads, CAMEO No Magic, SysML etc)

Transfer of Credit

Course transfers into this Certificate will not be available.

Availability

Available seats in this Certificate will go to matriculated Systems Program students first

Program Learning Outcomes

- Demonstrate knowledge of identifying, developing, reading, and interpreting SysML diagrams, agnostic of software tool
- Demonstrate applied use of a framework for architecting
- Demonstrate knowledge of MBSE governance
- Demonstrate applied use of the architecting software tool selected by the program

Major Course Requirements

SE 6380 - MBSE and SysML will cover fundamental concepts of Model-based Systems Engineering (MBSE) practices and principles and will cover the basics of the system modeling language (SysML®) managed by the Object Management Group (OMG). The MSOSA software tool will be introduced and students will be familiarized with it by completing simple tutorials. Student learning outcomes above will be assessed using assignments, exams, and Canvas discussions. This course prepares students to take the OMG-Certified SysML® Professional (OCSMP™) test if they wish.

SE 6385 - Architecting Proposal will be a 1 credit hour course for the students to prepare their proposal for the system they want to architect in SE 6390 and 6400. The instructor will work with them on appropriately scoping their projects during the semester.

SE 6390 - MBSE II builds upon the basics from the MBSE 1 course by architecting a complex system using MSOSA and SysML. This course will predominantly be driven by a course project, where students will architect their systems in their approved proposals. Students will be introduced to the MagicGrid framework for completing their architecting projects. This framework was developed by the vendor of MSOSA in collaboration with industry and government practitioners. The course project will culminate with a final update to their system architecture model, a written lessons learned report, and a presentation. Student learning outcomes above will be assessed using project assignments and Canvas discussions.

SE 6400 - MBSE III explores more advanced capabilities of the MSOSA tool. Students use their project artifacts from MBSE 2 and create additional features and details to their system architecture model, and explore simulation and integration with other tools (e.g., Matlab Simulink and Python). These additional features, while considered more advanced modeling, can be performed concurrently with the development of their system architecture models. Additionally, this course will cover the importance of governing a system architecture model and MBSE project. Students will develop a governance plan and have an opportunity to explore modeling the plan using MSOSA. Like in the MBSE 2 course, the course project will culminate with a final update to their system architecture model, a written lessons learned report, and a presentation.

Required Courses (10 credit hours)

- SE 6380 - Model Based Systems Engineering (MBSE) and SysML **Credits: (3)**
- SE 6385 - Architecting Proposal **Credits: (1)**
- SE 6390 - Model Based Systems Engineering (MBSE) II **Credits: (3)**
- SE 6400 - Model-based Systems Engineering III **Credits: (3)**

Quality and Lean Manufacturing Post Baccalaureate Certificate

The Graduate Institutional Certificate in Quality and Lean Manufacturing prepares students to take the ASQ green belt certification exam or to go on in the MSETM program at Oklahoma State University. Contact the Department for more information.

- **Program Prerequisite:** Applicants must possess a bachelor's degree from a regionally accredited institution in an appropriate field and be working in industry.
- **Grade Requirements:** Students must receive a grade of B or better in every course.
- **Credit Hour Requirements:** 12 credit hours as specified below.
- **Program Code:** 8046PBC
- **CIPC:** 150702

Course Requirements for Graduate Certificate

Required Courses (12 credit hours)

- ETM 5913G - Six Sigma Tools I **Credits: (3)**
- ETM 5923G - Six Sigma Tools II **Credits: (3)**
- ETM 5933G - Lean Tools **Credits: (3)**
- ETM 5943G - Lean-Sigma Implementation **Credits: (3)**

Systems Engineering and Sustainable Engineering Post Baccalaureate Certificate

- **Credit Hour Requirements:** 12 credit hours as specified below.
- **Program Code:** 8096PBC
- **CIPC:** 142701

The Industry-based Post-Bachelor's Certificate in Systems Engineering and Sustainable Engineering is a launching point for gainful employment in the aerospace/manufacturing workplace, professional certification within the International Council of Systems Engineering (INCOSE), and continuing education toward a Master of Science in Systems Engineering.

Grade Requirements:

- A student's GPA for the cumulative Graduate Certificate coursework must be a minimum of 3.0.
- A student must earn a minimum of "C" in courses included within the Certificate while meeting the 3.0 GPA minimum.

Time Limit: A student is expected to complete all work within five semesters from the date of first enrollment in the certificate program. A student who fails to complete requirements within five semesters may be withdrawn and required to apply for readmission. Students exceeding this limit must submit a petition to the program requesting additional time to complete the certificate. Petitions must describe why they were unable to complete their certificate during the requisite time frame, the amount of work remaining, timeline for completion, and the term in which they expect to complete the certificate.

Admissions Requirements

Preferred Qualifications

Applicants for admission into the Master of Science in Systems Engineering program should possess a B.Sc. in engineering (EAC), engineering-technology (ETAC), or computing (CAC) from an ABET accredited program with a minimum of Calculus I and STEM Statistics. B.Sc. in any other related subject is on a case-by-case basis only. A minimum overall GPA of 3.0 is required from the undergraduate program in which the bachelor's degree is earned; a 3.3 is preferred. The program reviews the student portfolio, including bachelors program, calculus and statistics grades, rigor of courses taken (upper division), work experience, professional certifications, and participation in the systems community). Each application is reviewed on a case-by-case basis and acceptance and leveling courses are determined at the time of application review.

Leveling Courses

After being provisionally accepted, leveling courses are determined on a case-by-case basis after the student portfolio is reviewed. These leveling courses would be primarily meeting minimum math, physics, and computer science recommendations of the Systems Engineering program.

Good Academic Standing

A student in good academic standing:

- is demonstrating systems thinking and professionalism during the semester
- is taking personal responsibility and setting themselves up for success
- is making satisfactory progress toward the completion of degree requirements and is within the time limits of the program, including approved extensions
- is demonstrating an ability to succeed in the program; and
- has a cumulative grade point average of 3.0 (B) or better

Unsatisfactory Academic Standing

The program will place a notation of "below minimum academic requirements" on the academic record at the end of the term in which a student's cumulative GPA falls below a 2.0. The program may decide whether unsatisfactory academic standing may be a basis for placing a student on academic probation. A student with unsatisfactory academic standing will not be advanced and will not be awarded a graduate certificate.

Upon the recommendation of the program director, a student will be given an opportunity to correct the academic deficiency and return to satisfactory academic standing.

A student with unsatisfactory academic standing must provide documentation including: reasons for the poor academic record; explain how conditions that produced this performance have changed; and present specific plans for improvement. A student whose cumulative GPA falls below a 2.0, is not making satisfactory progress toward the degree, and is failing to succeed in the plan of studies, may be denied permission to register, required to withdraw, or dismissed from the program.

Repeating a Course

A student may repeat a course with permission of the program and course instructor. Credits for the course may not be earned beyond the limit set by guidelines of the graduate program. A student may repeat a single course once and is granted only 2 total repeat opportunities.

Courses Required (12 credit hours)

- SE 6010 - Foundation of Systems Engineering **Credits: (3)**
- SE 6370 - Requirement Engineering **Credits: (3)**
- SE 6380 - Model Based Systems Engineering (MBSE) and SysML **Credits: (3)**
- SE 6130 - Overview of Systems Engineering Processes **Credits: (3)** or
- SE 6260 - Reliability Engineering and Risk Analysis **Credits: (3)**

Master of Science

Masters of Science in Systems Engineering (MSSE)

- **Grade Requirements:** An MSSE student must complete all program courses, including electives, with a grade of "B-" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hour Requirements:** The program requires a minimum of 31 semester hours of graduate coursework.
- **Program Code:** 8103MS
- **CIPC:** 142701

Once enrolled, a student must register for at least one MSSE course each semester, except summers, until graduation. Students who fail to do so must petition for readmission into the program.

Admissions Requirements

The MSSE is competitive admission, therefore the program has a limited number of spaces. The program reviews the student portfolio, including bachelors' program, calculus and statistics grades, rigor of courses taken (upper division), work experience, professional certifications, and participation in the systems community).

Preferred Qualifications

Applicants for admission into the Master of Science in Systems Engineering program should possess a B.Sc. in engineering (EAC) or computing (CAC) from an ABET accredited program with Calculus I, Calculus II, and calculus-based statistics as a minimum. B.Sc. in any other related subject is on a case-by-case basis only. A minimum overall GPA of 3.0 is required from the undergraduate program in which the bachelor's degree is earned; a 3.3 is preferred.

Note,

- Preference given to students that have completed calculus III or equivalent (i.e., Multivariable calculus).
- Preference given to students that have completed a professional or technical writing course.
- Preference given to students that have completed an introductory course to procedural or object-oriented programming.
- Preference given to graduates of the hard sciences (Mathematics, physics, and chemistry).
- Specific industry or military experience is also considered and evaluated toward potential acceptance into the program.

- Specific Systems Engineering professional certifications are also considered and evaluated toward potential acceptance into the program

Applicants will submit:

- Completed application
- Current resume
- Academic Statement of Purpose (ASOP)
- Official transcripts from every institution of higher education attended
 - 3.0 or better in each is required
 - Equivalent course of MATH 1210 - Calculus I and MATH 1220-Calculus II or higher
 - Calculus based statistics (math or engineering), MATH 3410-Probability and Statistics I is preferred
 - B.Sc. degree from a regionally accredited institution in engineering, engineering technology, computer or a science discipline with a GPA of 3.0.
- GRE test scores are required if all previous degrees were conferred by an institution outside of the U.S.

Additional Admission Requirements for International Students

- All international students and any applicant educated outside the U.S. must demonstrate proficiency in English. For applicants for whom English is not their first language a minimum English language proficiency score is required. (TOEFL (Test of English as a Foreign Language)= 75 overall, with a minimum of 17 in each category: OR IELTS (International English Language Testing System) 6.5 overall, with a minimum of 6.0 in each category. Students with a bachelor's degree or higher from a regionally accredited (or equivalent) university in which the language of instruction was English may be exempt from English-language proficiency testing.
- All international students must complete the GRE.

Application

The application for admission to the Master of Science in Systems Engineering program must be submitted online. Official transcripts from each institution of higher education attended and all test scores must be sent directly to the WSU Department of Manufacturing & Systems Engineering. Visit MSSE website for application deadlines.

Leveling Courses

After being provisionally accepted, students who have not graduated from an ABET accredited program or have not completed college Calculus I, II, and Calculus-based statistics, must demonstrate the ability to pass the following courses

- MATH 3410 - Probability and Statistics I **(3)**
- MATH 1210 - Calculus I **(4)**
- MATH 1220-Calculus II
- Leveling courses must be completed from a regional accrediting association recognized by the U.S. Department of Education.
 - Higher Learning Commission
 - Western Association of Schools and Colleges
 - Southern Association of Colleges and School Commission on Colleges
 - Middle State Commission on Higher Education
 - New England Commission on Higher Education
 - Northwest Commission on Colleges and Universities

General Requirements

The online Master of Systems Engineering is a course-based degree with a design project.

- Minimum of 31 credits of graduate work in approved program of study
- Up to six credits may be transferred from any combination as listed in the "Transfer of Credit" section below
- Electives or course substitutions must be approved by an academic advisor
- Requirements for course-based degree:
 - 18 credits must be the foundation of Systems Engineering courses,
 - 9 credits of technical electives,
 - 4 credits of design project. SE 6500 and SE 6510

Transfer of Credit Information

The program differentiates between two types of course credit that may be transferred:

1. Graduate credits completed at another accredited institution (that is, not at Weber State University)
2. Graduate credits completed at Weber State University in another school, college, or department (i.e., School of Business or the College of Science)

Outside Institution/ Transfer of Credit Policy: No more than two 6000-level or higher graduate courses, may be transferred from another accredited university, professional society, or certification program.

Student may submit a petition for exceptions.

Weber State University Transfer of Credit Policy: No more than six credits at the 6000-level taken at Weber State University are permitted. Exception includes the Systems Foundations & Practice Certificate at Weber State University, which is approved by petition after the completion. Student may submit a petition for exceptions.

Conditions That Must Be Met to Transfer Credit:

1. Student must be fully matriculated into master's degree program (not a conditional/provisional student)
2. Student must submit formal documentation of courses, credits, syllabus, and grade.
3. All transfer credits must be approved by the graduate program which may impose minimum grade requirements and/or age limits on each credits. Student may submit a petition for exceptions.

Courses Cannot Be Transferred for Credit If:

1. A grade below 3.0 was earned.
2. Extension or continuing education courses.

Weber State University accepts transfer credit from regionally accredited colleges and universities. Listed below are the six regional accrediting associations recognized by the U.S. Department of Education.

- Higher Learning Commission
- Western Association of Schools and Colleges
- Southern Association of Colleges and School Commission on Colleges
- Middle State Commission on Higher Education
- New England Commission on Higher Education
- Northwest Commission on Colleges and Universities

Time Limit

A student is expected to complete all work within five years from the date of first enrollment in the master's program. A student who fails to complete requirements within five years may be withdrawn and required to apply for readmission. Students exceeding this limit must submit a petition to the program requesting additional time to complete the program. Petitions must describe why they were unable to complete their degree during the requisite

time frame, the amount of work remaining, timeline for completion, and the term in which they expect to complete the degree.

Students may request a leave of absence for up to two consecutive terms (fall, spring, summer), when certain life events prevent continued active participation in their degree program. Examples of leave include illness, injury, or to provide care for family or dependents.

Repeating a Course

A student may repeat a course with permission of the program and course instructor. A student may repeat a single course once and is granted only 2 total repeat opportunities.

Course Requirements for MSSE

Foundation Courses (6 courses required, minimum 18 credit hours):

- SE 6010 - Foundation of Systems Engineering **Credits: (3)**
- SE 6370 - Requirement Engineering **Credits: (3)**
- SE 6130 - Overview of Systems Engineering Processes **Credits: (3)**
- SE 6380 - Model Based Systems Engineering (MBSE) and SysML **Credits: (3)**
- SE 6020 - Engineering Project and Program Management **Credits: (3)**
- SE 6140 - Design for Operational Feasibility **Credits: (3)**

Elective Courses (3 courses required, minimum 9 credit hours):

- SE 6260 - Reliability Engineering and Risk Analysis **Credits: (3)**
- SE 6320 - Simulation Modeling and Engineering Optimization: Methods/Applications **Credits: (3)**
- SE 6330 - Weapon Engineering and Weapon Effectiveness **Credits: (3)**
- SE 6340 - Systems Thinking and Dynamics **Credits: (3)**
- SE 6350 - Organizational Systems **Credits: (3)**
- SE 6360 - System Logistics: Ensuring a System of Systems Approach **Credits: (3)**
- SE 6390 - Model Based Systems Engineering (MBSE) II **Credits: (3)**
- SE 6400 - Model-based Systems Engineering III **Credits: (3)**
- SE 6520 - System Design and Operational Analysis **Credits: (3)**
- SE 6900 - Special Topics **Credits: (1-4)**
- CS 6610 - Computer Architecture **Credits: (3)**

Note: The above list consists of suggested electives. This list is not exhaustive. If you find a graduate-level technical course that pertains to your professional goals and/or the systems engineering field, please contact the MSSE Program Director to check if it may apply as an elective. All requests for non-MSEE elective courses must be submitted 30 days before the First Day of class (S) as listed on the academic calendar. Approval to register for a non-MSEE graduate course is determined by the department offering the course.

Design Project (4 credit hours)

MSSE Students are required to complete a system engineering design project that demonstrates proficiency in research, design, analysis, implementation, testing and documentation.

SE 6500 and SE 6510 is required for a project. SE 6500 is a pre-req for SE 6510. Students must be enrolled SE 6510 at the time of their final design review.

- SE 6500 - Systems Engineering Project Overview **Credits: (1)**
And
- SE 6510 - Design Project **Credits: (3)**

Department of Mechanical Engineering

Department Chair: Dr. Daniel J. Magda

Location: Noorda Engineering Building, Room 142

Telephone Contact: Sheri Eddington 801-626-6305

Website: weber.edu/mechanical/engineering

Professors: Daniel J. Magda, Dustin Birch; **Associate Professor:** Tariq Arif; **Assistant Professors:** Randy Hurd, Bharath Babu Nunna, An Ho, Kirk Stoery; **Instuctor:** Randall Kent, Spencer Petersen

Advisor: Tanya Scott, 801-626-6877, Angela Payan, 801-626-6369

Mechanical Engineering Courses

Associate of Applied Science

Mechanical Engineering Technology (AAS)

- **Grade Requirements:** A grade of "C" or better in all major courses and support courses is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher. Also refer to the general grade requirements for graduation in the Degree Requirements.
- **Credit Hour Requirements:** A total of 63 credits is required, 20 of which are within the Manufacturing and Mechanical Engineering Technology Department. Transfer students are required to take a minimum of 20 credit hours at Weber State University.
- **Program Code:** 8002AAS
- **CIPC:** 150805

Advisement

All Mechanical Engineering Technology students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6305 for the name of your advisor and to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. Computer & Information Literacy as defined in this catalog is also required for the AAS degree. Consult with your advisor for specific general education guidelines.

Course Requirements for the AAS Degree

MET Core and Support Courses Required (47 credit hours)

- MET 1000 - Introduction to Mechanical Engineering Technology **Credits: (3)**
- MFET 2310 - Statics for Engineering Technology **Credits: (3)**
- MFET 2320 - Mechanics of Materials **Credits: (3)**
- MFET 2360 - Manufacturing Processes and Materials **Credits: (3)**
- EET 1850 - Industrial Electronics **Credits: (4)**
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)**
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- PDD 1010 - Introduction to Engineering & Technical Design (Solidworks) **Credits: (3)**
- MATH 1040 QL - Introduction to Statistics **Credits: (3)**
- MATH 1080 QL - Pre-calculus **Credits: (5)**
- MATH 1210 - Calculus I **Credits: (4)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- ENGR 2300 - Thermodynamics **Credits: (3)**
- PDD 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD **Credits: (3)**

Other General Education Support Courses Required (6 credit hours)

- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- ECON 1010 SS - Economics as a Social Science **Credits: (3)**

Associate of Pre-Engineering

Pre-Engineering (APE)

- **Grade Requirements:** A minimum overall GPA of 2.00 is required.
- **Credit Hour Requirements:** A minimum of 57 credit hours is required. A minimum of 20 hours in residence (for transfer students).
- **Program Code:** 8042APE
- **CIPC:** 140101

The Associate of Pre-Engineering (APE) degree at Weber State University offers the first two years of a professional engineering curriculum. The degree is designed to prepare students for transfer into an engineering program at other universities in Utah, or throughout the United States, that offer four-year engineering degrees. Because many pre-engineering graduates will transfer to the University of Utah or Utah State University, the WSU Pre-Engineering program has official transfer agreements with these two schools.

In planning a program of study, students should be aware that most pre-engineering courses have mathematics and science prerequisites and that improper scheduling of courses can lengthen the time required to complete the degree. Students should also be aware that requirements may vary according to the university to which the student wishes to

transfer. Students are therefore strongly encouraged to meet with the Pre-Engineering coordinator prior to beginning their program.

The Associate of Pre-Engineering degree has fewer general education credit hours than the Associate of Science (AS) degree. Therefore, in order for a student to obtain a Bachelor of Science (BS) degree in engineering, he or she will have to take additional general education courses at WSU and/or the receiving university. Alternatively, a student may earn the AS degree, but this degree may take longer than the APE degree because it contains not only pre-engineering courses but also a full complement of general education courses. The AS degree has the potential benefit, however, of satisfying all the general education requirements at either the University of Utah or Utah State University.

Advisement

All Pre-Engineering students are strongly encouraged to meet with the Pre-Engineering coordinator at the beginning of the program and at least once annually for course and program advisement. Pre-Engineering students are also encouraged to obtain advisement from the applicable engineering department at the receiving university.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). No special admission or application requirements are needed for this program. However, students entering the Pre-Engineering program are expected to have taken college preparatory mathematics and physical science courses in high school. The standard entry level mathematics course for pre-engineering majors is MATH 1210 - Calculus I. The prerequisite for MATH 1210 is MATH 1080 QL - Pre-calculus, or MATH 1050 QL - College Algebra plus MATH 1060 QL - Trigonometry, or placement through examination. Students who are not ready to take MATH 1210 upon entering the Pre-Engineering program should consult with the Pre-Engineering coordinator, who will recommend remedial courses that will prepare the student for calculus, physics and engineering courses.

Major Course Requirements for APE Degree

General Education Core Requirements (15 credit hours)

1. Composition (3 credit hours)

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**

2. American Institutions (3 credit hours)

- POLS 1100 AI - American National Government **Credits: (3)** or
- HIST 1700 AI - American History **Credits: (3)** or
- ECON 1740 AI - Economic History of the United States **Credits: (3)**

3. Information Literacy (.5 to 1 credit hours)

Refer to the Information Literacy requirements listed under the General Requirements section of this catalog. The credit hours for this requirement do not count toward the 57 credit hour total for this degree.

4. General Education Breadth Requirements (9 credit hours)

Select 9 credit hours – 3 credit hours from Humanities (HU), 3 credit hours from Creative Arts (CA) and 3 credit hours from Social Sciences (SS) (a list of courses for each area appears under the General Education section of this catalog).

Pre-Engineering Core Requirements (20 credit hours)

- ENGR 1000 - Introduction to Engineering **Credits: (2)**
- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** (w lab)
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)** (w lab)

Engineering Specialty Courses (22 credit hours minimum)

Engineering specialty courses are those that are required for specific engineering disciplines at the receiving universities. With the assistance of the Pre-Engineering coordinator, students should take courses that apply to their particular engineering major at the university to which they plan to transfer. The specialty courses listed below apply generally, but do not constitute a list of specific course requirements for any particular receiving university. Engineering specialty course requirements for the University of Utah and Utah State University may be obtained from the Pre-Engineering coordinator or the applicable engineering department at these institutions.

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)**
- CHEM 2320 - Organic Chemistry II **Credits: (4)**
- CHEM 3070 - Biochemistry I **Credits: (3)**

- CS 1023 - Selected Programming Language **Credits: (4)**
- CS 1030 - Foundations of Computing **Credits: (4)**
- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2130 - Computational Structures **Credits: (4)**
- CS 2250 - Structured Computing in a Selected Language **Credits: (4)**

- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**
- CS 2810 - Computer Architecture/Organization **Credits: (4)**
- PDD 1010 - Introduction to Engineering & Technical Design (Solidworks) **Credits: (3)**

- ENGR 1040 - Computer Aided Design **Credits: (3)**
- ENGR 2010 - Statics **Credits: (3)**
- ENGR 2030 - Dynamics **Credits: (3)**
- ENGR 2140 - Mechanics of Materials **Credits: (3)**
- ENGR 2160 - Materials Science and Engineering **Credits: (3)**
- ENGR 2165 - Materials Science and Engineering Laboratory **Credits: (1)**
- ECE 2210 - Electrical Engineering for Non-majors **Credits: (4)**
- ENGR 2230 - Introduction to Land Surveying **Credits: (3)**
- ENGR 2300 - Thermodynamics **Credits: (3)**

- ECE 1270 - Introduction to Electrical Circuits **Credits: (4)**
- ECE 1400 - Fundamentals of Engineering Computing **Credits: (4)**
- ECE 2260 - Circuits and Signals **Credits: (4)**
- ECE 2700 - Digital Circuits **Credits: (4)**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)** and
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2250 - Linear Algebra and Differential Equations **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- EEN 1200 - Introduction to Energy Engineering **Credits: (2)**
- EEN 2600 - Engineering Economics **Credits: (3)**

Bachelor of Science

Energy Engineering (BS)

- **Program Prerequisites:** ENGL 1010 or placement into ENGL 2010; MATH 1050 plus 1060 or 1080, or placement into MATH 1210; CHEM 1200 or permission from the Chemistry Department to take CHEM 1210.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in all EEN and support courses is required for this major (a grade of "C-" is not acceptable). Students must have a minimum cumulative GPA of 2.5 to graduate.
- **Credit Hour Requirements:** A total of 127 credit hours is required for graduation.
- **Program Code:** 8095BS
- **CIPC:**149999

Energy Engineering is the branch of engineering that deals with energy efficiency, power generation, energy services, facility management, environmental compliance, sustainable energy and renewable energy. One of the more recent engineering fields to emerge, energy engineering combines the fields of mechanical engineering, electrical engineering, environmental science and economics. The main responsibility of energy engineers is to find the most efficient, sustainable and cost-effective ways to operate buildings, power plants and manufacturing processes. The Energy Engineering Program consists primarily of courses in the Mechanical Engineering Program, bolstered by courses in Electrical Engineering. Some new courses in energy related topics are also an integral part of the program. In the senior year, students complete a two-semester capstone project that integrates their course work. The program prepares graduates to enter the energy engineering industry or to pursue graduate studies in the discipline.

Program Educational Objectives

Educational objectives are the accomplishments that the program prepares graduates to achieve. The educational objectives of the Energy Engineering Program are to produce graduates who are able to:

1. Be employed in an engineering or other physical science/technology field in a position that utilizes the curriculum knowledge and skills developed in the Energy Engineering Program.

2. Use their Energy Engineering education as a stimulus for personal and professional growth to pursue advanced degrees in engineering or other fields.
3. Communicate with and work effectively and ethically with people of diverse backgrounds.
4. Be independent and critical thinkers who identify problems and develop effective solutions through creativity and the application of knowledge.

Accreditation

The Weber State University Energy Engineering Program will apply for accreditation by the Engineering Accreditation Commission (EAC) of ABET in October 2025.

Enrollment and Graduation

The current student enrollment is 20, with the program graduating 4 students so far.

Advisement

All Energy Engineering students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department administrative assistant at 801-626-6305 for the name of your advisor and to schedule an appointment.

Use Grad MAPs to plan your degree

Admission Requirements

Refer to "Program Prerequisites" above. See the department administrative assistant to declare the major.

General Education

Refer to Degree Requirements in the WSU catalog for BS degrees. Consult with your advisor and refer to the major requirements below for specific general education courses required.

Program Learning Outcomes

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and social contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Required Mechanical Engineering and Energy Engineering Courses (43 credit hours)

- ENGR 1000 - Introduction to Engineering **Credits: (2)**
- ENGR 2010 - Statics **Credits: (3)**
- ENGR 2030 - Dynamics **Credits: (3)**
- ENGR 2140 - Mechanics of Materials **Credits: (3)**
- ENGR 2160 - Materials Science and Engineering **Credits: (3)**
- ENGR 2165 - Materials Science and Engineering Laboratory **Credits: (1)**
- ECE 2210 - Electrical Engineering for Non-majors **Credits: (4)**
- ENGR 2300 - Thermodynamics **Credits: (3)**
- ME 3040 - Dynamic System Modeling **Credits: (3)**
- ME 3050 - Machine Design **Credits: (3)**
- ME 3060 - Control Systems **Credits: (3)**
- ME 3300 - Fluid Mechanics **Credits: (3)**
- ME 4000 - Heat Transfer **Credits: (3)**
- ME 4050 - Thermal-Fluid Laboratory **Credits: (1)**
- ME 4990 - Seminar in Mechanical Engineering **Credits: (1)**
- ECE 3510 - Power Systems **Credits: (4)**

Required Energy Engineering Courses (19 credit hours)

- EEN 1200 - Introduction to Energy Engineering **Credits: (2)**
- EEN 2600 - Engineering Economics **Credits: (3)**
- EEN 3000 - Design, Ethics & Entrepreneurship **Credits: (3)**
- EEN 3200 - Sustainable Energy **Credits: (3)**
- EEN 4300 - Energy Auditing **Credits: (2)**
- EEN 4100 - Senior Project I **Credits: (3)**
- EEN 4200 - Senior Project II **Credits: (3)**

Elective Energy Engineering Courses (6 credit hours)

Select 6 credit hours from the following 4000 level courses:

- EEN 4420 - Renewable Energy Systems Design I **Credits: (3)**
- EEN 4430 SUS - Renewable Energy Systems Design II **Credits: (3)**
- EEN 4440 - Introduction to Energy Systems **Credits: (3)**
- EEN 4450 - Electric Vehicles Engineering **Credits: (3)**
- EEN 4460 - Energy Management **Credits: (3)**
- EEN 4470 SUS - Energy and Environmental Issues **Credits: (3)**
- EEN 4480 - Energy and Legal Issues **Credits: (3)**
- ME 4500 - Heating, Ventilating and Air-Conditioning **Credits: (3)**
- ECE 5510 - Advanced Power Systems **Credits: (3)**

Required Support Courses (24 credit hours)

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2250 - Linear Algebra and Differential Equations **Credits: (4)**

- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- MFET 2500 - Process Automation I **Credits: (1)** and
- MFET 2510 - Process Automation I Lab **Credits: (2)**

Required General Education Courses (35 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- LIBS 1704 - Information Navigator **Credits: (1)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- Additionally, select three credits of (AI) American Institutions, six credits of (SS/DV) Social Science/Diversity, and three credits of (LS/DV) Life Science/Diversity.

Mechanical Engineering (BS)

- **Program Prerequisite:** Not required.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in all ME and support courses is required for this major (a grade of "C-" is not acceptable). Students must have a minimum cumulative WSU GPA of 2.5 to graduate.
- **Credit Hour Requirements:** A total of 127 credit hours is required for graduation.
- **Program Code:** 8082BS
- **CIPC:** 141901

Mechanical Engineering is the branch of engineering that deals with the design and development of mechanical devices and systems across a wide spectrum of industries such as transportation, aerospace, biotechnology, electronics, robotics, power generation, renewable energy, environmental control and manufacturing. The Mechanical Engineering Program offers courses in engineering mechanics, materials, thermal-fluid sciences, instrumentation and measurements and manufacturing. In the senior year, students complete a two-semester capstone project that integrates their course work. The program prepares graduates to enter engineering industry or to pursue graduate studies in the discipline.

Mission Statement:

Educate and prepare Mechanical Engineering students for successful careers. This is accomplished by the program educational objectives.

Program Educational Objectives

1. Be employed in an engineering or other physical science/technology field in a position that utilizes the curriculum knowledge and skills developed in the Mechanical Engineering program.
2. Use their mechanical engineering education as a stimulus for personal and professional growth to pursue advanced degrees in engineering or other fields.
3. Engage students in activities to produce graduates who communicate and work effectively and ethically with people of diverse backgrounds.
4. Be independent and critical thinkers who identify problems and develop effective solutions through creativity, and the application of knowledge.

ABET ME Student Learning Outcomes are:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Enrollment and Graduation

The current student enrollment is 464 with the program graduating 144 students so far.

Accreditation

The Weber State University Mechanical Engineering program is accredited by the Engineering Accreditation Commission (EAC) of ABET.

Advisement

All Mechanical Engineering students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626-6898 for the name of your advisor and to schedule an appointment. Individual student records are accessible through the WSU Home Page.

Admission Requirements

See an academic advisor for the College of Engineering, Applied Science and Technology to declare your program of study (major). The program consists of two parts, a pre-professional program and a professional program.

Pre-professional Program

To enter the pre-professional program, students must have enrolled or have all the necessary prerequisites to enroll in MATH 1210 - Calculus I, ENGL 1010 EN1 - Introductory College Writing, and CHEM 1230 PS - Engineering Chemistry.

The pre-professional program consists of the following courses:

ENGR 1000, ENGR 2010, ENGR 2030, ENGR 2140, ENGR 2160, ECE 2210, ENGR 2300, MATH 1210, MATH 1220, MATH 2210, MATH 2250, PHYS 2210, PHYS 2220, CHEM 1230.

Professional Program

Students will be allowed to continue in the mechanical engineering professional program, which consists of junior and senior courses, if they have achieved a minimum cumulative GPA of 2.80 in the pre-professional program.

Students who have not achieved this GPA standard should consult with the mechanical engineering program coordinator about which pre-professional courses to repeat.

General Education

Refer to Degree Requirements or Bachelor of Science degrees. Consult with your advisor and refer to the major requirements below for specific general education courses required.

Major Course Requirements for ME BS Degree

Mechanical Engineering Required Courses (50 credit hours)

- ENGR 1000 - Introduction to Engineering **Credits: (2)**
- ENGR 2010 - Statics **Credits: (3)**
- ENGR 2030 - Dynamics **Credits: (3)**
- ENGR 2140 - Mechanics of Materials **Credits: (3)**
- ENGR 2160 - Materials Science and Engineering **Credits: (3)**
- ENGR 2165 - Materials Science and Engineering Laboratory **Credits: (1)**
- ECE 2210 - Electrical Engineering for Non-majors **Credits: (4)**
- ENGR 2300 - Thermodynamics **Credits: (3)**
- ME 3040 - Dynamic System Modeling **Credits: (3)**
- ME 3050 - Machine Design **Credits: (3)**
- ME 3060 - Control Systems **Credits: (3)**
- ME 3300 - Fluid Mechanics **Credits: (3)**
- ME 3350 - Engineering Computing **Credits: (2)**
- ME 3500 - Numerical Methods for Engineering **Credits: (3)**
- ME 4000 - Heat Transfer **Credits: (3)**
- ME 4050 - Thermal-Fluid Laboratory **Credits: (1)**
- ME 4100 SUS - Senior Project I **Credits: (3)**
- ME 4200 SUS - Senior Project II **Credits: (3)**
- ME 4990 - Seminar in Mechanical Engineering **Credits: (1)**

Mechanical Engineering Elective Courses (9 credit hours)

Select credit hours from the following 3000 and 4000 level courses:

- ME 4150 - Vibrations **Credits: (3)**
- ME 4250 - Finite Element Analysis **Credits: (3)**
- ME 4300 - Material Failure Analysis **Credits: (3)**
- ME 4350 - Intermediate Mechanics of Materials **Credits: (3)**
- ME 4400 - Aerodynamics **Credits: (3)**
- ME 4440 - Compressible Fluid Flow **Credits: (3)**
- ME 4450 - Aerospace Propulsion **Credits: (3)**
- ME 4500 - Heating, Ventilating and Air-Conditioning **Credits: (3)**
- ME 4550 - Robotics **Credits: (3)**
- ME 4600 - Intermediate Thermal-Fluids **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)**

Required Support Course (minimum of 33 credit hours)

- PDD 1010 - Introduction to Engineering & Technical Design (Solidworks) **Credits: (3)**
- MSE 1210 - Metal Processing and Joining for Engineers **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)** or
- PS 3250 - Business Communication **Credits: (3)**
- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**

- MATH 2250 - Linear Algebra and Differential Equations **Credits: (4)**
or both
- MATH 2270 - Elementary Linear Algebra **Credits: (3)** and
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**

Required General Education Courses (34 credit hours)

- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
prerequisite is ENGL 1010 Introductory College Writing (3) or placement.
- American Institutions (AI) **Credits: (3)**
- Information Literacy **Credits: (.5-1)***
- Humanities and Creative Arts (HU/CA) **Credits: (9)**
- Social Science/Diversity (SS/DV) **Credits: (3)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- Life Science (LS) **Credits: (3)**
****Information Literacy not included in 34 credit hour total***

- CHEM 1230 PS - Engineering Chemistry **Credits: (4)**

- CHEM 1235 - Engineering Chemistry Lab **Credits: (1)**

Additional Mechanical Engineering courses (not required however these need departmental approval)

- ME 4800 - Individual Research Problems **Credits: (1-3)**
- ME 4830 - Readings in Mechanical Engineering **Credits: (1-3)**
- ME 4890 - Cooperative Work Experience **Credits: (1-3)**
- ME 4900 - Special Topics **Credits: (1-3)**
- ME 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

Mechanical Engineering Technology (BS)

- **Program Prerequisite:** Complete the requirements for the Mechanical Engineering Technology (AAS).

- **Minor:** Not Required.
- **Grade Requirements:** A grade of "C" or better in all major courses, support courses, and technical electives is required (a grade of "C-" is not acceptable) in addition to an overall GPA for all courses of 2.00 or higher. Also refer to the general grade requirements for graduation in the Degree Requirements section of this catalog.
- **Credit Hour Requirements:** A total of 124 credit hours is required for graduation. A total of 40 upper division credits is also required (courses numbered 3000 and above). Transfer students are required to take a minimum of 30 credit hours at Weber State University.
- **Program Code:** 8002BS
- **CIPC:** 150805

Advisement

All Mechanical Engineering Technology students are required to meet with their faculty advisor at least annually for course and program advisement. Please call the department secretary at 801-626- 6305 for the name of your advisor and to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). Refer to the Program Prerequisite listed above. There are no additional special admission or application requirements for this program.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Consult with your advisor for specific general education guidelines.

Program Learning Outcomes

- Demonstrate appropriate mastery of knowledge, skills and modern tools in the discipline
- Apply current knowledge of managing engineering and technology
- Conduct, analyze and interpret experiments and apply experimental results to improve processes
- Apply creativity to design of systems, components and processes
- Function effectively on teams
- Identify, analyze and solve technical problems
- Communicate effectively
- Recognize the needs for and possess the ability to pursue life long learning
- Understand professional, ethical and social responsibilities
- Respect diversity and recognize professional, societal and global issues
- Have a commitment to quality, timelines and continuous improvement

Major Course Requirements for BS Degree

To be taken in addition to the courses required for the Mechanical Engineering Technology (AAS)

Mechanical Engineering Technology Courses Required (31 credit hours)

- MET 3050 - Dynamics for Engineering Technology **Credits: (3)**

- MET 3150 - Engineering Technology Materials **Credits: (3)**
- MET 3300 - Computer Programming Applications of Mechanical Engineering Technology **Credits: (3)**
- MET 3400 - Machine Design for Engineering Technology **Credits: (3)**
- MET 3500 - Mechanical Measurements and Instrumentation **Credits: (3)**
- MET 3700 - Testing and Failure Analysis **Credits: (3)**
- MET 4200 - Mechanical Design with FEA **Credits: (3)**
- MET 4500 SUS - Senior Project I **Credits: (3)**
- MET 4510 SUS - Senior Project II **Credits: (3)**
- MET 4650 - Thermal Science **Credits: (3)**
- MET 4990 - Seminar in Mechanical Engineering Technology **Credits: (1)**

Support Courses Required (9 credit hours)

- MFET 1210 - Machining Principles Lecture/Lab I **Credits: (3)**
- MFET 3340 - Applied Fluid Power **Credits: (2)** and
- MFET 3340L - Applied Fluid Power Lab **Credits: (1)**
- PS 3250 - Business Communication **Credits: (3)** or
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**

Technical Electives (9 credit hours)

A minimum of 9 credit hours of technical electives chosen from the following list are required. At least 3 credit hours must be upper division.

- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**
- MET 4300 - Heating, Ventilating & Air Conditioning **Credits: (3)**
- MET 4800 - Individual Research in Mechanical Engineering Technology **Credits: (1-3)**
- MET 4890 INT - Cooperative Work Experience **Credits: (1-3)**
- MFET 2410 - Quality Concepts and Statistical Applications **Credits: (3)**
- MFET 2440 - Computer Numeric Control (CNC) in Manufacturing **Credits: (2)** and
- MFET 2440L - CNC in Manufacturing Lab **Credits: (1)**
- MFET 2500 - Process Automation I **Credits: (1)** and
- MFET 2510 - Process Automation I Lab **Credits: (2)**
- MFET 2860 - Plastics/Composites Materials & Properties **Credits: (3)**
- MFET 3010 - Tool Design **Credits: (3)**
- MFET 3350 - Plastic and Composite Manufacturing **Credits: (2)** and
- MFET 3350L - Plastic and Composite Manufacturing Lab **Credits: (2)**
- MFET 3460 - Engineering Design using Solid Modeling **Credits: (2)** and

- MFET 3460L - Engineering Design using Solid Modeling Lab **Credits: (1)**
- MFET 3750 - Welding Metallurgy I **Credits: (2)**
- MFET 3820 - Nondestructive Testing **Credits: (3)**
- MFET 3830 - Reinforced Plastics/Advanced Composite Lecture/Lab **Credits: (3)**
- MFET 4310 - Corrosion and Corrosion Control **Credits: (2)**
- MFET 4580 - Process Automation II & Robotics **Credits: (1)** and
- MFET 4585 - Process Automation II Lab **Credits: (2)**
- MSE 3700 - Manufacturing Systems I **Credits: (3)**
- MSE 3850 - Statistical Process Control and Reliability **Credits: (3)**
- MSE 3910 - Six Sigma Methods and Tools in Manufacturing **Credits: (3)**
- PDD 2460 - Product Design Fundamentals Using 3D CAD **Credits: (3)**
- PDD 2650 - Product Design & Development **Credits: (3)**
- PDD 3470 - Introduction to CATIA V5 **Credits: (3)**
- PDD 4470 - Advanced CATIA V5 **Credits: (3)**
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**

Note:

The following courses require pre-requisites that are not covered in the MET Core Requirements: MATH 2210, MATH 2270, MATH 2280, MFET 3010, MFET 4580 and MFET 4585, MSE 3910, PDD 2650, PDD 3470, PDD 4470.

Other Required Courses (12 credit hours)

- Gen Ed Humanities Elective **(3)**
- Gen Ed Social Science Diversity Elective **(3)**
- Gen Ed Life Science Elective **(3)**
- Gen Ed American Institutions Elective **(3)**

Department of Professional Sales

Department Chair: Nicole Flink

Location: Technical Education Building, Room 101

Telephone Contact: Wendi Birch 801-626-6913

Professors: Tim Border, Jo Ellen Jonsson; **Associate Professors:** Alex Lawrence, Blake Nielson; **Assistant**

Professors: Brock Adams, Nicole Flink; **Instructor:** Mikelle Barberi-Weil, Ryan McKeehan, Paige Young

The Department of Professional Sales offers associate of applied science degrees in the areas of Sales & Merchandising Technology and bachelor's degrees in Professional Sales.

Sales and Merchandising

The sales and merchandising program is designed to prepare people for employment in selling at all levels of distribution and merchandising and middle management areas of retailing. Occupational opportunities include positions as salespeople (auto, insurance, real estate, etc.), middle management areas of sales managers and wholesale managers, retail salespeople, departmental managers, fashion coordinators, buyers, sales promotion

managers, personnel directors, and display people. Students supplement their course work with practical on-the-job training in local business establishments, receiving college credit for their work experience.

Professional Sales

This program prepares individuals to serve as agents or sales representatives in selling products/services to other businesses, plants, professionals, and public and private institutions. This program offers a professional sales emphasis tailored toward specific fields such as:

Manufacturing Rep	Communication System Rep
Pharmaceutical Rep	Medical Equipment Rep
Financial Planning	Real Estate
Technology Sales	Financial Services Marketing
Wholesale Rep	Broker
Electronic Rep	Small Business Owner

Associate of Applied Science

Sales and Merchandising (AAS)

- **Program Prerequisite:** An interview with the program advisor is necessary prior to acceptance into the program.
- **Grade Requirements:** An overall GPA of 2.00 or "C."
- **Credit Hour Requirements:** A total of 63 credit hours is required.
- **Assessment Requirements:** Students will be required to complete certain assessment instruments as part of the overall requirements for receiving their associate's degree. Please see your advisor or your department for specific information regarding assessment.
- **Program Code:** 8025AAS
- **CIPC:** 521803

Advisement

All Sales and Merchandising students are required to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6913 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. COMM 2110 is a required support course and will also be applied toward general education requirements. Computer and Information Literacy as defined in this catalog is also required for the AAS degree.

Program Learning Outcomes

- Basic Selling Techniques: Demonstrate effective selling skills.
- Contract and Sales Negotiations: Apply negotiation techniques to selling situations.
- Customer Profiling: Identify and profile the various selling styles.
- Sales Proposal Writing: Apply the principles of proposal writing.
- Team Building Skills: Development of the interpersonal and leadership skills to work effectively in teams.
- Customer Service Skills: Identify successful techniques for working with customers in business situations.
- Supervision Skills: Practical application of supervisory skills including choosing, organizing, training and evaluating.
- Sales Presentation Skills: Identifying and using the principles and practices of professional sales consultants.
- Interpersonal Relationship Skills: Identifying and demonstrating interpersonal relationship skills.
- Legal Compliance and Sales Ethics: Applying the principles, techniques and analysis of ethics and the law in the sales and service profession.
- Planning and organization skills: Apply the principles of organization and planning to all facets of the sales and service profession.
- Technology Skills

Major Course Requirements for AAS Degree

Courses Required (15 credit hours)

- PS 1143 - Principles of Selling and Persuasion **Credits: (3)**
- PS 1303 - Sales Channels **Credits: (3)**
- PS 2603 - Advanced Selling Techniques **Credits: (3)**
- PS 3203 - Customer Service Techniques **Credits: (3)**
- PS 3563 - Principles of Sales Supervision **Credits: (3)**

Support Courses (30 credit hours)

- Select 30 credit hours from any of the PS Department courses.

Note:

Computer and Information Literacy as defined in this catalog is also required.

Bachelor of Science

Professional Sales (BS)

- **Program Prerequisite:** An interview with a faculty member is necessary prior to acceptance into the program.

- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable) in addition to an overall GPA of 2.00 or higher.
- **Credit Hour Requirements:** A total of 120 hours is required for graduation; a minimum of 51 of these is required within the major. A total of 40 upper division credit hours is required (courses number 3000 and above); a minimum of 32 of these is required within the major.
- **Program Code:** 8065BS
- **CIPC:** 521804

Advisement

All Professional Sales students are required to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6913 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Program Learning Outcomes

- **Basic Selling Techniques:** Demonstrate effective selling skills.
- **Contract and Sales Negotiations:** Apply negotiation techniques to selling situations.
- **Customer Profiling:** Identify and profile the various selling styles.
- **Sales Proposal Writing:** Apply the principles of proposal writing.
- **Team Building Skills:** Development of the interpersonal and leadership skills to work effectively in teams.
- **Customer Service Skills:** Identify successful techniques for working with customers in business situations.
- **Business Math Skills:** Apply the basic principles of business math: markup, cost of goods sold, profit and loss statement, merchandise plans, pricing techniques, etc.
- **Supervision Skills:** Practical application of supervisory skills including choosing, organizing, training and evaluating.
- **Supervised Sales Experience:** The practical use of program skills and applying them to the workplace.
- **Sales Presentation Skills:** Identifying and using the principles and practices of professional sales consultants.
- **Interpersonal Relationship Skills:** Identifying and demonstrating interpersonal relationship skills.
- **Legal Compliance and Sales Ethics:** Applying the principles, techniques and analysis of ethics and the law in the sales and service profession.
- **Planning and organization skills:** Apply the principles of organization and planning to all facets of the sales and service profession.

Major Course Requirements for BS Degree

Courses Required (51 credit hours)

- PS 1143 - Principles of Selling and Persuasion **Credits: (3)**
- PS 1303 - Sales Channels **Credits: (3)**
- PS 1401 - Introduction to Sales and Service Technology **Credits: (1)**
- PS 2603 - Advanced Selling Techniques **Credits: (3)**
- PS 3103 - Sales Personalities and Profiles **Credits: (3)**
- PS 3203 - Customer Service Techniques **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**
- PS 3303 - Technology in Sales **Credits: (3)**
- PS 3363 - Contract and Sales Negotiation Techniques **Credits: (3)**
- PS 3503 - Sales Planning and Forecasting **Credits: (3)**
- PS 3563 - Principles of Sales Supervision **Credits: (3)**
- PS 3702 - Developing Team Leadership Skills **Credits: (2)**
- PS 3803 - Sales Proposals **Credits: (3)**
- PS 3903 - Sales Presentation Strategies and Techniques **Credits: (3)**
- PS 4203 - Ethical Sales and Service **Credits: (3)**
- PS 4610 INT - Senior Project I **Credits: (3)**
- PS 4620 INT - Senior Project II **Credits: (3)**
- PS 4993 - Sales Career Seminar **Credits: (3)**

Support Course Electives (minimum 24 credit hours)

Select from the following or other classes approved by the department adviser.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- ATTC 3520 - Fleet Management **Credits: (3)**
- ATTC 3620 - Automotive Business Practices **Credits: (3)**
- BSAD 1010 - Introduction to Business **Credits: (3)**
- BSAD 3000 - Small Business Management **Credits: (3)**
- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- CHF 1500 SS/CC - Human Development **Credits: (3)**
- FAM 2100 - Family Resource Management **Credits: (3)**
- CHF 2400 SS/CC - Family Relations **Credits: (3)**
- FAM 3150 - Consumer Rights and Responsibilities **Credits: (3)**
- FAM 4400 - The Family in Stress **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3850 - Advertising **Credits: (3)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- GERT 3120 - Aging: Adaptation and Behavior **Credits: (3)**
- GERT 4650 - Retirement: Adjustment/Planning **Credits: (3)**
- ID 1010 CA - Introduction to Interior Design **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- PS 1403 - Introduction to Customer Care **Credits: (3)**

- PS 1503 - Introduction to Fashion Merchandising **Credits: (3)**
- PS 1890 INT - Work Experience **Credits: (1-3)**
- PS 2182 - Credit and Collection Methods **Credits: (2)**
- PS 2383 - Retail Merchandising and Buying Methods **Credits: (3)**
- PS 2443 - Advertising Methods **Credits: (3)**
- PS 2703 - Internet Sales and Service **Credits: (3)**
- PS 2890 INT - Work Experience II **Credits: (1-3)**
- PS 2903 - Professional Selling Methodologies **Credits: (3)**
- PS 2991 - Sales/Service Technology Seminar **Credits: (1-3)**
- PS 3003 - Sales Development **Credits: (3)**
- PS 3703 - Professional Sales Simulations **Credits: (3)**
- PS 4830 - Directed Readings **Credits: (1-3)**
- PS 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- PSY 2000 SS/CC - The Psychology of Human Relationships **Credits: (3)**
- PSY 3000 - Child Psychology **Credits: (3)**
- PSY 3100 - Psychology of Diversity **Credits: (3)**
- PSY 3460 - Social Psychology **Credits: (3)**
- PSY 3510 - Industrial and Organizational Behavior **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- SOC 2600 - Families in Society **Credits: (3)**
- WEB 2080 - Database Applications **Credits: (1)**
- WEB 3070 - Advanced Spreadsheet Applications **Credits: (1)**
- WEB 3090 - Digital Presentations **Credits: (2)**
- WEB 2220 - Digital Publishing **Credits: (3)**
- WEB 3400 - LAMP Stack Web Development **Credits: (3)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Professional Sales (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** A grade of "C" or better in all courses.
- **Credit Hour Requirements:** A minimum of 18 credit hours.
- **Program Code:** 8065
- **CIPC:** 521804

Course Requirements for BIS

Professional Sales Courses Required (6 credit hours)

- PS 1143 - Principles of Selling and Persuasion **Credits: (3)**
- PS 2603 - Advanced Selling Techniques **Credits: (3)**

Additional Professional Sales Electives (12 credit hours)

Choose any 4 of the following courses

- PS 3103 - Sales Personalities and Profiles **Credits: (3)**
- PS 3203 - Customer Service Techniques **Credits: (3)**
- PS 3303 - Technology in Sales **Credits: (3)**
- PS 3363 - Contract and Sales Negotiation Techniques **Credits: (3)**
- PS 3563 - Principles of Sales Supervision **Credits: (3)**
- PS 3803 - Sales Proposals **Credits: (3)**
- PS 3903 - Sales Presentation Strategies and Techniques **Credits: (3)**

Minor

Sales Minor

Professional Sales (Minor)

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor.
- **Credit Hour Requirements:** A total of 15 credit hours required.
- **Program Code:** Professional Sales (8065)
- **CIPC:** Professional Sales (521804)

This program offers students who major in another field the option to obtain a minor in one of the areas in Professional Sales. Course options are available for substitution or addition to the recommended courses should the student feel a need for a more specific or concentrated minor emphasis. Check with the PS Department for approval of substitute courses.

Course Requirements for Professional Sales Minor (minimum of 15 credit hours)

- PS 1143 - Principles of Selling and Persuasion **Credits: (3)**
- PS 1303 - Sales Channels **Credits: (3)**
- PS 2603 - Advanced Selling Techniques **Credits: (3)**
- PS 3203 - Customer Service Techniques **Credits: (3)**
- PS 3563 - Principles of Sales Supervision **Credits: (3)**

Noorda Interdisciplinary Center

Director: David Ferro

Location: ET 110

Telephone: 801-626-6303

The Noorda Interdisciplinary Center (NIC) for Engineering, Science & Society, created with the generous donations from the Noorda Foundation, and an element of the original agreement with that foundation, endeavoursendeavors to find collaborations between various disciplines in science, engineering, technology, humanities, and social

sciences; to allow for creating interdisciplinary programs; to engage in projects with the community examining social impacts and creating positive changes through engineering and science; to expose students to the social contexts within which they work and create; and to reignite passion and exploration with the larger community for an enlightened understanding of techno-scientific issues. The NIC is oriented towards outreach and teaching about and solving engineering grand challenges, that could correspond to Noorda Foundation goals like energy efficiency, generation, and storage, among others, that putting engineering into important social, historical, and economic contexts, including, for examples, the need to welcome sustainability, under-represented populations into engineering, promoting democracy, and cybersecurity.

Institutional Certificate

Solar Photovoltaic Systems Certificate of Proficiency

- **Grade Requirements:** A grade of "C" or better in all the following five EET courses is required for this institutional certificate (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 18 credit hours of EET courses list below (EET 1140 or EET 1850, EET 2180, EET 2190, EET 3100, and EET 3180). No minimum GPA is required for this certificate.
- **Program Code:** 8076CP
- **CIPC:** 151703

Program Learning Outcomes

- Expertise in the siting, design, analysis and performance of PV systems from site specific information
- Verify system design, manage project, install electrical and mechanical components, complete system installation, and conduct maintenance and troubleshooting of Solar PV sites.

Required Courses (minimum 18 credit hours)

- EET 1140 - DC Circuits **Credits: (3)** or
- EET 1850 - Industrial Electronics **Credits: (4)**
- EET 2180 - Solar PV Systems **Credits: (4)**
- EET 2190 - Solar PV Technical Assessments **Credits: (4)**
- EET 3100 - Renewable Energy **Credits: (3)**
- EET 3180 - Advanced Solar PV Systems **Credits: (4)**

School of Computing

Department Chair: Dr. Kyle Feuz

Location: WSU Davis, Computer and Automotive Engineering (CAE), 161

Telephone Contact: Isabelle Vivier, 801-626-7929

The School of Computing provides exceptional educational opportunities to students in the growing area of computing and computational systems. Students can explore diverse areas such as software engineering, mobile applications, programming languages, virtual reality, simulation science, game development, network technologies, network security, database development, multimedia applications, user interface/user experience, and web design and development. The College of Engineering, Applied Science & Technology offers AAS and BS degrees in the following computing programs:

- Computer Science
- Network Management Technology
- Web and User Experience

The BS degree in Computer Science is accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org>

Students must provide evidence of completion of an Associate of Applied Science AAS or Associate of Science AS degree in computing or other related degree prior to entering advanced upper division curriculum.

Computer Science

Program Coordinator: Linda DuHadway

Location: Technical Education Building, Room 110K

Telephone Contact: 801-626-6906

CS Program Advisor: Pat DeJong, 801-626-6318

Salt Lake Program Coordinator & Advisor: Ted Cowan, 801-957-4769

Davis Program Coordinator & Advisor: Brad Peterson, 801-395-3465

Professors: Richard Fry, Brian Rague, Drew Weidman; **Associate Professors:** Robert Ball, Linda DuHadway, Kyle Feuz, Hugo Valle, Yong Zhang; **Assistant Professors:** Abdulmalek Al-Gahmi, Noel Alton, Nicole Anderson, Arpit Christi, Luke Fernandez, Mark Huson, Joshua Jensen, Nils Murrugarra-Llerena, Brad Peterson, Meher Shaikh, Patrick Zwick; **Instructors:** Mackenzie Bristow, Ted Cowan, Robert Kumar, Jose Limas, Marrie Mack, Kim Murphy, Cody Squadroni, Alison Sunderland, Garth Tuck

The Computer Science program offers an Associate of Applied Science Degree and a Bachelor of Science Degree in Computer Science. The nature of the curricula offers flexibility as a student may tailor their program of study to their interests and professional aspirations. The curricula is based on ABET suggested program outcomes and also provides a Customized Option for students seeking a second bachelor's degree or a minor in a different academic area. The program also offers a minor, a teaching minor, and a BIS concentration. A Game Development Certificate is also offered that consists of 15-16 credits that focus on game development and math and also requires a bachelor's degree in Computer Science to be completed as a pre or co-requisite.

The Computer Science program is a technical, scientific approach requiring a solid foundation in mathematics and physics. The program blends scientific and engineering principles implemented through actual, practical, and applications-oriented experience as well as the intellectual study of computing. It is designed to provide a sound fundamental understanding of logic and of digital computer organization as well as the interaction between hardware, software and the interconnection of system components. Also emphasized is software engineering which includes understanding operating systems and other software systems design including implementation of the theory of computing, analysis of algorithms, simulation, and knowledge-based systems. The objectives of the Computer Science program are to provide students with an education that will meet their academic and career goals as well as meeting the needs of local industries.

Network Management Technology

Program Coordinator: Kyle Feuz

Location: Elizabeth Hall, Room 301

Telephone Contact: 801-626-6059

NMT Program Advisors: Kyle Feuz, Andy Drake

Professor: Allyson Saunders; **Assistant Professor:** Matthew Paulson; **Instructors:** Andy Drake, AJ Helper, Jose Limas

The Network Management Technology program offers an Associate of Applied Science (AAS) Degree and a Bachelor of Science (BS) Degree in Network Management Technology, as well as a minor in Network Management Technology. Also offered are a Network Security Technology Certificate and a Network Technologies Certificate.

The program offers courses in network management technology, telecommunications, local area networks, wireless technologies, operating systems, network certification, and other related areas.

Network Management Technology students study both the data side and the voice side of the discipline. On the data side, students learn about computer networks, network operating systems, security, and computer application programs. On the voice side, students learn about designing, installing, and managing phone systems, and making decisions regarding the purchase and operation of hardware and software.

Web & User Experience

Program Coordinator: Cody Squadroni

Location: Elizabeth Hall, Room 368

Telephone Contact: 801-626-6571

WEB Program Advisor: Pat DeJong, 801-626-6318

Assistant Professors: Noel Alton, Chimobi Ucha

The Web and User Experience program offers an Associate of Applied Science (AAS) Degree and a Bachelor of Science (BS) Degree in Web and User Experience. Minors are offered in Web Technology, and User Experience Design.

The program offers courses in web design, user experience design, database management, graphic production, and other related areas.

Graduates of this program will be prepared for employment in web design, development, and user experience. Students will gain an understanding of best practices in each of these fields.

Credit Policy

1. **Obsolete Credit:** School of Computing credits earned more than seven (7) years earlier than the proposed date of graduation will not be accepted toward University or major requirements unless validated through a challenge examination or approved by the appropriate academic department chair or department advisor.
2. **Waiver Requests:** Any exceptions to the printed School of Computing program graduation requirements must be approved by the appropriate academic department chair or department advisor prior to waiving, substituting, or taking the course(s) in question.

Associate of Applied Science

Computer Science (AAS)

- **Grade Requirements:** A grade of "C" or better must be earned in all required CS courses (a grade of "C-" is not acceptable). A grade of "C-" or better must be earned in all required support courses. In addition, an overall GPA of 2.70 or higher must be attained for all required courses.
- **Credit Hour Requirements:** This degree requires a minimum 66 credit hours.
- **Assessment Requirements:** Students will be required to complete certain assessment instruments as part of the overall requirements for receiving their associate's degree. Please see your advisor or your department for specific information regarding assessment.
- **Program Code:** 8023AAS
- **CIPC:** 110701

Advisement

It is strongly suggested that Computer Science students see the departmental advisor on a regular basis. Call the department administrative specialist at 801-626-7929 for an appointment with the advisor. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (refer to Enrollment Services and Information) as Associate of Applied Science in Computer Science. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for the AAS general education requirements (core and breadth). The following required support courses will also be applied toward general education requirements: COMM 2110, ENGL 2010, CHEM 1110 (or CHEM 1130 or CHEM 1210 or (GEO 1060 and GEO 1065) or (GEO 1110 and GEO 1115) or (PHYS 2210 and PHYS 2215) or (PHYS 2010 and PHYS 2015) or BTNY 1403 or HTHS 2110 or MICR 2054 or ZOOL 1610 or ZOOL 2420), and MATH 1040 (or MATH 1210 or MATH 1120 or MATH 3410), CS 1030, LIBS 1704, and ETC 2001.

Program Learning Outcomes

- Apply knowledge of computing and mathematics
- Analyze problems, identify, and define requirements
- Design, implement, & evaluate computer-based systems
- Function in teams
- Professional, ethical, security, and social behavior
- Communicate Effectively
- Analyze local and global impact of computing
- Engage in continuing professional development
- Use current techniques, skills, and tools
- Apply mathematics, algorithms, and computer theory
- Apply design and development principles

Major Course Requirements for AAS Degree

Computer Science Courses Required (38 credit hours)

- CS 1030 - Foundations of Computing **Credits: (4)**
- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2130 - Computational Structures **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**
- CS 2450 - Software Engineering I **Credits: (4)**
- CS 2550 - Introduction to Database Design and SQL **Credits: (4)**
- CS 2810 - Computer Architecture/Organization **Credits: (4)**
- CS 2899 - Associate Degree Assessment **Credits: (0)**
- CYBR 2300 - Introduction to Networking and Cybersecurity **Credits: (3)**
- WEB 1430 - Client Side Programming **Credits: (3)**

Support Courses Required (21-22 credit hours)

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)** or
- ENGL 2015 EN2 - Intermediate College Writing & Research **Credits: (4)**
- MATH 1040 QL - Introduction to Statistics **Credits: (3)** Or
- MATH 1120 QL - Foundations of Data Science **Credits: (3)** or
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 1080 QL - Pre-calculus **Credits: (5)**
OR
- MATH 1050 QL - College Algebra **Credits: (4)** and
- MATH 1060 QL - Trigonometry **Credits: (3)**
- MATH 1210 - Calculus I **Credits: (4)**
- ETC 2001 SS/CC - Engineering Culture **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**

Natural Science Support Courses (4-5 credit hours)

Select one course below.

Natural science course must include lab.

- BTNY 1403 LS SUS - Principles of Environmental Science **Credits: (4)** (4hrs required)
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- CHEM 1130 PS - Introduction to General, Organic & Biochemistry **Credits: (4)** and
- CHEM 1135 - Introduction to General, Organic & Biochemistry Lab **Credits: (1)**
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEO 1060 PS - Environmental Geosciences **Credits: (3)** and

- GEO 1115 - Physical Geology Lab **Credits: (1)**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)** and
- GEO 1115 - Physical Geology Lab
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)**
- PHYS 2010 PS - College Physics I **Credits: (5)** and
- PHYS 2019 - College Physics I Lab **Credits: (0)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and
- PHYS 2219 - Physics for Scientists and Engineers I Lab **Credits: (0)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

Writing Support Courses (3 credit hours)

Select one course below.

- ENGL 2250 CA/CC - CW: Introduction to Creative Writing **Credits: (3)**
- PHIL 1250 HU - Critical Thinking **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**

Cybersecurity and Network Management (AAS)

- **Grade Requirements:** A grade of "C" or better in courses required for this program in addition to an overall GPA of 2.50 or higher for all required specific major courses and a minimum cumulative GPA for all courses of 2.00.
- **Credit Hour Requirements:** A total of 63 credit hours is required within the program. Recommendation: If additional elective hours are needed to meet the 63 credit hours required for the AAS degree, students are encouraged to take courses to be counted toward the Cybersecurity and Network Management bachelor's degree.
- **Program Code:** 8109AAS
- **CIPC:** 110901

Advisement

All students should meet with an advisor for course and program advisement. For more information or to schedule an appointment visit <https://weber.edu/cyber/advising.html>.

Admission Requirements

Declare a program of study (see Enrollment Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements.

Program Learning Outcomes

- Possess an ability to analyze a problem, and to identify and define the computing requirements appropriate to its solution
- Possess an ability to design, implement, and evaluate a computer-based solution to meet a given set of computing requirements in the context of network technology
- Possess an ability to communicate effectively with a range of audiences about technical information
- Possess an ability to make informed judgments in computing based upon legal and ethical principles
- Possess an ability to function effectively on teams to establish goals, plan tasks, meet deadlines, manage risk, and produce deliverables
- Possess an ability to support the delivery, use, and management of information systems within an information systems environment.

Major Course Requirements for AAS Degree

Core Courses Required (9-10 credit hours)

- ENGL 1010 EN1 - Introductory College Writing **Credits: (3)**
- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- MATH 1040 QL - Introduction to Statistics **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)**

Specific Major Courses Required (45 credit hours)

- CS 1030 - Foundations of Computing **Credits: (4)**
- CYBR 1400 - Introduction to Cyber Defense and Ethics **Credits: (3)**
- CYBR 2200 - Cybersecurity and System Fundamentals **Credits: (3)**
- CYBR 2210 - Linux Systems Administration **Credits: (3)**
- CYBR 2300 - Introduction to Networking and Cybersecurity **Credits: (3)**
- CYBR 2310 - Network Server Administration **Credits: (3)**
- CYBR 2415 - Routing and Switching **Credits: (4)**
- CYBR 2500 - Practical Cybersecurity Infrastructure **Credits: (4)**
- CS 1400 - Programming I **Credits: (4)**
- CS 2130 - Computational Structures **Credits: (4)**
- CS 2550 - Introduction to Database Design and SQL **Credits: (4)**
- WEB 1400 - Web Design and Usability **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**

Support Courses Required (6 credit hours)

- ECON 1010 SS - Economics as a Social Science **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**

Web and User Experience (AAS)

- **Grade Requirements:** A grade of "C" or better must be earned in all required WEB and CS courses (a grade of "C-" is not acceptable). A grade of "C-" or better must be earned in all required support courses. In addition, an overall GPA of 2.70 or higher must be attained for all required courses.
- **Credit Hour Requirements:** A total of 63 credit hours is required.
- **Program Code:** 8075AAS
- **CIPC:** 110801

Advisement

Web and User Experience major students should meet with a School of Computing advisor for course and program advisement. Refer to the Department Advisor Referral List for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information) with the department secretary (Elizabeth Hall 301). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. COMM 2110 will be applied to fill both program and general education requirements.

Program Learning Outcomes

- Possess effective business communication skills.
- Possess knowledge and skills of technology.
- Implement effective decision-making and problem-solving skills.
- Possess knowledge of ethics and professionalism.
- Produce industry-standard websites and multimedia projects
- Applying knowledge of computing and mathematics
- Analyze problems, identify, and define requirements
- Design, implement, & evaluate computer-based systems
- Professional, ethical, security, and social behavior
- Analyze local and global impact of computing

Major Course Requirements for AAS Degree

Core Courses Required (10 credit hours)

- ENGL 1010 EN1 - Introductory College Writing **Credits: (3)**
- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)**

General Education Courses Required (6 credit hours)

Refer to Degree Requirements for Associate of Applied Science requirements.

Specific Major Courses Required (19 credit hours)

- WEB 1400 - Web Design and Usability **Credits: (3)**
- WEB 1430 - Client Side Programming **Credits: (3)**
- WEB 2500 - User Experience Design **Credits: (3)**
- WEB 2620 - Advanced CSS **Credits: (3)**
- WEB 2700 - Web Accessibility 1 **Credits: (4)**
- WEB 2890 - Client-Side Portfolio **Credits: (3)**

Support Courses Required (19 credit hours)

- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- ART 1120 - Design Concepts **Credits: (3)**
- CS 1030 - Foundations of Computing **Credits: (4)**
- CS 1400 - Programming I **Credits: (4)**
- CS 2550 - Introduction to Database Design and SQL **Credits: (4)**

Specific Major Electives (9 credit hours)

These 9 credits can be fulfilled with any CS or WEB 1xxx or 2xxx course which has not already been applied above.

- CS 1xxx Any CS 1xxx Course Not Slotted Elsewhere
- CS 2xxx Any CS 2xxx Course Not Slotted Elsewhere
- WEB 2xxx Any WEB 2xxx Course Not Slotted Elsewhere

Institutional Certificate

Cloud Computing Security Certificate of Proficiency

- **Program Admission and Prerequisites:** Application for admission to Weber State University and/or current degree-seeking status.
- **Credit Hour Requirements:** A total of 18 credit hours is required (at least 9 of which must be residence hours taken from WSU).
- **Grade Requirements:** Completion of the following required courses with a grade of "C" or better. These courses may also be slotted appropriately for degree requirements.
- **Program Code:** 8116CP
- **CIPC:** 110902

Courses Required-(18 credit hours)

- CYBR 2200 - Cybersecurity and System Fundamentals **Credits: (3)**
- CYBR 2210 - Linux Systems Administration **Credits: (3)**
- CYBR 2300 - Introduction to Networking and Cybersecurity **Credits: (3)**
- CYBR 2310 - Network Server Administration **Credits: (3)**
- CYBR 3210 - Cloud Architecture and Security **Credits: (3)**

- CYBR 3300 - Advanced LAN Security Management **Credits: (3)**

Cybersecurity Essentials Certificate of Proficiency

- **Program Admission and Prerequisites:** Application for admission to Weber State University and/or current degree-seeking status..
- **Grade Requirements:** Completion of the following required courses with a grade of "C" or better. These courses may also be slotted appropriately for degree requirements.
- **Program Code: 8090CP**
- **CIPC: 111003**

Courses Required (17 credit hours)

- CS 1030 - Foundations of Computing **Credits: (4)**
- CS 1400 - Programming I **Credits: (4)**
- CYBR 1400 - Introduction to Cyber Defense and Ethics **Credits: (3)**
- CYBR 2200 - Cybersecurity and System Fundamentals **Credits: (3)**
- CYBR 2300 - Introduction to Networking and Cybersecurity **Credits: (3)**

Cybersecurity Policy and Management Certificate of Proficiency

- **Grade Requirements:** A minimum overall GPA of 2.00 or "C".
- **Credit Hour Requirements:** A total of 23 credit hours is required (at least 10 of which must be residence hours taken from WSU).
- **Program Code: 8115CP**
- **CIPC: 430404**

Program Learning Outcomes

- Possess an ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline
- Possess an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- Possess an ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- Possess an understanding of professional, ethical, legal, security and social issues and responsibilities
- Possess an ability to communicate effectively with a range of audiences
- Possess an ability to analyze the local and global impact of computing on individuals, organizations, and society
- Recognize the need for an ability to engage in continuing professional development
- Possess an ability to use current techniques, skills, and tools necessary for computing practice

Course Requirements for Certificate of Proficiency

Courses Required (21 credit hours)

- CYBR 1400 - Introduction to Cyber Defense and Ethics **Credits: (3)**
- CYBR 2200 - Cybersecurity and System Fundamentals **Credits: (3)**
- CYBR 2210 - Linux Systems Administration **Credits: (3)**
- CYBR 2300 - Introduction to Networking and Cybersecurity **Credits: (3)**
- CYBR 3300 - Advanced LAN Security Management **Credits: (3)**
- CYBR 3550 - Supervising Information Technology **Credits: (3)**
- CYBR 3730 - Survey of Information Security Policies **Credits: (3)**

Game Development Certificate of Proficiency

A student may apply for a certificate of proficiency in Game Development provided he or she has fulfilled the following requirements:

1. Concurrent or previous completion of a Bachelor's Degree in Computer Science from the WSU College of Engineering, Applied Science, and Technology or any other accredited institution.
2. Completion of the following required courses with a grade of C or better. (These courses may also be slotted as electives for degree requirements)
 - **Program Code:** 8049CP
 - **CIPC:** 110299

Program Learning Outcomes

- Apply knowledge of computing and mathematics
- Analyze problems, identify, and define requirements
- Design, implement, & evaluate computer-based systems
- Function in teams
- Professional, ethical, security, and social behavior
- Communicate Effectively
- Analyze local and global impact of computing
- Engage in continuing professional development
- Use current techniques, skills, and tools
- Apply mathematics, algorithms, and computer theory
- Apply design and development principles

(15 credit hours):

- CS 1010 CA - Introduction to Interactive Entertainment **Credits: (3)**
- CS 3280 - Object Oriented Windows Application Development **Credits: (4)**
- CS 4640 - Foundations of Game Development **Credits: (4)**
- CS 4650 - Advanced Game Development **Credits: (4)**

Network Technologies Certificate of Proficiency

- **Grade Requirements:** A minimum overall GPA of 2.00 or "C".

- **Credit Hour Requirements:** A total of 18 credit hours is required (at least 10 of which must be residence hours taken from WSU).
- **Program Code:** 8067CP
- **CIPC:** 110901

Program Learning Outcomes

- Possess an ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline
- Possess an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- Possess an ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- Possess an understanding of professional, ethical, legal, security and social issues and responsibilities
- Possess an ability to communicate effectively with a range of audiences
- Possess an ability to analyze the local and global impact of computing on individuals, organizations, and society
- Recognize the need for an ability to engage in continuing professional development
- Possess an ability to use current techniques, skills, and tools necessary for computing practice

Course Requirements for Certificate of Proficiency

Courses Required (18 credit hours)

- CYBR 2300 - Introduction to Networking and Cybersecurity **Credits: (3)**
- CYBR 2310 - Network Server Administration **Credits: (3)**
- CYBR 2415 - Routing and Switching **Credits: (4)**
- CYBR 3710 - Switching and Transmission Network Systems Management **Credits: (4)**
- CS 3705 - Protocol Analysis **Credits: (4)**

Programming Essentials Certificate of Proficiency

A student may apply for an Institutional Certificate of Proficiency in Programming Essentials provided he or she has fulfilled the following requirements:

1. Application for admission to Weber State University and/or current degree-seeking status.
2. Completion of the following required courses with a grade of "C" or better. These courses may also be slotted appropriately for degree requirements.

Program Learning Outcomes

- Apply knowledge of computing and mathematics
- Analyze problems, identify, and define requirements
- Design, implement, & evaluate computer-based systems
- Professional, ethical, security, and social behavior
- Analyze local and global impact of computing
- Engage in continuing professional development
- Use current techniques, skills, and tools

- Apply mathematics, algorithms, and computer theory

(16 credit hours):

- CS 1030 - Foundations of Computing **Credits: (4)**
- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**

User Experience Design Certificate of Proficiency

User experience (UX) design is a growing interdisciplinary field focusing on the interaction between humans and technology and the design of meaningful and transformative user experiences. It focuses on having a deep understanding of users and their needs and using that understanding to guide the design of new sites, apps, products, and services.

This certificate provides students with the high-quality training in the main areas of UX including design, prototyping, accessibility, and user research methods. Students receiving this certificate will possess a level of competency that will prepare them to work as UX designers and/or researchers.

A student may apply for an Institutional Certificate of Proficiency in User Experience provided the following requirements have been fulfilled:

- Application for admission to Weber State University and/or current degree-seeking status
- Completion of the following required courses with a grade of "C" or better (a grade of "C-" is not acceptable).
These courses may also be slotted appropriately for degree requirements.

Program Code: 8094CP

CIPC: 303101

Program Learning Outcomes

- Possess effective business communication skills.
- Possess knowledge and skills of technology.
- Implement effective decision-making and problem-solving skills.
- Possess knowledge of ethics and professionalism.
- Produce industry-standard websites and multimedia projects

Required Courses (16 credit hours)

- WEB 1400 - Web Design and Usability **Credits: (3)**
- WEB 2500 - User Experience Design **Credits: (3)**
- WEB 2620 - Advanced CSS **Credits: (3)**
- WEB 3500 - User Interface Prototyping & Design **Credits: (3)**
- WEB 3600 - User Research Methods **Credits: (4)**

Web Essentials Certificate of Proficiency

The Institutional Certificate of Proficiency in Web Essentials provides a measured, proven, and effective introduction to user interface design concepts and best practices in web development. This Institutional Certificate emphasizes hands-on programming techniques, development of solid design principles, and exposure to the most widely used multimedia creation and editing tools. A student receiving this certificate will possess a level of competency that will prepare them to successfully design and develop client side web pages.

A student may apply for an Institutional Certificate of Proficiency in Web Essentials provided he or she has fulfilled the following requirements:

1. Application for admission to Weber State University and/or current degree-seeking status
2. Completion of the following required courses with a grade of "C" or better. These courses may also be slotted appropriately for degree requirements.
 - **Program:** 8086CP
 - **CIPC:** 110801

Program Learning Outcomes

- Possess effective business communication skills.
- Possess knowledge and skills of technology.
- Implement effective decision-making and problem-solving skills.
- Possess knowledge of ethics and professionalism.
- Produce industry-standard websites and multimedia projects
- Applying knowledge of computing and mathematics
- Analyze problems, identify, and define requirements
- Design, implement, & evaluate computer-based systems
- Professional, ethical, security, and social behavior
- Analyze local and global impact of computing

(17 credit hours):

- CS 1030 - Foundations of Computing **Credits: (4)**
- CS 1400 - Programming I **Credits: (4)**
- WEB 1400 - Web Design and Usability **Credits: (3)**
- WEB 2210 - Computer Illustrations **Credits: (3)**
- WEB 2200 - Image Editing **Credits: (3)**

Bachelor of Science

Computer Science (BS)

- **Program Prerequisite:** Completion or equivalent of a Weber State AAS degree in Computer Science and acceptance into the baccalaureate degree program.
- **Minor:** Required for the Customized Option.
- **Grade Requirements:** A grade of "C" or better must be earned in all required CS courses (a grade of "C-" is not acceptable). A grade of "C-" or better must be earned in all required support courses. In addition, an overall GPA of 2.70 or higher must be attained for all required courses.
- **Credit Hour Requirements:** A minimum of 120 credit hours is required for graduation. The actual number of credit hours required for graduation with the customized option varies.

- **Program Code:** 8023BS, 8022BS(Customized Post-Bac)
- **CIPC:** 110701, Customized(110101)

Advisement

It is strongly suggested that Computer Science students see an advisor on a regular basis. Call the department administrative specialist at 801-626-7929 for an appointment with the advisor. (Also refer to the Department Advisor Referral List.)

Admission Requirements into the Bachelor Program

1. Complete an AAS degree in Computer Science or equivalent.
2. Formally declare and be accepted to baccalaureate status through the Department of Computer Science. Specific requirements and details may be obtained from a department advisor.

General Education

Refer to Degree Requirements. The MATH 1040, or MATH 1080, or MATH 1120 course in the Computer Science AAS degree, which is a pre-requisite to the BS major, also satisfies the WSU core general education Quantitative Literacy requirement. Computer Science majors must complete COMM 2110 as part of the Humanities general education requirement. Computer Science majors must complete ETC 2001 as part of the Social Science and Cultural Competence general education requirement. It is recommended that Computer Science majors take CS 1010 for the CA general education requirements.

Students who pass the Computer Science Advanced Placement A exam with a score of 3 receive 4 hours of credit for CS 1022 (4). Students who pass the Computer Science Advanced Placement A exam with a score of 4 or 5 receive a total of 8 hours of credit consisting of CS Elective credit (4) plus specific credit for either CS 1400 (4) or CS 1023 (4). Students who pass the Advanced Placement Computer Science Principles exam with a score of 3, 4, or 5 receive 4 hours of credit for CS 1030 (4).

Program Learning Outcomes

- An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, legal, security and social issues and responsibilities
- An ability to communicate effectively with a range of audiences
- An ability to analyze the local and global impact of computing on individuals, organizations, and society
- Recognition of the need for and an ability to engage in continuing professional development
- An ability to use current techniques, skills, and tools necessary for computing practice.
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
- An ability to apply design and development principles in the construction of software systems of varying complexity.

Major Course Requirements for BS Degree

*To be taken in addition to the requirements for the AAS degree in Computer Science.
Course Descriptions-CS, ETC, NET, WEB*

Required Courses (26 credit hours)

- CS 3100 - Operating Systems **Credits: (4)**
- CS 3230 - Object Oriented User Interface Development with Java **Credits: (4)** or
- CS 3280 - Object Oriented Windows Application Development **Credits: (4)**
- CS 3550 - Advanced Database Programming **Credits: (4)**
- CS 3750 CEL - Software Engineering II **Credits: (4)**
- CS 4110 - Concepts of Formal Languages and Algorithms for Computing **Credits: (4)**
- CS 4760 - CS Capstone **Credits: (4)**
- CS 4890 INT - Cooperative Work Experience **Credits: (1-4)** (2 credits)
- CS 4899 - Bachelor's Degree Assessment **Credits: (0)**

Support Courses Required (3-4 credit hours)

- MATH 1220 - Calculus II **Credits: (4)** or
- MATH 3110 - Foundations of Algebra **Credits: (3)** or
- MATH 3160 - Number Theory **Credits: (3)** or
- MATH 1216 - Integral Calculus **Credits: (4)**

CS Upper Division Electives (6-8 credit hours)

Choose 2 upper division computer science courses (see list of suggested electives). You may not use CS 4800 or CS 4850 or CS 4890 for these electives.

Other Upper Division Electives (4 credit hours)

Choose 4 credits of any approved upper division courses from CS, NET, WEB, ECE, EET, MIS, PHYS, AND MATH. This may include up to 4 credits maximum in any one of the following courses: CS 4800, CS 4850, or an additional 2 credits from the required CS 4890 (max 4 credits total).

Suggested Upper Division CS Electives

The following suggested electives are provided in order to assist students wishing to specialize in different areas:

Recommended electives for students desiring to pursue a Master's Degree in Computer Science

- CS 4280 - Computer Graphics **Credits: (4)**
- CS 4500 - Introduction to Artificial Intelligence **Credits: (4)**
- CS 4820 - Compiler Design **Credits: (4)**

Recommended electives for students desiring to specialize in Web Development

- CS 4230 - Java Application Development **Credits: (4)**
- CS 4350 - Advanced Internet Programming **Credits: (4)**
- CS 4790 - .NET Web Application Development **Credits: (4)**
- CS 3620 - Server-Side Web Architecture **Credits: (4)**
- CS 3630 - Rich Internet Application Development **Credits: (4)**

Recommended electives for students desiring to specialize in Mobile Development

- CS 3230 - Object Oriented User Interface Development with Java **Credits: (4)**
- CS 3260 - Mobile Development for the iPhone **Credits: (4)**
- CS 3270 - Mobile Development for Android **Credits: (4)**

Recommended electives for students desiring to specialize in Network Security

- CS 3030 - Scripting Languages **Credits: (4)**
- CS 3705 - Protocol Analysis **Credits: (4)**
- CS 3805 - Computer and Network Security **Credits: (4)**
- CS 3840 - Computer Forensics for Security Assurance **Credits: (4)**
- CYBR 4740 - Security Vulnerabilities and Intrusion Mitigation **Credits: (4)**

Alternative Customized Option (33-35 credit hours) plus a minor or first bachelor's degree

Required Courses (30-32 credit hours)

- CS 3100 - Operating Systems **Credits: (4)**
- CS 3230 - Object Oriented User Interface Development with Java **Credits: (4)** or
• CS 3280 - Object Oriented Windows Application Development **Credits: (4)**
- CS 3550 - Advanced Database Programming **Credits: (4)**
- CS 3750 CEL - Software Engineering II **Credits: (4)**
- CS 4110 - Concepts of Formal Languages and Algorithms for Computing **Credits: (4)**
- CS 4760 - CS Capstone **Credits: (4)**
- Any two computer science upper division electives (6-8 credit hours). CS 4800, CS 4850, and CS 4890 may not be used for these electives.
- Complete a minor in any academic area or a concurrent second bachelor's degree, or have completed a first bachelor's degree.

Note:

Additional hours of upper division computer science courses may be taken to satisfy the University upper division requirement of 40 hours (CS 4890 is recommended).

Suggested Course Sequence

Computer Science Teaching (BS)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Not required for Computer Science and Computer Science Customized majors. Computer Science Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).
- **Minor:** Not required.
- **Grade Requirements:** An overall GPA of 2.90 is required in courses required for this major. Also refer to the general grade requirements for graduation under Degree Requirements.
- **Credit Hour Requirements:** A total of 126 semester credit hours is required for graduation; 60 hours are required within the major, plus the credits required by the Department of Teacher Education. Forty-four upper-division credit hours are required (courses numbered 3000 and above).
- **Program Code:** 8091BS
- **CIPC:** 131321

Advisement

Computer Science Teaching majors are strongly encouraged to meet with the advisor at least annually for course and program advisement. Call 801-626-7929 for more information or to schedule an appointment. Computer Science Teaching majors are also encouraged to meet with a College of Social Sciences & Education advisor (call 801-626-6269). (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study. Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education

Refer to pages Degree Requirements for Bachelor of Science requirements.

Program Learning Outcomes

- An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, legal, security and social issues and responsibilities
- An ability to communicate effectively with a range of audiences
- An ability to analyze the local and global impact of computing on individuals, organizations, and society
- Recognition of the need for and an ability to engage in continuing professional development
- An ability to use current techniques, skills, and tools necessary for computing practice.
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.

- An ability to apply design and development principles in the construction of software systems of varying complexity.

Computer Science Teaching Major Course Requirements for BS Degree

Computer Science Courses Required (60 credit hours)

- CS 1030 - Foundations of Computing **Credits: (4)**
- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2130 - Computational Structures **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**
- CS 2450 - Software Engineering I **Credits: (4)**
- CS 2550 - Introduction to Database Design and SQL **Credits: (4)**
- CS 2810 - Computer Architecture/Organization **Credits: (4)**
- WEB 1430 - Client Side Programming **Credits: (3)**
- CYBR 2300 - Introduction to Networking and Cybersecurity **Credits: (3)**
- CS 3230 - Object Oriented User Interface Development with Java **Credits: (4)**
- CS 3280 - Object Oriented Windows Application Development **Credits: (4)**
- CS 3550 - Advanced Database Programming **Credits: (4)**
- CS 4840 - Computer Science Teaching Methods **Credits: (3)**

Select two of the following:

- CS 3030 - Scripting Languages **Credits: (4)**
- CS 3100 - Operating Systems **Credits: (4)**
- CS 3260 - Mobile Development for the iPhone **Credits: (4)**
- CS 3270 - Mobile Development for Android **Credits: (4)**
- CS 3705 - Protocol Analysis **Credits: (4)**

Support Courses Required (16 credit hours)

- CHF 1500 SS/CC - Human Development **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- ENGL 2250 CA/CC - CW: Introduction to Creative Writing **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)**

Note:

Students must also complete the Teacher Education Licensure Program.

Cybersecurity and Network Management (BS)

- **Program Prerequisite:** Completion or equivalent of a Weber State AAS Degree in Cybersecurity and Network Management.

- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major in addition to an overall GPA of 2.50 or higher for all required specific major courses and a minimum cumulative GPA for all courses of 2.00.
- **Credit Hour Requirements:** A total of 120-126 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); 38 of these credit hours are required within the major.
- **Program Code:** 8109BS
- **CIPC:** 110901

Advisement

All students should meet with an advisor for course and program advisement. For more information or to schedule an appointment visit <https://weber.edu/cyber/advising.html>.

Use Grad MAPs to plan your degree

Admission Requirements

Complete an AAS Degree in Cybersecurity and Network Management or equivalent. Declare a program of study (see Enrollment Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for the Bachelor of Science requirements. COMM 2110 and ECON 1010 will be applied to fill 6 credits of both program and general education requirements. (These courses are taken as part of the AAS).

Program Learning Outcomes

- An ability to analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- An ability to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- An ability to communicate effectively in a variety of professional contexts.
- An ability to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- An ability to function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- An ability to support the delivery, use, and management of information systems within an information systems environment.

Major Course Requirements for BS Degree

To be taken in addition to the requirements for the Cybersecurity and Network Management (AAS).

Specific Major Courses Required (41 credit hours)

- CYBR 3210 - Cloud Architecture and Security **Credits: (3)**

- CYBR 3300 - Advanced LAN Security Management **Credits: (3)**
- CYBR 3550 - Supervising Information Technology **Credits: (3)**
- CYBR 3710 - Switching and Transmission Network Systems Management **Credits: (4)**
- CYBR 3730 - Survey of Information Security Policies **Credits: (3)**
- CYBR 3720 - Wireless Networking and Security **Credits: (3)**
- CYBR 4700 - Data and Voice Network Design **Credits: (4)**
- CYBR 4740 - Security Vulnerabilities and Intrusion Mitigation **Credits: (4)**
- CYBR 4760 INT - Cybersecurity and Network Management Internship **Credits: (3)** or
- CYBR 4790 INT - Cybersecurity and Network Management Senior Project **Credits: (3)**
- CS 3030 - Scripting Languages **Credits: (4)**
- CS 3705 - Protocol Analysis **Credits: (4)**

Upper Division Elective (3 credit hours)

Web and User Experience (BS)

- **Program Prerequisite:** Completion or equivalent of a Weber State AAS Degree in Web and User Experience.
- **Emphasis Selection:** Full Stack Web Development Emphasis or User Experience Design Emphasis
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better must be earned in all required WEB and CS courses (a grade of "C-" is not acceptable). A grade of "C-" or better must be earned in all required support courses. In addition, an overall GPA of 2.70 or higher must be attained for all required courses.
- **Credit Hour Requirements:** A minimum of 123 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above).
- **Program Code:** 8075BS with one of the following emphasis codes: 8093 (Full-Stack) or 8094 (User Experience Design)
- **CIPC:** Web and User Experience(110801) with the following: Full Stack(110801) or User Experience Design (303101)

Advisement

Web and User Experience major students should meet with a School of Computing advisor for course and program advisement. Refer to the Department Advisor Referral List for more information or to schedule an appointment.

Admission Requirements

Complete the AAS Degree in Web and User Experience or equivalent. Declare a program of study (see Enrollment Services and Information) with the department secretary (Elizabeth Hall 301). An application is needed to select an emphasis.

General Education

Refer to Degree Requirements for the Bachelor of Science requirements. The COMM HU CEL 2110 course required for the Web and User Experience major (taken as part of the AAS) will also be applied to fill general education requirements.

Program Learning Outcomes

- Possess effective business communication skills.
- Possess knowledge and skills of technology.
- Implement effective decision-making and problem-solving skills.
- Possess knowledge of ethics and professionalism.
- Produce industry-standard websites and multimedia projects

Major Course Requirements for BS Degree

In addition to the requirements for the Web and User Experience (AAS), select one of the following emphases:

- Web and User Experience (BS), Full Stack Web Development Emphasis
- Web and User Experience (BS), User Experience Design Emphasis

Web and User Experience (BS), Full Stack Web Development Emphasis

Students of this emphasis will learn to build functional web applications end to end using languages like JavaScript, PHP, Python, Java, and ASP.Net, and tools like MySQL, Oracle, MS SQL Server, and NoSQL databases to find, save, or change data and serve it back to the user.

- **Program Prerequisite:** Completion or equivalent of a Weber State AAS Degree in Web and User Experience.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better must be earned in all required WEB and CS courses (a grade of "C-" is not acceptable). A grade of "C-" or better must be earned in all required support courses. In addition, an overall GPA of 2.70 or higher must be attained for all required courses.
- **Credit Hour Requirements:** A minimum of 123 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above).
- **Program Code:** 8075BS with 8093 emphasis code
- **CIPC:** Web and User Experience(110801) with Full Stack(110801)

Advisement

Web and User Experience major students should meet with a School of Computing advisor for course and program advisement. Refer to the Department Advisor Referral List for more information or to schedule an appointment.

Admission Requirements

Complete the Web and User Experience (AAS) or equivalent. Declare a program of study (see Enrollment Services and Information) with the department admin (Elizabeth Hall 301). An application is needed to select this emphasis

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The COMM 2110 HU CEL course required for the Web and User Experience major (taken as part of the AAS) will also be applied to fill general education requirements.

Program Learning Outcomes

- Possess effective business communication skills.
- Possess knowledge and skills of technology.
- Implement effective decision-making and problem-solving skills.
- Possess knowledge of ethics and professionalism.
- Produce industry-standard websites and multimedia projects

Major Course Requirements for BS Degree with an emphasis on User Experience Design

To be taken in addition to the requirements for the Web and User Experience (AAS).

Specific Major Courses Required (17 credit hours)

- WEB 3200 - Dynamic Languages for Web Development **Credits: (3)**
- WEB 3350 - Client Side Frameworks **Credits: (4)**
- WEB 3400 - LAMP Stack Web Development **Credits: (3)** or
- WEB 3430 - Full Stack JavaScript Development **Credits: (3)**
- WEB 3500 - User Interface Prototyping & Design **Credits: (3)**
- WEB 4350 - Web Development Capstone **Credits: (4)**

Support Courses Required (10 credit hours)

- BSAD 3000 - Small Business Management **Credits: (3)** or
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)** or
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- CS 3550 - Advanced Database Programming **Credits: (4)**

Electives (15 credit hours)

These 15 credits can be fulfilled with any CS 3xxx, CS 4xxx (excluding CS 4800, CS 4860, and CS 4890), NET 3550, WEB 3xxx, WEB 4xxx courses.

- Any CS 3xxx Course Not Slotted Elsewhere
- Any CS 4xxx Course (excluding CS 4800, CS 4860, and CS 4890) Not Slotted Elsewhere
- Any WEB 3xxx Course Not Slotted Elsewhere
- Any WEB 4xxx Course Not Slotted Elsewhere

Web and User Experience (BS), User Experience Design Emphasis

User Experience (UX) design is a growing interdisciplinary field focusing on the interaction between humans and technology and the design of meaningful and transformative user experiences. It focuses on having a deep understanding of users and their needs and using that understanding to guide the design of new sites, apps, products, and services.

This emphasis takes place during the last two years of the WEB/UX (BS) program. It covers the main areas of UX design including user research methods, accessibility, and information architecture. As an interdisciplinary emphasis, it lists required support courses from departments such as Psychology, Professional Sales, Communications, English, and Sociology and Anthropology. A student graduating with this emphasis will have the UX Design training and background needed to work as UX designers and/or researchers.

- **Program Prerequisite:** Completion or equivalent of a Weber State AAS Degree in Web and User Experience.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better must be earned in all required WEB and CS courses (a grade of "C-" is not acceptable). A grade of "C-" or better must be earned in all required support courses. In addition, an overall GPA of 2.70 or higher must be attained for all required courses.
- **Credit Hour Requirements:** A minimum of 123 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above).
- **Program Code:** 8075BS with 8094 emphasis code
- **CIPC:** Web and User Experience(110801) with User Experience Design (303101)

Advisement

Web and User Experience major students should meet with a School of Computing advisor for course and program advisement. Refer to the Department Advisor Referral List for more information or to schedule an appointment.

Admission Requirements

Complete the Web and User Experience (AAS) or equivalent. Declare a program of study (see Enrollment Services and Information) with the department admin (Elizabeth Hall 301). An application is needed to select this emphasis

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The COMM 2110 HU CEL course required for the Web and User Experience major (taken as part of the AAS) will also be applied to fill general education requirements.

Program Learning Outcomes

- Possess effective business communication skills.
- Possess knowledge and skills of technology.
- Implement effective decision-making and problem-solving skills.
- Possess knowledge of ethics and professionalism.
- Produce industry-standard websites and multimedia projects

Major Course Requirements for BS Degree with an emphasis on User Experience Design

To be taken in addition to the requirements for the Web and User Experience (AAS).

Specific Major Courses Required (17 credit hours)

- WEB 3130 - Web Accessibility 2 **Credits: (3)**
- WEB 3500 - User Interface Prototyping & Design **Credits: (3)**
- WEB 3530 - Information Architecture **Credits: (3)**
- WEB 3600 - User Research Methods **Credits: (4)**
- WEB 4350 - Web Development Capstone **Credits: (4)**

Support Courses Required (13 credit hours)

- PS 3250 - Business Communication **Credits: (3)**
- PSY 3500 - Cognition **Credits: (3)**
- CS 3650 - Human-Computer Interaction **Credits: (4)**
- SOC 4220 - Life in a Consumer Society **Credits: (3)**

Electives (12 credit hours)

- WEB 3XXX or 4XXX not already slotted anywhere else
- CS 3XXX or 4XXX not already slotted anywhere else
- Other upper-level courses from other departments

Emphasis Option for Bachelor of Interdisciplinary Studies

Computer Science (BIS)

Computer Science (Minor or BIS Concentration)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better must be earned in all required CS courses (a grade of "C-" is not acceptable). A grade of "C-" or better must be earned in all required support courses. In addition, an overall GPA of 2.70 or higher must be attained for all required courses.
- **Credit Hour Requirements:** 28 hours for the Minor and BIS Concentration.
- **Program Code:** 8023
- **CIPC:** 110701

Course Requirements for Minor or BIS Concentration (28 credit hours)

Required Courses (16 credit hours)

- CS 1030 - Foundations of Computing **Credits: (4)**

- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**

Electives (12 credit hours)

Select two of the following courses (8 credit hours)

- CS 2450 - Software Engineering I **Credits: (4)**
- CS 2550 - Introduction to Database Design and SQL **Credits: (4)**
- CS 2810 - Computer Architecture/Organization **Credits: (4)**
- CYBR 2300 - Introduction to Networking and Cybersecurity **Credits: (3)**
- WEB 1430 - Client Side Programming **Credits: (3)**

Select one additional course (4 credit hours total)

An approved upper division Computer Science course (CS courses numbered 3000 or higher) other than CS 4800, CS 4850, or CS 4890. An upper division programming language course (CS 3230, CS 3280, CS 3620, CS 3550, or CS 3030) is recommended.

Cybersecurity and Network Management (BIS)

Cybersecurity and Network Management (Minor or BIS Emphasis)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

For the BIS emphasis, refer to Bachelor of Arts/Science in Interdisciplinary Studies (BIS) in the Interdisciplinary Programs section of this catalog.

- **Grade Requirements:** The following required curriculum used for this minor must be completed with a grade of "C" or better and with a GPA of 2.50 or higher for all required specific major courses and a minimum cumulative GPA for all courses of 2.00.
- **Credit Hour Requirements:** Minimum of 24 credit hours in NET courses as listed below.
- **Program Code:** 8109
- **CIPC:** 110901

Advisement

All students should meet with an advisor for course and program advisement. For more information or to schedule an appointment visit <https://weber.edu/computing/advising.html>.

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.

- High Impact Educational Experience-Engaged in high-impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community-engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing. Used effective oral and written English-language skills
- Post-Graduate Planning. Planned for careers and/or graduate programs.

Courses Required for Minor/BIS Emphasis

Courses Required (25 credit hours)

- CYBR 1400 - Introduction to Cyber Defense and Ethics **Credits: (3)**
- CYBR 2200 - Cybersecurity and System Fundamentals **Credits: (3)**
- CYBR 2210 - Linux Systems Administration **Credits: (3)**
- CYBR 2300 - Introduction to Networking and Cybersecurity **Credits: (3)**
- CYBR 2310 - Network Server Administration **Credits: (3)**
- CYBR 3210 - Cloud Architecture and Security **Credits: (3)**
- CYBR 3300 - Advanced LAN Security Management **Credits: (3)**
- CYBR 3710 - Switching and Transmission Network Systems Management **Credits: (4)**

Web Development (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** A grade of "C" or better must be earned in all required WEB courses (a grade of "C-" is not acceptable). A grade of "C-" or better must be earned in all required support courses. In addition, an overall GPA of 2.70 or higher must be attained for all required courses.
- **Credit Hour Requirements:** 23 hours for the Minor and BIS Concentration.
- **Program Code:** 8110
- **CIPC:** 110801

Web Development (Minor or BIS Emphasis)

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Web Development (Minor or BIS Emphasis)

- WEB 1400 - Web Design and Usability **Credits: (3)** and
- WEB 1430 - Client Side Programming **Credits: (3)**
- or**
- CS 2350 - Client Side Web Development **Credits: (4)**
- WEB 2620 - Advanced CSS **Credits: (3)**
- WEB 3200 - Dynamic Languages for Web Development **Credits: (3)**
- WEB 3350 - Client Side Frameworks **Credits: (4)**
- WEB 3400 - LAMP Stack Web Development **Credits: (3)** or
- WEB 3430 - Full Stack JavaScript Development **Credits: (3)**
- CS 3620 - Server-Side Web Architecture **Credits: (4)**

Minor

Computer Science Minor

Computer Science (Minor or BIS Concentration)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better must be earned in all required CS courses (a grade of "C-" is not acceptable). A grade of "C-" or better must be earned in all required support courses. In addition, an overall GPA of 2.70 or higher must be attained for all required courses.
- **Credit Hour Requirements:** 28 hours for the Minor and BIS Concentration.
- **Program Code:** 8023
- **CIPC:** 110701

Course Requirements for Minor or BIS Concentration (28 credit hours)

Required Courses (16 credit hours)

- CS 1030 - Foundations of Computing **Credits: (4)**
- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**

Electives (12 credit hours)

Select two of the following courses (8 credit hours)

- CS 2450 - Software Engineering I **Credits: (4)**

- CS 2550 - Introduction to Database Design and SQL **Credits: (4)**
- CS 2810 - Computer Architecture/Organization **Credits: (4)**
- CYBR 2300 - Introduction to Networking and Cybersecurity **Credits: (3)**
- WEB 1430 - Client Side Programming **Credits: (3)**

Select one additional course (4 credit hours total)

An approved upper division Computer Science course (CS courses numbered 3000 or higher) other than CS 4800, CS 4850, or CS 4890. An upper division programming language course (CS 3230, CS 3280, CS 3620, CS 3550, or CS 3030) is recommended.

Cybersecurity and Network Management Minor

Cybersecurity and Network Management (Minor or BIS Emphasis)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

For the BIS emphasis, refer to Bachelor of Arts/Science in Interdisciplinary Studies (BIS) in the Interdisciplinary Programs section of this catalog.

- **Grade Requirements:** The following required curriculum used for this minor must be completed with a grade of "C" or better and with a GPA of 2.50 or higher for all required specific major courses and a minimum cumulative GPA for all courses of 2.00.
- **Credit Hour Requirements:** Minimum of 24 credit hours in NET courses as listed below.
- **Program Code:** 8109
- **CIPC:** 110901

Advisement

All students should meet with an advisor for course and program advisement. For more information or to schedule an appointment visit <https://weber.edu/computing/advising.html>.

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high-impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community-engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing. Used effective oral and written English-language skills
- Post-Graduate Planning. Planned for careers and/or graduate programs.

Courses Required for Minor/BIS Emphasis

Courses Required (25 credit hours)

- CYBR 1400 - Introduction to Cyber Defense and Ethics **Credits: (3)**
- CYBR 2200 - Cybersecurity and System Fundamentals **Credits: (3)**
- CYBR 2210 - Linux Systems Administration **Credits: (3)**
- CYBR 2300 - Introduction to Networking and Cybersecurity **Credits: (3)**
- CYBR 2310 - Network Server Administration **Credits: (3)**
- CYBR 3210 - Cloud Architecture and Security **Credits: (3)**
- CYBR 3300 - Advanced LAN Security Management **Credits: (3)**
- CYBR 3710 - Switching and Transmission Network Systems Management **Credits: (4)**

User Experience Design Minor

User experience is a critical component of software and web design. User-centric design has allowed software engineers and front-end web developers to create user experiences that are more sophisticated. This minor will address user experience best practices in several courses using current tools and technologies. The courses in this minor will complement major course offerings.

- **Grade Requirements:** The following required curriculum used for this minor must be completed with a grade of "C" or better and with a minimum cumulative GPA for all courses of 2.70.
- **Credit Hour Requirements:** Minimum of 24 credit hours.
- **Program Code:** 8069
- **CIPC:** 110801

Advisement

Web and User Experience major students should meet with a School of Computing advisor for course and program advisement. Refer to the Department Advisor Referral List for more information or to schedule an appointment.

Required Courses

- WEB 1400 - Web Design and Usability **Credits: (3)**
- WEB 2210 - Computer Illustrations **Credits: (3)**
- WEB 1430 - Client Side Programming **Credits: (3)** or
- WEB 2410 - Web Animation I **Credits: (3)**
- WEB 2500 - User Experience Design **Credits: (3)**
- WEB 2620 - Advanced CSS **Credits: (3)**
- WEB 3500 - User Interface Prototyping & Design **Credits: (3)** or
- WEB 3530 - Information Architecture **Credits: (3)**
- WEB 3600 - User Research Methods **Credits: (4)**

Web Development Minor

- **Grade Requirements:** A grade of "C" or better must be earned in all required WEB courses (a grade of "C-" is not acceptable). A grade of "C-" or better must be earned in all required support courses. In addition, an overall GPA of 2.70 or higher must be attained for all required courses.
- **Credit Hour Requirements:** 23 hours for the Minor and BIS Concentration.
- **Program Code:** 8110
- **CIPC:** 110801

Web Development (Minor or BIS Emphasis)

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Web Development (Minor or BIS Emphasis)

- WEB 1400 - Web Design and Usability **Credits: (3)** and
- WEB 1430 - Client Side Programming **Credits: (3)**
- **or**
- CS 2350 - Client Side Web Development **Credits: (4)**
- WEB 2620 - Advanced CSS **Credits: (3)**
- WEB 3200 - Dynamic Languages for Web Development **Credits: (3)**
- WEB 3350 - Client Side Frameworks **Credits: (4)**
- WEB 3400 - LAMP Stack Web Development **Credits: (3)** or
- WEB 3430 - Full Stack JavaScript Development **Credits: (3)**
- CS 3620 - Server-Side Web Architecture **Credits: (4)**

Teaching Minor

Computer Science Teaching Minor

- **Grade Requirements:** A grade of "C" or better must be earned in all required CS courses (a grade of "C-" is not acceptable). A grade of "C-" or better must be earned in all required support courses. In addition, an overall GPA of 2.70 or higher must be attained for all required courses.
- **Credit Hour Requirements:** 26 hours for the Teaching Minor.
- **Program Code:** 8020
- **CIPC:** 131321

Students who select the Computer Science Teaching minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education) and have a teaching major.

Course Requirements for Teaching Minor (26 credit hours)

Required Courses (18 credit hours)

- CS 1030 - Foundations of Computing **Credits: (4)**
- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2810 - Computer Architecture/Organization **Credits: (4)**
- EDUC 3370 - Advanced Instructional Technology **Credits: (2)**

Electives (8 credit hours)

Select one of the following

- CS 2250 - Structured Computing in a Selected Language **Credits: (4)**
- CS 2350 - Client Side Web Development **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**
- CS 2450 - Software Engineering I **Credits: (4)**
- CS 2550 - Introduction to Database Design and SQL **Credits: (4)**

Select one additional course (4 credit hours)

An approved upper division Computer Science course (CS courses numbered 3000 or higher) other than CS 4800, CS 4850, or CS 4890. An upper division programming language course (CS 3230, CS 3280, CS 3620, CS 3550, or CS 3030) is recommended.

Post Baccalaureate Certificate

Autonomous Vehicle Software Post Baccalaureate Certificate

The Post Baccalaureate Certificate in Autonomous Vehicle Software prepares individuals to write software for autonomous vehicles. Students will be trained in advanced software theory and practical application involving machine learning, advanced artificial intelligence, routing, and navigation of autonomous vehicles.

- **Grade Requirements:** A minimum grade of "B-" and GPA of 3.0.
- **Program Code:** 8114PBC and one of the following cohorts for tracks: Computer Science Track (AUTO_CS) or Computer Engineering Track (AUTO_CE)
- **CIPC:** 15.0407

Admissions Requirements

Candidate must be a current student in one of the following programs:

- Master of Science in Computer Engineering (MSCE)
- Master of Science in Computer Science (MS)
- Master of Science in Computer Electrical Engineering (MSEE)

Required Core Courses (6 credits)

- CS 6500 - Advanced Artificial Intelligence **Credits: (3)**
- CS 6600 - Machine Learning **Credits: (3)**

Select a Track:

Computer Science Track (6 credits)

- CS 6300 - Route Planning and Navigation **Credits: (3)**

Select one from the following:

- CS 6200 - The Internet of Things **Credits: (3)**
- CS 6420 - Advanced Algorithms **Credits: (3)**
- CS 6700 - Deep Learning Theory **Credits: (3)**
- CS 6705 - Applied Cloud Computing **Credits: (3)**
- CS 6740 - Computer Systems Security **Credits: (3)**

Computer Engineering Track (6 credits)

- ECE 6220 - Image Processing **Credits: (3)**
- ECE 6730 - Robotics **Credits: (4)**

Computational Data Science and Machine Learning Post Baccalaureate Certificate

- **Grade Requirements:** A minimum of a B- must be received in all courses in order to receive the graduate certificate.
- **Credit Hour Requirements:** 12 credit hours as specified below.
- **Program Code:** 8098PBC
- **CIPC:** 307101

Graduate Certificate Requirements

- CS 5580 - Data Science Algorithms **Credits: (3)**
- CS 6580 - Data Science Algorithms II **Credits: (3)**
- CS 6600 - Machine Learning **Credits: (3)**
- CS 6700 - Deep Learning Theory **Credits: (3)** or

- CS 6705 - Applied Cloud Computing **Credits: (3)**

Master of Science

Master of Science in Computer Science (MS)

- **Grade Requirements:** An MSCS student must complete all program courses, including electives, with a grade of "B-" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hour Requirements:** The program requires a minimum of 30 semester hours beyond a bachelor's degree in computer science.
- **Program Code:** 8023MS
- **CIPC:** 110701

Once enrolled, a student must register for at least one MSCS course each semester, except summers, until graduation. Students who fail to do so must petition for readmission into the program.

Admissions Requirements

Applicants for admission into the Master of Science in Computer Science program must possess a bachelor's degree or be in the final stage of completing the degree. An overall GPA of 3.25 is required from the undergraduate program in which the bachelor's degree is earned.

Applicants will submit:

- Completed application.
- Current resume.
- Official transcripts from every institution of higher education attended.
- GRE Scores are required for International Applicants.

Additional Admission Requirements for International Students

All international students and any applicant educated outside the U.S. must demonstrate proficiency in English. For applicants for whom English is not their first language, a minimum English language proficiency score is required. (TOEFL (Test of English as a Foreign Language) = 75 overall, with a minimum of 17 in each category: OR IELTS (International English Language Testing System) 6.5 overall, with a minimum of 6.0 in each category).

The application for admission to the Master of Science in Computer Science program must be submitted online. Official transcripts from each institution of higher education attended and all test scores must be sent directly to the WSU School of Computing.

Deadlines for application are October 15, for students enrolling in spring semester and March 15, for students enrolling in fall semester. Completed applications are considered by the Admissions Committee after each application deadline

Advisement

For issues regarding admissions, registration, and scheduling, students should contact the Graduate Enrollment Director. For questions concerning academic advisement, the primary source of contact is the MSCS Program Director. Students should meet with the director at least once a year while enrolled.

Program Learning Outcomes

- Demonstrate the ability to apply knowledge of math, science and engineering.
- Demonstrate the ability to design a system, component or process.
- Demonstrate the ability to identify, formulate and solve computer science problems.
- Demonstrate the ability to apply master's level knowledge to the specialized area of computer science.

Leveling Courses

As determined on a case-by-case basis, students with non-computer science degrees may be required to take leveling courses in technology-related areas that will adequately prepare them for the MS core courses. The minimum leveling courses for non-computer science degrees are the following:

- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**
- CS 2810 - Computer Architecture/Organization **Credits: (4)**
- CS 3100 - Operating Systems **Credits: (4)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 1210 - Calculus I **Credits: (4)**

Course Requirement for MSCS

Required Core MSCS course (1 credit):

- CS 6000 - Fundamentals of Graduate Studies **Credits: (1)**

Required Thesis Research, Design Project, or Course-Work Only Option (6 credits):

MSCS students are required to complete original research resulting in a thesis (CS 6011), a substantial project (CS 6010), or a course-work option (two additional CS graduate electives). The student must declare to the department their intent to do a thesis, project or course-work only option. It is presumed that students will do a research thesis unless the program director is otherwise notified.

Generally, CS 6011 is taken by students who are interested in being introduced to research and development and are considering the possibility of pursuing their doctorate (Ph.D.).

Alternatively, CS 6010 is taken by students with an industry-minded perspective.

The course-work only option is for students seeking to increase their technical depth in Computer Science.

A total of 6 or more credits is required for each of the three tracks.

Select a Track (6 credits):

Thesis Option (6 credits)

- CS 6011 - Thesis Research **Credits: (2-6)**

Project Option (6 credits)

- CS 6010 - Design Project **Credits: (2-6)**

Course-Work Option (6 credits)

Two other CS 6000-Level Courses (except CS 6011 and CS 6010) that do not meet the previous requirements.

Computer Science Graduate Electives (18 credits)

MSCS students are required to complete 18 hours of Computer Science (CS) graduate electives. For these 18 credits, students may select any CS 6000-level courses that do not meet the previous requirements. For a list of scheduled and recently scheduled CS graduate courses, see the following: <https://weber.edu/mscs/course-schedule.html>.

Additional Graduate Electives (6 credits):

In addition, MSCS students are required to complete 6 additional graduate electives. These additional graduate electives can be any CS 6000-level course not previously applied to another requirement, any graduate course that is approved by the MSCS graduate director, or one of the approved courses from the following list:

- Any MATH 6000-level course
- Any ECE 6000-level course
- Any CS 6000-level course
- Any CS 5000-level course
- Any ECON 6000-level course
- Any MPC 6000-level course
- MBA 6160 - Applications of Decision Models **Credits: (3)**
- MBA 6310 - Information Technology in the Enterprise **Credits: (3)**
- MBA 6530 - E-Business **Credits: (3)**
- MBA 6630 - Networking **Credits: (3)**
- MBA 6640 - Cyber Security **Credits: (3)**

Master of Science in Data Science (MS)

- **Grade Requirements:** An MSDS student must complete all program courses, including electives, with a grade of "B-" or higher. In addition, the overall program GPA must be 3.0 or higher. Failure to maintain a 3.0 grade point average, or two consecutive course sessions where a grade lower than B- has been earned, will result in academic probation in accordance with departmental policies.
- **Credit Hour Requirements:** 33 credit hours total required.
- **Program Code:** 8104MS
- **CIPC:** 307001

Admission Requirements

Applicants for admission into the Master of Science in Data Science program must possess a bachelor's degree or be in the final stage of completing the degree. An overall GPA of 3.25 is required from the undergraduate program in which the bachelor's degree is earned.

Applicants will submit:

- Completed application.

- Current resume.
- Official transcripts from every institution of higher education attended.

Additional Admission Requirements for International Students

Scores from the GRE.

All international students and any applicant educated outside the U.S. must demonstrate proficiency in English. For applicants for whom English is not their first language, a minimum English language proficiency score is required. (TOEFL (Test of English as a Foreign Language) = 75 overall, with a minimum of 17 in each category: OR IELTS (International English Language Testing System) 6.5 overall, with a minimum of 6.0 in each category).

Application

The application for admission to the Master of Science in Data Science program must be submitted online. Official transcripts from each institution of higher education attended and all test scores must be sent directly to the WSU School of Computing.

Deadlines for application are October 15, for students enrolling in spring semester and March 15, for students enrolling in fall semester. Completed applications are considered by the Admissions Committee after each application deadline.

Leveling Courses

As determined on a case-by-case basis, students with non-computer science degrees may be required to take leveling courses in technology-related areas that will adequately prepare them for the MS core courses. The minimum leveling courses for non-computer science degrees are the following:

- Integral calculus: MATH 1216 or MATH 1220 or QUAN 2400.
- Descriptive and inferential statistics: MATH 3410 or MATH 3450 or QUAN 3610 or COMM 3150 or PSY 3600.
- Linear algebra: MATH 2270.
- Programming basics: CS 2420.
- Database basics: CS 2550 or MIS 3210.

Core Course Requirements

- CS 5580 - Data Science Algorithms **Credits: (3)**
- CS 6580 - Data Science Algorithms II **Credits: (3)**
- CS 6550 - Advanced Database Management Systems **Credits: (3)**
- ECON 6550 - Econometrics **Credits: (3)**
- MATH 6400 - Advanced Statistical Learning **Credits: (3)**
- MATH 6450 - Applied Statistics & Regression **Credits: (3)**
- MATH 6500 - Factor and Cluster Analysis **Credits: (3)**
- MPC 6840 - Data Visualization & Storytelling **Credits: (3)**
- CS 6705 - Applied Cloud Computing **Credits: (3)** or
- MATH 6900 - Capstone in Statistics and Data Science **Credits: (1-3)** (3 credits required)

Electives

Select six credits of the following courses not already used from above:

- Any MATH 6000-level course
- Any ECE 6000-level course
- Any CS 6000-level course
- Any CS 5000-level course
- Any ECON 6000-level course
- Any MPC 6000-level course
- MBA 6160 - Applications of Decision Models **Credits: (3)**
- MBA 6620 - Data Mining for Business **Credits: (3)**
- MBA 6660 - Forecasting and Time Series **Credits: (3)**
- MHA 6200 - Population Health and Data Analytics **Credits: (3)**
- MHA 6450 - Health Informatics **Credits: (3)**

Certification

Mobile Application Development Certificate

A student may apply for a certificate in Mobile Application Development provided he or she has fulfilled the following requirements:

1. Concurrent or previous completion of a Bachelor's Degree in Computer Science from the WSU College of Applied Science and Technology or any other accredited institution.
2. Completion of the following required courses with a grade of C or better. These courses may also be slotted as electives for degree requirements.

Program Learning Outcomes

- Apply knowledge of computing and mathematics
- Analyze problems, identify, and define requirements
- Design, implement, & evaluate computer-based systems
- Function in teams
- Professional, ethical, security, and social behavior
- Communicate Effectively
- Analyze local and global impact of computing
- Engage in continuing professional development
- Use current techniques, skills, and tools
- Apply mathematics, algorithms, and computer theory
- Apply design and development principles

(12 credit hours):

- CS 3260 - Mobile Development for the iPhone **Credits: (4)**
- CS 3270 - Mobile Development for Android **Credits: (4)**
- CS 3630 - Rich Internet Application Development **Credits: (4)**

College of Science

Dr. Andrea Easter-Pilcher, Dean

The College of Science provides quality education in the natural sciences and mathematics. The college offers majors and minors in seven departments (Botany, Chemistry, Earth and Environmental Science, Mathematics, Microbiology, Physics, and Zoology). The college also supports students through its Developmental Mathematics Program. The departments and programs of the College of Science support professional and graduate school preparatory programs, and contribute significantly to the general education of students by improving scientific understanding of the natural world and quantitative literacy. Education is provided through formal classes, laboratory and field experiences, and undergraduate research projects. Student learning is also supported by departmental clubs and professional preparatory organizations. The college promotes science and mathematics teaching through the Center for Science and Mathematics Education, and community outreach through such facilities as the Layton P. Ott Planetarium and Museum of Natural Science.

Associate Dean: Dr. Barb Trask

Associate Dean: Dr. Laine Berghout

Location: Tracy Hall Science Center, Room 470

Telephone Contact: Donna Wollman 801-626-6159

Department Chairs/Directors

Botany and Plant Ecology: Dr. Bridget Hilbig	801-626-6176
Chemistry and Biochemistry: Dr. Brandon Burnett	801-626-6221
Developmental Mathematics Program: Dr. Kathryn Van Wagoner	801-626-7478
Earth and Environmental Sciences: Dr. Marek Matyjasik	801-626-7726
Mathematics: Dr. Sandra Fital-Akelbek	801-626-6095
Microbiology: Dr. Michele Culumber	801-626-6949
Physics and Astronomy: Dr. Colin Inglefield	801-626-6163
Zoology: Dr. Ron Myers	801-626-6170

Science and Mathematics Programs, offered as both majors and minors allow students to pursue in-depth study in the science discipline of one's choice. They also allow one to experience a more diverse education through broader study outside of the sciences. Graduates in the sciences and mathematics are able to find employment in a variety of entry-level positions directly related to their major discipline. They are also able to move into graduate school or professional programs. Our graduates possess the broad liberal arts educational background and depth of expertise for significant career ladder movement in their discipline fields. They also have the breadth of knowledge and skills to exercise unique job mobility to become entrepreneurs and pioneer new career directions.

Pre-professional Programs are designed for students interested in specific professional careers requiring additional education at professional schools elsewhere. Weber State University has an excellent record of graduates being admitted into a wide range of professional school programs.

Professional Teacher Preparation Programs are designed to meet the needs of students seeking certification to teach in elementary and secondary schools. The Center for Science & Mathematics Education coordinates with the Jerry and Vickie Moyes College of Education to provide opportunities for students to investigate science teaching careers. There are many excellent career opportunities for graduates with teaching majors or minors in science or mathematics.

Technical Education Programs are offered to meet the needs of individuals seeking vocational and technical preparation required for skilled job-entry or reentry employment, as well as for career updating and occupational enhancement. Currently Associate of Science and Associate of Applied Science degrees are offered for Biotechnician training and Chemical Technician training, respectively, and Institutional Certificates are offered for Biotechnician training, Chemical Technician training, and Geomatics.

Students planning to major or minor in the College of Science should contact the appropriate department for assistance in planning their program. The details of the requirements for all majors and minors are listed within the respective departments. Students completing the teaching majors, minors, or emphases will also work closely with the Center for Science & Mathematics Education and the Jerry and Vickie Moyes College of Education.

Center for Science & Mathematics Education

Director: Dr. Adam Johnston

Location: Tracy Hall Science Center, Room 204

<https://www.weber.edu/csme>

csme@weber.edu

801-626-6160

Effective science and mathematics education of the citizenry requires rich and active experiences with the concepts and methods of science and math throughout life. To this end the Center for Science & Mathematics Education seeks to share the resources and expertise of the faculties at Weber State University with the surrounding schools and community.

The mission of the Center for Science and Math Education is to:

- To provide training and advisement for pre-service secondary education science and mathematics teaching majors.
- To provide coordination for science and mathematics education at Weber State University, liaison with the WSU Department of Teacher Education, the Utah State Office of Education and the local school districts.
- To provide in-service training and support for science and mathematics teachers.
- To provide opportunities and support for K-12 students related to science and mathematics.

The Center for Science & Mathematics Education also administers and advises students in the Biology Composite Teaching (BS) and the Biology Teaching Minor.

See Mathematics Education (MTHE) under Course Descriptions.

Science Education courses are listed following Master of Education (GSE) under Course Descriptions.

Chemical Technology Center

Director: Dr. Edward B. Walker

Location: Tracy Hall Science Center, Room 255P

Telephone: 801-626-6162

Email: ewalker@weber.edu

The mission of the Chemical Technology Center is to enhance the learning environment at Weber State University. The Center involves students and faculty in applied research activities that concomitantly provide extra-curricular learning opportunities, service to the community, and productive relationships with local and regional industries.

Layton P. Ott Planetarium

Director: Dr. John Armstrong, planetarium@weber.edu, 801-626-6215

Web Site: weber.edu/ottplanetarium

The Planetarium, featuring a 30-foot hemispherical dome, is used for instruction in undergraduate astronomy classes. It is also a science education facility featuring programs of interest to elementary students, secondary students, and the general public. For the general public, a program featuring some topic of current interest in astronomy is given one evening a week. Any teacher wishing instructional materials or wanting to set up an appointment for a class visit should contact the Director of the Planetarium, 801-626-6871.

Pre-Professional Programs

For information see weber.edu/premedicalprofessionalprograms or call the Pre-Medical Professional Programs office 801-626-7755.

Students pursuing one of the following programs should satisfy the pre-professional requirements while completing a bachelor's degree. Students should work closely with both their pre-professional advisor and their academic major advisor. Since course loads are typically heavy, and requirements and application procedures vary among post-graduate programs, students should plan their academic strategies early and with full information.

Advisement

Students should be familiar with requirements in the Weber State catalog and consult with the pre-professional advisor and an advisor in their major department.

<u>Emphasis</u>	<u>Advisor</u>	<u>Room</u>	<u>Telephone</u>
Pre-Chiropractic	Mr. James Moore	TY 358	801-626-7813
Pre-Dentistry	Mr. James Moore	TY 358	801-626-7813
Pre-Medical	Mr. James Moore	TY 358	801-626-7813
Pre-Optometry	Mr. James Moore	TY 358	801-626-7813
Pre-Pharmacy	Dr. Don Davies	TY 255K	801-626-6224
Pre-Occupational Therapy	Ms. Brittni Strickland	SW 102L	801-626-7425
Pre-Physical Therapy	Ms. Rachel Brock	SW 323	801-626-6696
Pre-Physician Assistant	Mr. Kenton Cummins	MH 215	801-626-7509
Pre-Podiatry	Mr. James Moore	TY 358	801-626-7813
Pre-Veterinary Medicine	Dr. Ron A. Meyers	TY 407	801-626-6170

Pre-Professional

Pre-Medical Programs

Choosing a career in the medical field is an important decision. Weber State students feel confident in this decision knowing their desire is well supported through the Dr. Ezekiel R. Dumke Family Pre-Medical Program and student resources. The journey starts by understanding that there is not a "pre-medical major;" rather, you select a major in any discipline and include the courses that schools providing professional training in your area of interest require. Regular communication with pre-medical advisors is encouraged as you plan and carry out your pre-medical preparation.

Pre-Med General Office

Monday - Friday, 8:00 a.m. - 5:00 p.m.
Tracy Hall Science Center, 201
801-626-7755, Email

Advisement

Pre-Medical Program Advisor: James K. More

Students pursuing pre-med programs should satisfy the pre-professional requirements while completing a bachelor's degree within the College of Science. Students should work closely with both their pre-professional advisor and their academic major advisor. Since course loads are typically heavy, and requirements and application procedures vary among post-graduate programs, students should plan their academic strategies early and with full information.

Programs

Learn more about the programs offered at WSU's Pre Medical Programs Website.

- Pre Dentistry
- Pre Medicine
- Pre Pharmacy
- Pre Physical Assistant
- Pre Physical & Occupational Therapy
- Pre Veterinary Medicine

Recommended Courses

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)** and

- CHEM 3075 - Biochemistry I Lab **Credits: (1)**
- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- PSY 1010 SS - Introductory Psychology **Credits: (3)** or
- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)** and
- MATH 1060 QL - Trigonometry **Credits: (3)**
OR
- MATH 1080 QL - Pre-calculus **Credits: (5)**
- MATH 1210 - Calculus I **Credits: (4)**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2220 - Diversity of Animals **Credits: (4)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**

Department of Botany and Plant Ecology

Department Chair: Sue Harley

Location: Tracy Hall Science Center, Room 416

Telephone: 801-626-6174

Professors: Sue Harley, Barbara Wachocki; **Associate Professor:** Bridget Hilbig, Heather Root; **Assistant Professors:** James Cohen

While plants have intrigued and delighted people for thousands of years, they still remain undervalued and too little appreciated. We see a faint connection between plants and our basic needs for food, shelter, clothing, and energy, but only in a rather limited way. Remote connections are made, if at all, between the history of exploration; present-day social, economic, and political conditions; and access to plants and plant products. Interest and understanding of plants is becoming much more intense. During the last few decades we have seen an unprecedented increase in the variety of plants and plant products available in our markets as the popularity of ethnic cuisines has grown. Also, worldwide, people are becoming increasingly aware of sound nutrition and the role plants play in our general health. We now appreciate plants as reservoirs of untold numbers of pharmaceuticals important in our war on diseases. These interests are stimulating our collective concerns about understanding the past, present, and future uses of plants. Recently we have begun to address our most serious problems, such as the loss of ecosystem integrity and habitats for animals dependent upon vegetation. This we have done through increased understanding of plants. We now know how valuable plants are in maintaining the health and stability of the global environment and that in its survival is the survival of the human species.

Botany is the study of all aspects of plants, including systematics, morphology, diversity, metabolism, and ecology. Through a study of plants, students gain an understanding and an appreciation of life at the cellular, organismal, population, and community levels of organization. The study of Botany can lead to a variety of professional careers, including soil science, forestry, range management, biotechnology, plant breeding, horticulture, environmental science, natural medicine, and teaching.

The Botany Department at Weber State University offers undergraduate training in all areas of botany. Students who are interested in specializing in a particular area are encouraged to meet with an advisor. Students who are interested in Field Botany can earn a certificate of proficiency in field botany while working on their Botany (BS) or as a stackable credential with a Biology (AS).

The Botany Department cooperates with the departments of Microbiology and Zoology in offering a Biology Composite Teaching (BS) Major for individuals who are interested in teaching Biology at the secondary school level and a Biology (AS).

The Botany Minor provides valuable support for students majoring in a variety of other fields, including anthropology, geosciences, and zoology.

Herbarium

The Herbarium of Weber State University is housed in the Tracy Hall Science Center, room TY345. It contains more than 28,000 preserved plant specimens, primarily collected from Utah and the Western United States. This collection serves as an important reference for students, faculty, biologists, and all others who need to know the identity of plants or learn something about their geographic distributions and ecological associations.

Interdisciplinary Programs

The Botany Department participates in the interdisciplinary Urban and Regional Planning Emphasis Program. Students who wish to enroll in this program should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of the catalog.) The Department of Botany also contributes courses and faculty expertise to the interdisciplinary Environmental Science major (BS) sponsored by the College of Science.

Institutional Certificate

Field Botany Certificate of Proficiency

This program has been suspended pending formal discontinuance and is no longer accepting new students.

The Certificate of Proficiency in Field Botany provides 24 semester credit hours in botany, the minimal botany course work needed for federal job code 0430, botanist. This certificate can be earned as a stand alone certificate, as a +1 with the Biology AS, or while working on a Botany BS. An additional 5 credit hours in botany and an appropriate mathematics course are required beyond the requirements for the botany minor.

- **Program Prerequisite:** Not required.
- **Grade Requirements:** Students completing a certificate in Field Botany must have a minimum grade of "C" in all courses used toward the certificate (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 27-28 credit hours is required for the certificate.
- **Program Code:** 6045CP
- **CIPC:** 260301

Advisement

Advisor: Dr. Barbara Wachocki, 801-626-7223, bwachocki@weber.edu

Program Learning Outcomes

- The chemical and molecular machinations operating within all biological processes.
- The centrality of genetic systems' governance of life's actions from the cellular to the phyletic

- The coordinated regulation of integrated cellular systems and their effect on the physiological functioning of organisms
- The dynamic interaction of living systems with each other and their environments
- The transforming role of evolution in changing life forms and how evolution explains both the unity and diversity of life.
- The Process of Science: Students will use observational strategies to test hypotheses and critically evaluate experimental evidence.
- Quantitative Reasoning: Students will represent diverse experimental data sets graphically and apply statistical methods to them.
- Communication: Students will disseminate results of experiments in a variety of presentation formats to a wide variety of audiences.
- Sustainability: Students will use their knowledge of biology to address environmental issues and solutions.
- Basic Lab Techniques (For example: pipetting, light microscopy)
- Lab Safety (For example: chemical hygiene, sharps waste management)
- Navigation (For example: GPS, mapping, remote sensing)
- Plant Identification (For example: Dichotomous keying, common Utah flora, curating specimens)
- Plant Community Sampling (For example: plot selection and design, sampling strategies, vegetation sampling methods)
- Field Safety (For example: minimizing risk from field hazards in remote areas such as weather, travel, wild animals, and terrain)
- Record Keeping (For example: field notebook)

Course Requirements

Required courses (22-23 credit hours)

- BTNY 2104 - Plant Form and Function **Credits: (4)** *or equivalent as approved by Botany department chair*
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)** *or equivalent as approved by Botany department chair*
- BTNY 3454 - Plant Ecology **Credits: (4)**
- BTNY 3624 - Taxonomy of Vascular Plants **Credits: (4)**
- BTNY 4950 - Advanced Field Botany **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)** *or*
- Equivalent math course as approved by Botany department chair

Botany Electives (Minimum 5 credit hours)

Select courses from the list below to reach a minimum of 24 total BTNY credit hours for the certificate.

- BTNY 2413 - Introduction to Natural Resource Management **Credits: (3)**
- BTNY 3105 - Anatomy of Vascular Plants **Credits: (4)**
- BTNY 3204 - Plant Physiology **Credits: (4)**
- BTNY 3214 - Soils **Credits: (4)**
- BTNY 3224 - Plant Morphology **Credits: (4)**
- BTNY 3303 - Plant Genetics **Credits: (4)**
- BTNY 3420 - Wildland Fire Ecology **Credits: (3)**

- BTNY 3473 - Plant Geography **Credits: (3)**
- BTNY 3504 - Mycology **Credits: (4)**
- BTNY 3643 - Intermountain Flora **Credits: (3)**
- BTNY 4750 - Topics in Botany **Credits: (1-5)** * (*variable title and credit*)
- BTNY 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)** * (*variable title and credit*)

**with approval of the Botany department chair or Field Botany advisor*

Bachelor of Science

Botany (BS)

- **Program Prerequisite:** Not required.
- **Minor:** A minor is required.
- **Grade Requirements:** An overall GPA of 2.00 in all courses required for this major. Also refer to the general grade requirements for graduation under Degree Requirements.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 66 of these is required within the major. A total of 40 upper division credit hours is required (courses number 3000 and above) with a minimum of 21 required within the major.
- **Program Code:** 6067BS
- **CIPC:** 260301

Advisement

Majors are encouraged to consult with their advisor each semester. Contact the Botany department (801-626-6174).

Admission Requirements

Declare your program of study (see Enrollment Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to pages Degree Requirements for Bachelor of Science requirements. The following courses required for the Botany major will also satisfy general education requirements:

All Botany majors are required to complete a Botany Capstone Seminar. The requirements for the Capstone are explained in detail when a student takes BTNY 2121. The final evaluation of the capstone seminar takes place in BTNY 4990.

Program Learning Outcomes

- The chemical and molecular machinations operating within all biological processes
- The centrality of genetic systems' governance of life's actions from the cellular to the phyletic
- The coordinated regulation of integrated cellular systems and their effect on the physiological functioning of organisms
- The dynamic interaction of living systems with each other and their environments

- The transforming role of evolution in changing life forms and how evolution explains both the unity and diversity of life.
- The dynamic interaction of living systems with each other and their environments
- The transforming role of evolution in changing life forms and how evolution explains both the unity and diversity of life.
- The Process of Science: Students will use observational strategies to test hypotheses and critically evaluate experimental evidence.
- Quantitative Reasoning: Students will represent diverse experimental data sets graphically and apply statistical methods to them.
- Communication: Students will disseminate results of experiments in a variety of presentation formats to a wide variety of audiences
- Sustainability: Students will use their knowledge of biology to address environmental issues and solutions.
- Basic Lab Techniques (For Example: pipetting, light microscopy, chromatography, aseptic technique, microbial culture and plating techniques, cell culture)
- Molecular (For Example: DNA extractions, PCR, Gel electrophoresis)
- Microscopy Techniques (For Example: Sectioning, Sample Infiltration and Embedding, Phase contrast, Confocal)
- Safety (For Example: Chemical hygiene, Sharps, Waste management)
- Navigation (For Example: GPS, Mapping, Remote Sensing, problem solving)
- Plant Identification (For Example: Dichotomous keying, common Utah flora, curating specimen)
- Plant Community Sampling (For example: plot selection and design, sampling strategies, vegetation sampling methods)
- Safety (For example: minimizing risk from field hazards in remote areas such as weather, travel, wild animals, terrain)
- Record Keeping (For example: lab notebook, field notebook)
- Software Applications (For example: FLOUVIEW, ARCGIS, R, MATLAB, Spreadsheets, Databases, 4Peaks)

Major Course Requirements for BS Degree

- BTNY 2104 - Plant Form and Function **Credits: (4)**
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**
- BTNY 2121 - Career Planning for Botanists **Credits: (1)**
- BTNY 2600 - Laboratory Safety **Credits: (1)**
- BTNY 2750 - Topics in Science and Society **Credits: (3)**
- BTNY 3624 - Taxonomy of Vascular Plants **Credits: (4)**
- BTNY 4990 - Botany Capstone Seminar **Credits: (2)**

Botany Elective Courses (Minimum of 21 Credit Hours)

A minimum of 21 additional credits is required within the major. Of these, a minimum of 3 credit hours in each of the three categories (A, B, and C) is required. A maximum of 6 lower division credits can count towards the major course requirements.

Category A: Genetics, Cell, and Molecular (3 credit minimum)

- BTNY 3153 - Biology of the Plant Cell **Credits: (3)**
- BTNY 3303 - Plant Genetics **Credits: (4)**

Category B: Physiology and Organismal (3 credit minimum)

- BTNY 3105 - Anatomy of Vascular Plants **Credits: (4)**
- BTNY 3204 - Plant Physiology **Credits: (4)**
- BTNY 3224 - Plant Morphology **Credits: (4)**
- BTNY 3504 - Mycology **Credits: (4)**
- BTNY 3583 - Medicinal Plants-Chemistry and Use **Credits: (4)**

Category C: Evolution, Ecology, and Environmental (3 credit minimum)

- BTNY 2413 - Introduction to Natural Resource Management **Credits: (3)**
- BTNY 3214 - Soils **Credits: (4)**
- BTNY 3420 - Wildland Fire Ecology **Credits: (3)**
- BTNY 3473 - Plant Geography **Credits: (3)**
- BTNY 3643 - Intermountain Flora **Credits: (3)**
- BTNY 4113 - Plant Evolution **Credits: (3)**
- BTNY 4950 - Advanced Field Botany **Credits: (3)**

Additional Botany Elective Courses

BTNY 4750 - Topics in Botany, BTNY 4920 - Short Courses, Workshops, Institutes, and Special Programs, and other variable title courses may count towards one of the three categories with approval from the Botany Department chair.

- BTNY 2203 - Home and Garden Plants **Credits: (3)**
- BTNY 2303 - Ethnobotany **Credits: (3)**
- BTNY 2890 INT - Cooperative Work Experience **Credits: (1-3)**
- BTNY 4750 - Topics in Botany **Credits: (1-5)**
- BTNY 4800 - Individual Research **Credits: (2)**
- BTNY 4830 - Readings in Botany **Credits: (1-3)**
- BTNY 4840 - Thesis Readings **Credits: (2)**
- BTNY 4850 - Thesis Research **Credits: (1-4)**
- BTNY 4890 INT - Cooperative Work Experience **Credits: (1-6)**
- BTNY 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- BTNY 4970 - Botany Thesis **Credits: (2)**
- MATH 3450 - Advanced Statistical Methods **Credits: (4)**

Required Support Courses (23-36 credit hours)

For each of the following categories in the College of Science you must choose one of the course groupings to satisfy your required support courses.

Chemistry (10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

Mathematics (3-5 credit hours)

- MATH 1050 QL - College Algebra **Credits: (4)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)** or
- MATH 1210 - Calculus I **Credits: (4)**

Physical Sciences (7-10 credit hours)

- PHYS 1010 PS - Elementary Physics **Credits: (3)** and
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)** and
- GEO 1115 - Physical Geology Lab **Credits: (1)**
or
- PHYS 2010 PS - College Physics I **Credits: (5)** and
- PHYS 2020 - College Physics II **Credits: (5)**
or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**

Other Life Sciences (6 credit minimum)

- MICR 1113 LS - Introductory Microbiology **Credits: (3)**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- MICR 3012 GLB - Microbiology and Global Public Health **Credits: (2)**
- MICR 3053 - Microbiological Procedures **Credits: (3)**
- MICR 3203 - The Immune System in Health & Disease **Credits: (3)**
- MICR 3254 - Immunology **Credits: (4)**
- MICR 3305 - Medical Microbiology **Credits: (5)**
- MICR 3403 GLB - Tropical Diseases **Credits: (3)**
- MICR 3484 - Environmental Microbiology **Credits: (4)**
- MICR 3753 - Geomicrobiology **Credits: (3)**
- MICR 3853 - Food Microbiology **Credits: (3)**
- MICR 4054 - Microbial Physiology **Credits: (4)**
- MICR 4154 - Microbial Genetics **Credits: (4)**
- MICR 4554 - Virology **Credits: (4)**
- ZOOL 1010 LS - Animal Biology **Credits: (3)**
- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2220 - Diversity of Animals **Credits: (4)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**
- ZOOL 3450 CRE - Ecology **Credits: (4)**
- ZOOL 3470 - Zoogeography **Credits: (3)**
- ZOOL 3500 - Conservation Biology **Credits: (3)**
- ZOOL 3720 - Evolution **Credits: (3)**
- ZOOL 4050 - Comparative Vertebrate Anatomy **Credits: (4)**
- ZOOL 4100 - Vertebrate Embryology **Credits: (4)**
- ZOOL 4120 - Histology **Credits: (4)**
- ZOOL 4210 - Advanced Human Physiology **Credits: (4)**
- ZOOL 4220 - Endocrinology **Credits: (4)**

- ZOOL 4300 - Research Applications in Genetics **Credits: (4)**
- ZOOL 4470 - Wildlife Ecology and Management **Credits: (4)**
- ZOOL 4480 - Freshwater Ecology **Credits: (4)**
- ZOOL 4490 - Marine Ecology **Credits: (4)**
- ZOOL 4640 - Entomology **Credits: (4)**
- ZOOL 4650 - Ichthyology **Credits: (4)**
- ZOOL 4660 - Herpetology **Credits: (4)**
- ZOOL 4670 - Ornithology **Credits: (4)**
- ZOOL 4680 - Mammalogy **Credits: (4)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Botany (BIS)

Botany (Minor/BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** An overall GPA of 2.00 in all courses used toward the minor.
- **Credit Hour Requirements:** Minimum 19 credit hours in Botany courses.
- **Program Code:** 6000
- **CIPC:** 260301

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for Minor/BIS

Botany Courses Required (9 credit hours)

- BTNY 2104 - Plant Form and Function **Credits: (4)**
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**
- BTNY 2600 - Laboratory Safety **Credits: (1)**

Electives

Select at least three courses from the list below for a minimum of 10 credit hours (3 lower division credit hours maximum).

- BTNY 2203 - Home and Garden Plants **Credits: (3)**
- BTNY 2303 - Ethnobotany **Credits: (3)**
- BTNY 2413 - Introduction to Natural Resource Management **Credits: (3)**
- BTNY 2750 - Topics in Science and Society **Credits: (3)**
- BTNY 3105 - Anatomy of Vascular Plants **Credits: (4)**
- BTNY 3153 - Biology of the Plant Cell **Credits: (3)**
- BTNY 3204 - Plant Physiology **Credits: (4)**
- BTNY 3214 - Soils **Credits: (4)**
- BTNY 3303 - Plant Genetics **Credits: (4)**
- BTNY 3454 - Plant Ecology **Credits: (4)**
- BTNY 3473 - Plant Geography **Credits: (3)**
- BTNY 3504 - Mycology **Credits: (4)**
- BTNY 3514 - Algology **Credits: (4)**
- BTNY 3523 - Marine Biology **Credits: (3)**
- BTNY 3583 - Medicinal Plants-Chemistry and Use **Credits: (4)**
- BTNY 3624 - Taxonomy of Vascular Plants **Credits: (4)**
- BTNY 3643 - Intermountain Flora **Credits: (3)**
- BTNY 4113 - Plant Evolution **Credits: (3)**
- BTNY 4252 - Cell Culture **Credits: (2)**
- BTNY 4750 - Topics in Botany **Credits: (1-5)**
- BTNY 4890 INT - Cooperative Work Experience **Credits: (1-6)**
- BTNY 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- BTNY 4950 - Advanced Field Botany **Credits: (3)**
- MATH 3450 - Advanced Statistical Methods **Credits: (4)**
- BTNY 3420 - Wildland Fire Ecology **Credits: (3)**
- BTNY 3224 - Plant Morphology **Credits: (4)**

Minor

Botany Minor

Botany (Minor/BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** An overall GPA of 2.00 in all courses used toward the minor.
- **Credit Hour Requirements:** Minimum 19 credit hours in Botany courses.
- **Program Code:** 6000
- **CIPC:** 260301

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.

- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for Minor/BIS

Botany Courses Required (9 credit hours)

- BTNY 2104 - Plant Form and Function **Credits: (4)**
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**
- BTNY 2600 - Laboratory Safety **Credits: (1)**

Electives

Select at least three courses from the list below for a minimum of 10 credit hours (3 lower division credit hours maximum).

- BTNY 2203 - Home and Garden Plants **Credits: (3)**
- BTNY 2303 - Ethnobotany **Credits: (3)**
- BTNY 2413 - Introduction to Natural Resource Management **Credits: (3)**
- BTNY 2750 - Topics in Science and Society **Credits: (3)**
- BTNY 3105 - Anatomy of Vascular Plants **Credits: (4)**
- BTNY 3153 - Biology of the Plant Cell **Credits: (3)**
- BTNY 3204 - Plant Physiology **Credits: (4)**
- BTNY 3214 - Soils **Credits: (4)**
- BTNY 3303 - Plant Genetics **Credits: (4)**
- BTNY 3454 - Plant Ecology **Credits: (4)**
- BTNY 3473 - Plant Geography **Credits: (3)**
- BTNY 3504 - Mycology **Credits: (4)**
- BTNY 3514 - Algology **Credits: (4)**
- BTNY 3523 - Marine Biology **Credits: (3)**
- BTNY 3583 - Medicinal Plants-Chemistry and Use **Credits: (4)**
- BTNY 3624 - Taxonomy of Vascular Plants **Credits: (4)**
- BTNY 3643 - Intermountain Flora **Credits: (3)**
- BTNY 4113 - Plant Evolution **Credits: (3)**
- BTNY 4252 - Cell Culture **Credits: (2)**
- BTNY 4750 - Topics in Botany **Credits: (1-5)**
- BTNY 4890 INT - Cooperative Work Experience **Credits: (1-6)**
- BTNY 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- BTNY 4950 - Advanced Field Botany **Credits: (3)**
- MATH 3450 - Advanced Statistical Methods **Credits: (4)**
- BTNY 3420 - Wildland Fire Ecology **Credits: (3)**
- BTNY 3224 - Plant Morphology **Credits: (4)**

Department of Chemistry and Biochemistry

Department Chair: Brandon Burnett

Location: Tracy Hall Science Center, Room 255H

Telephone Contact: Colleen Boam 801-626-6952

Professors: H. Laine Berghout, Charles Davidson, Don Davies, Timothy Herzog, Todd M. Johnson, Andreas Lippert, Barry A. Lloyd, Michelle Paustenbaugh, Edward Walker; **Associate Professors:** Brandon Burnett, Tracy Covey; **Assistant Professor:** Andressa Antonini Bertolazzo, Katherine Bowman, Demetrios Pagonis **Instructors:** Carol Campbell, Brooke Jenkins, Ranga Don Wahalathantrige

The Department of Chemistry and Biochemistry is approved by the American Chemical Society (ACS). Chemistry and Biochemistry- ACS Certified Bachelor of Science degrees meets all the requirements of the ACS. Both Chemistry BS or Biochemistry BS programs provide good foundations in chemistry and biochemistry that prepares students to enter the work force directly, or enter graduate research programs. They also provide our students excellent preparation for Pre-Medical, Pre-Dental, Pre-Pharmacy, other Pre-Medical Professional students and who need a sound chemical background. The Chemistry Teaching Major leads to a Bachelor of Science Degree with secondary education licensure. A Chemistry Minor and a Chemistry Teaching Minor are also available. The two-year Chemical Technician Program, leading to an Associate of Applied Science Degree or a Certificate of Skill Proficiency, is designed to emphasize skills required for employment as a technician in chemical laboratories.

Interdisciplinary Programs

The Department of Chemistry and Biochemistry contributes courses and faculty expertise to the Interdisciplinary Environmental Science major (BS) sponsored by the College of Science. In addition, the department participates in A.A.S. Physical Science.

Associate of Applied Science

Chemical Technician (AAS)

- **Grade Requirements:** Minimum overall GPA of 2.00 or "C".
- **Credit Hour Requirements:** A total of 63 credit hours are required for graduation; 35 of these are required within the program.
- **Program Code:** 6004AAS
- **CIPC:** 410301

Advisement

It is recommended that a student consult with a chemistry advisor annually. Call 801-626-6952 for information and to arrange an appointment.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. The following course required for the Chemical Technician program will also satisfy part of the general education requirement for physical sciences: CHEM 1210.

Major Course Requirements for AAS Degree

Courses Required

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2990 - Chemical Technician Seminar **Credits: (1)**

Foundation Courses

Students are required to take 2 of the following foundation courses:

Please note the combined CHEM 2310 and CHEM 2315 and CHEM 3070 and CHEM 3075 count as one foundation course. CHEM 2310 and CHEM 2315 must be taken concurrently.

- CHEM 2310 - Organic Chemistry I **Credits: (4)**
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3000 - Quantitative Analysis **Credits: (4)**
- CHEM 3070 - Biochemistry I **Credits: (3)**
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**
- CHEM 3410 - Foundations in Physical Chemistry **Credits: (4)**
- CHEM 3610 - Foundations in Inorganic Chemistry **Credits: (4)**

Support Course Required (4 credit hours)

- MATH 1050 QL - College Algebra **Credits: (4)**

Institutional Certificate

Chemical Technician Certificate of Completion

- **Grade Requirements:** Minimum overall GPA of 2.00 or "C".
- **Credit Hour Requirements:** A total of 41 credit hours are required.
- **Program Code:** 6004CC
- **CIPC:** 410301
-

Course Requirements for Institutional Certificate of Completion

Courses Required (21 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**

- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2600 - Laboratory Safety **Credits: (1)**
- CHEM 2990 - Chemical Technician Seminar **Credits: (1)**
- CHEM 3000 - Quantitative Analysis **Credits: (4)**
- CHEM 3020 - Computer Applications in Chemistry **Credits: (1)**
- CHEM 3050 - Instrumental Analysis **Credits: (4)**

Support Courses Required (10 credit hours)

- ENGL 1010 EN1 - Introductory College Writing **Credits: (3)**
- One additional course in oral or written communications **(3)**
- *Minimum* MATH 1010 - Intermediate Algebra **Credits: (4-5)** or *equivalent*

Elective Courses (Select 10 credit hours; at least 4 credit hours must be 2000-level or higher)

- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 2320 - Organic Chemistry II **Credits: (4)** and
- CHEM 2325 - Organic Chemistry II Lab **Credits: (1)**
- CHEM 2890 INT - Cooperative Work Experience **Credits: (1-6)**
- CHEM 3070 - Biochemistry I **Credits: (3)**
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**
- CHEM 3080 - Biochemistry II **Credits: (3)**
- CHEM 3090 - Biochemical Techniques **Credits: (1)**
- CHEM 4540 - Spectrometric and Separation Methods **Credits: (4)**
- CHEM 4890 INT - Cooperative Work Experience **Credits: (1-6)**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- MICR 3053 - Microbiological Procedures **Credits: (3)**
- MICR 3254 - Immunology **Credits: (4)**
- MICR 4154 - Microbial Genetics **Credits: (4)**
- MICR 4253 - Cell Culture **Credits: (3)**
- BTNY 1403 LS SUS - Principles of Environmental Science **Credits: (4)**
- BTNY 2104 - Plant Form and Function **Credits: (4)**
- BTNY 3153 - Biology of the Plant Cell **Credits: (3)**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)**
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- GEO 2050 - Earth Materials **Credits: (4)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- PHYS 2010 PS - College Physics I **Credits: (5)** or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- PHYS 2020 - College Physics II **Credits: (5)** or
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**

- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**
- ZOOL 4300 - Research Applications in Genetics **Credits: (4)**
- CJ 1350 - Introduction to Forensic Science **Credits: (3)**
- CJ 4110 - Physical Methods in Forensic Science **Credits: (4)**
- CJ 4115 - Friction Ridge Analysis **Credits: (4)**
- CJ 4125 - Research Methods in Forensic Science **Credits: (4)**

Note:

Other courses may be used to fill these 10 hours of electives if approved by the Chemistry Department Chair.

Bachelor of Science

Biochemistry - ACS Certified (BS)

- **Program Prerequisite:** Students are eligible for admission to the Biochemistry (BS) Program upon completion of the requirements for the Chemical Technician (AAS) degree, the requirements of which are a subset of the Biochemistry (BS) requirements.
- **Minor:** Not required.
- **Grade Requirements:** Average GPA of 2.00 or better in courses within the major.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation. A minimum of 56 credit hours of chemistry and chemistry related course work are required with a further 18 credits in required cognate courses outside of chemistry. A total of 40 upper division credit hours (in courses numbered 3000 and above) are required for all Biochemistry majors to fulfill University graduation requirements; 36 upper division credit hours are earned while completing the Biochemistry program requirements.
- **Program Code:** 6036BS
- **CIPC:** 260202

Advisement

All Biochemistry majors should meet with their assigned faculty advisor at least annually for course and program advisement. Initial advisement is with the Chemistry Department Chair. Call 801-626-6952 for information and to arrange an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). Students are eligible for admission to the Biochemistry (BS) program upon completion of the requirements for the Chemical Technician (AAS) degree, the requirements of which are a subset of the in Biochemistry (BS) requirements.

General Education Requirements

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for the Biochemistry major also satisfy general education requirements for the physical sciences: CHEM 1210 and PHYS 2210 or PHYS 2010.

Biochemistry-ACS Certified (BS)

Students applying for the Biochemistry Major will first complete the requirements for the Chemical Technician AAS. Courses for the AAS are included here for completeness.

Program Learning Outcomes

- Problem-solving skills. Chemistry majors should be competent problem-solvers. They should be able to identify the essential parts of a problem and formulate a strategy for solving the problem. They should be able to estimate the solution to a problem, apply appropriate techniques to arrive at a solution, test the correctness of their solution, interpret their result and connect it to related areas of chemistry.
- Laboratory skills. Chemistry majors should be competent experimentalists. They should be able to design and set up an experiment, collect and analyze data, identify sources of error, interpret their result and connect it to related areas of chemistry.
- Presentation skills. Chemistry majors should be able to express (orally and in writing) their understanding of core chemical principles, the results of experiments, the analysis of problems and their conclusions.
- Computer skills. Chemistry majors should be competent users of basic software, such as word processing, spreadsheet, and graphing programs. Strong presentation and organizing skills are complimented with computer knowledge in graphing and spreadsheets.

Required Introductory and Foundation Courses (32 credit hours)

The following are introductory and foundation level courses that are required for the Biochemistry major.

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2990 - Chemical Technician Seminar **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)**
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3000 - Quantitative Analysis **Credits: (4)**
- CHEM 3070 - Biochemistry I **Credits: (3)**
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**
- CHEM 3410 - Foundations in Physical Chemistry **Credits: (4)**
- CHEM 3610 - Foundations in Inorganic Chemistry **Credits: (4)**

Required In-Depth Courses (16 credit hours)

The following are required courses beyond the foundation and include either ZOOL 3200 - Cell Biology, or MICR 4154 - Microbial Genetics.

- CHEM 2320 - Organic Chemistry II **Credits: (4)**
- CHEM 2325 - Organic Chemistry II Lab **Credits: (1)**
- CHEM 3080 - Biochemistry II **Credits: (3)**
- CHEM 3090 - Biochemical Techniques **Credits: (1)**
- CHEM 4250 CRE - Medicinal Chemistry **Credits: (3)** and

- MICR 4154 - Microbial Genetics **Credits: (4)** or
- ZOOL 3200 - Cell Biology **Credits: (4)**

Elective In-Depth Courses (select at least 8 credit hours)

Students will complete 8 hours of elective credits from the list below including courses from the chemistry, botany, microbiology or zoology departments. At least two hours of CHEM Laboratory are required. One hour of laboratory credit is embedded in most in-depth CHEM courses. Please consult the course description for more details.

- BTNY 3153 - Biology of the Plant Cell **Credits: (3)**
- BTNY 3204 - Plant Physiology **Credits: (4)**
- BTNY 3303 - Plant Genetics **Credits: (4)**
- BTNY 3583 - Medicinal Plants-Chemistry and Use **Credits: (4)**
- CHEM 3050 - Instrumental Analysis **Credits: (4)**
- CHEM 4150 - Nuclear Magnetic Resonance Spectroscopy **Credits: (3)**
- CHEM 4420 CRE - Quantum Chemistry **Credits: (4)**
- CHEM 4540 - Spectrometric and Separation Methods **Credits: (4)**
- CHEM 4620 - Advanced Inorganic Chemistry **Credits: (4)**
- CHEM 4630 - Materials Chemistry **Credits: (4)**
- CHEM 4700 - Special Topics in Chemistry **Credits: (1-3)**
- CHEM 4800 - Research and Independent Study in Chemistry **Credits: (1-3)**
- CHEM 4990 CRE - Senior Seminar **Credits: (1)**
- MICR 3254 - Immunology **Credits: (4)**
- MICR 3305 - Medical Microbiology **Credits: (5)**
- MICR 4054 - Microbial Physiology **Credits: (4)**
- MICR 4154 - Microbial Genetics **Credits: (4)**
- MICR 4253 - Cell Culture **Credits: (3)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**
- ZOOL 4210 - Advanced Human Physiology **Credits: (4)**
- ZOOL 4220 - Endocrinology **Credits: (4)**
- ZOOL 4300 - Research Applications in Genetics **Credits: (4)**

Note:

CHEM 2600 - Laboratory Safety recommended.

Students planning to attend graduate school should take PHYS 2210/2220 and CHEM 4420.

Additional courses should be chosen to support career plans.

Required Cognate Courses (18 credit hours)

Students must complete a minimum of two semesters of calculus and two semesters of physics with laboratory.

- MATH 1210 - Calculus I **Credits: (4)** and
- MATH 1220 - Calculus II **Credits: (4)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and

- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)** or
- PHYS 2010 PS - College Physics I **Credits: (5)** and
- PHYS 2020 - College Physics II **Credits: (5)**

Chemistry - ACS Certified (BS)

- **Program Prerequisite:** Students are eligible for admission to the Chemistry (BS) Program upon completion of the requirements for the Chemical Technician (AAS) degree, the requirements of which are a subset of the in Chemistry (BS) requirements.
- **Minor:** Not required
- **Grade Requirements:** Average GPA of 2.00 or better in courses within the major.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation. A minimum of 51 credit hours of chemistry and chemistry related course work are required with a further 18 credits in required cognate courses outside of chemistry. A total of 40 upper division credit hours (in courses numbered 3000 and above) are required for all Chemistry majors to fulfill University graduation requirements; 29-34 upper division credit hours are earned while completing the Chemistry program requirements.
- **Program Code:** 6005BS
- **CIPC:** 400501

Advisement

All Chemistry majors should meet with their assigned faculty advisor at least annually for course and program advisement. Initial advisement is with the Chemistry Department Chair. Call 801-626-6952 for information and to arrange an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). Students are eligible for admission to the Chemistry (BS) Program upon completion of the requirements for the Chemical Technician (AAS) degree, the requirements of which are a subset of the in Chemistry (BS) requirements.

General Education Requirements

Refer to Degree and General Education Requirements for Bachelor of Science requirements. The following courses required for the Chemistry major also satisfy general education requirements for the physical sciences: CHEM 1210 and PHYS 2210.

Chemistry-ACS Certified (BS)

Students applying for the Chemistry Major will first complete the requirements for the Chemical Technician AAS. Courses for the AAS are included here for completeness.

Program Learning Outcomes

- Problem-solving skills. Chemistry majors should be competent problem-solvers. They should be able to identify the essential parts of a problem and formulate a strategy for solving the problem. They should be able to estimate the solution to a problem, apply appropriate techniques to arrive at a solution, test the correctness of their solution, interpret their result and connect it to related areas of chemistry.

- Laboratory skills. Chemistry majors should be competent experimentalists. They should be able to design and set up an experiment, collect and analyze data, identify sources of error, interpret their result and connect it to related areas of chemistry.
- Presentation skills. Chemistry majors should be able to express (orally and in writing) their understanding of core chemical principles, the results of experiments, the analysis of problems and their conclusions.
- Computer skills. Chemistry majors should be competent users of basic software, such as word processing, spreadsheet, and graphing programs. Strong presentation and organizing skills are complimented with computer knowledge in graphing and spreadsheets.

Required Introductory and Foundation Courses (32 credit hours)

The following are introductory and foundation level courses that are required for the Chemistry major.

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)**
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 2990 - Chemical Technician Seminar **Credits: (1)**
- CHEM 3000 - Quantitative Analysis **Credits: (4)**
- CHEM 3070 - Biochemistry I **Credits: (3)**
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**
- CHEM 3410 - Foundations in Physical Chemistry **Credits: (4)**
- CHEM 3610 - Foundations in Inorganic Chemistry **Credits: (4)**

Required In-Depth Courses (3 credit hours)

The following are required courses beyond the foundation.

- CHEM 4800 - Research and Independent Study in Chemistry **Credits: (1-3)**
Minimum of 2 credit hours of CHEM 4800 are required
- CHEM 4990 CRE - Senior Seminar **Credits: (1)**

Elective In-Depth Courses (minimum 16 credit hours)

Students must take a minimum of 16 credit hours of the following courses with a minimum of 12 hours in CHEM including a minimum of 4 hours of CHEM laboratory. One hour of laboratory credit is imbedded in most in-depth CHEM courses. Please consult the course description for more detail.

- CHEM 2320 - Organic Chemistry II **Credits: (4)**
- CHEM 2325 - Organic Chemistry II Lab **Credits: (1)**
- CHEM 3020 - Computer Applications in Chemistry **Credits: (1)**
- CHEM 3050 - Instrumental Analysis **Credits: (4)**
- CHEM 3080 - Biochemistry II **Credits: (3)**
- CHEM 3090 - Biochemical Techniques **Credits: (1)**
- CHEM 4150 - Nuclear Magnetic Resonance Spectroscopy **Credits: (3)**

- CHEM 4250 CRE - Medicinal Chemistry **Credits: (3)**
- CHEM 4420 CRE - Quantum Chemistry **Credits: (4)**
- CHEM 4540 - Spectrometric and Separation Methods **Credits: (4)**
- CHEM 4550 - Geochemistry **Credits: (3)**
- CHEM 4620 - Advanced Inorganic Chemistry **Credits: (4)**
- CHEM 4630 - Materials Chemistry **Credits: (4)**
- CHEM 4700 - Special Topics in Chemistry **Credits: (1-3)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)**
- MATH 4110 - Modern Algebra I **Credits: (3)**
- MICR 4054 - Microbial Physiology **Credits: (4)**
- PHYS 3180 - Thermal Physics **Credits: (3)**
- PHYS 3190 CRE - Applied Optics **Credits: (3)**
- PHYS 3410 - Electronics for Scientists **Credits: (4)**
- PHYS 4200 - The Physics of Materials **Credits: (3)**
- PHYS 4410 CRE - Materials Characterization Laboratory **Credits: (2)**
- PHYS 4610 - Quantum Mechanics **Credits: (3)**
- ZOOL 3200 - Cell Biology **Credits: (4)**

Note:

CHEM 2600 - Laboratory Safety is recommended.

CHEM 2320/2325, CHEM 4420, and CHEM 4620 are strongly recommended for students planning to attend graduate school.

Additional upper division math courses (MATH 2210, MATH 2270, MATH 2280, MATH 3410, MATH 3710, MATH 4110) are recommended for students planning to attend graduate school and study physical chemistry or chemical engineering.

Additional courses should be chosen to support career plans.

Required Cognate Courses (18 credit hours)

Students must complete a minimum of two semesters of calculus and two semesters of physics with laboratory.

- MATH 1210 - Calculus I **Credits: (4)** and
- MATH 1220 - Calculus II **Credits: (4)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**

Chemistry Teaching (BS)

- **Program Prerequisite:** Chemistry Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).
- **Grade Requirements:** Average GPA of 2.00 or better in Chemistry courses. Also refer to the general grade requirements for graduation on Degree Requirements.

- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation; 43 are required within the teaching major, plus the credits required by the Teacher Education department. A total of 40 upper division credit hours (in courses numbered 3000 and above) are required for all Chemistry majors to fulfill University graduation requirements.
- **Program Code:** 6007BS
- **CIPC:** 131323

Advisement

All Chemistry Teaching majors should meet with the Chemistry Teaching major advisor at least annually for course and program advisement. Call 801-626-6952 for information and to arrange an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for the Chemistry Teaching major, however, teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education Requirements

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for the Chemistry major also satisfies general education requirements: CHEM 1210 and CHEM 1215.

Program Learning Outcomes

- Problem-solving skills. Chemistry majors should be competent problem-solvers. They should be able to identify the essential parts of a problem and formulate a strategy for solving the problem. They should be able to estimate the solution to a problem, apply appropriate techniques to arrive at a solution, test the correctness of their solution, interpret their result and connect it to related areas of chemistry.
- Laboratory skills. Chemistry majors should be competent experimentalists. They should be able to design and set up an experiment, collect and analyze data, identify sources of error, interpret their result and connect it to related areas of chemistry.
- Presentation skills. Chemistry majors should be able to express (orally and in writing) their understanding of core chemical principles, the results of experiments, the analysis of problems and their conclusions.
- Computer skills. Chemistry majors should be competent users of basic software, such as word processing, spreadsheet, and graphing programs. Strong presentation and organizing skills are complimented with computer knowledge in graphing and spreadsheets.

Required Introductory and Foundation Courses (15 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**

Additional Required Chemistry Courses (8 credit hours)

- CHEM 2600 - Laboratory Safety **Credits: (1)**
- CHEM 3570 - Foundations of Science Education **Credits: (3)**
- CHEM 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)**
- CHEM 4800 - Research and Independent Study in Chemistry **Credits: (1-3)** (1 credit hour required) or
- CHEM 4890 INT - Cooperative Work Experience **Credits: (1-6)**

Electives (select at least 8 credit hours)

- CHEM 3000 - Quantitative Analysis **Credits: (4)** and
- CHEM 3020 - Computer Applications in Chemistry **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)** and
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**
- CHEM 3410 - Foundations in Physical Chemistry **Credits: (4)** (note pre-requisites)
- CHEM 3610 - Foundations in Inorganic Chemistry **Credits: (4)**

Required Support Courses (7-8 credit hours)

- HIST 3350 - History and Philosophy of Science **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)**

Note:

Consult with an advisor early the in program to choose elective courses which will fulfill teaching endorsement requirements.

Student must also complete requirements for a secondary education license as determined by the Jerry and Vicki Moyes College of Education

Emphasis Option for Bachelor of Interdisciplinary Studies

Chemistry (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** A minimum grade of "C" must be achieved in all coursework used to satisfy BIS emphasis requirements, consistent with the requirements for the BIS degree.
- **Credit Hours Requirements:** A minimum of 18 credit hours is required for the BIS emphasis.
- **Program Code:** 6006

- **CIPC:** 400501

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for BIS Emphasis

Required Introductory Courses (10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

Elective Foundation Courses (8-10 credit hours)

Select two foundation courses and their associate labs or co/prerequisite (if not included with the course) from the list below:

- CHEM 2310 - Organic Chemistry I **Credits: (4)**
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3000 - Quantitative Analysis **Credits: (4)**
- CHEM 3020 - Computer Applications in Chemistry **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)**
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**
- CHEM 3410 - Foundations in Physical Chemistry **Credits: (4)**
- CHEM 3610 - Foundations in Inorganic Chemistry **Credits: (4)**

Minor

Chemistry Minor

- **Grade Requirements:** A minimum passing grade of "D-" will be accepted in any course used toward the minor.
- **Credit Hours Requirements:** A minimum of 18 credit hours is required.
- **Program Code:** 6006
- **CIPC:** 400501

Required Introductory Courses (10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

Elective Foundation Courses (8-10 credit hours)

Select two foundation courses and their associated labs or co/prerequisite (if not included with the course) from the list below:

- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3000 - Quantitative Analysis **Credits: (4)** and
- CHEM 3020 - Computer Applications in Chemistry **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)** and
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**
- CHEM 3410 - Foundations in Physical Chemistry **Credits: (4)** (note prereqs)
- CHEM 3610 - Foundations in Inorganic Chemistry **Credits: (4)**

Teaching Minor

Chemistry Teaching Minor

- **Grade Requirements:** A minimum passing grade of "D-" will be accepted in any course used toward the minor.
- **Credit Hour Requirements:** A minimum of 26 credit hours is required.
- **Program Code:** 6007
- **CIPC:** 131323

Students who select the Chemistry Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Course Requirements for Teaching Minor

Courses Required (23 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and

- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 2320 - Organic Chemistry II **Credits: (4)** and
- CHEM 2325 - Organic Chemistry II Lab **Credits: (1)**

Approved chemistry elective, 3000 or above

Support Course Required (3 credit hours)

- HIST 3350 - History and Philosophy of Science **Credits: (3)**

If a student is not obtaining a Teaching Major in Sciences, the following courses are also required:

- CHEM 2600 - Laboratory Safety **Credits: (1)**
- CHEM 3570 - Foundations of Science Education **Credits: (3)**
- CHEM 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)**

Department of Earth and Environmental Sciences

Department Chair: Dr. Marek Matyjasik

Location: Tracy Hall Science Center, Room 338

Telephone Contact: Anna Cich 801-626-7139

Professors: Michael Hernandez, Marek Matyjasik, Adolph Yonkee; **Associate Professor:** Elizabeth Balgord, Carie Frantz; **Assistant Professors:** Ryan Frazier, Caitlin Tems; **Lab Manager:** Sara Summers

Earth scientists (also called geoscientists) investigate Earth, our planetary home, including its origin, composition, dynamic processes, and evolution over geologic time. Earth science knowledge is vital to society, as we explore for natural resources, mitigate the impacts of natural disasters, and work to protect the quality of the environment for future generations. Environmental scientists are problem solvers; they use multi-science approaches to investigate and address a wide variety of environmental issues. Both Earth and environmental scientists rely heavily of geospatial technologies (GIS, remote sensing, drones) to study and model Earth processes and features. This is an important and exciting time to be involved in Earth, environmental, and geospatial science careers.

The Department of Earth and Environmental Sciences offers bachelor's degrees in Geology, Applied Environmental Geoscience, and Earth Science Teaching, and supports the Physical Science Composite Teaching degree. The department offers minors in Geology, Geospatial Studies, and Earth Science Teaching. A certificate of proficiency in Geospatial Analysis is also available.

Every citizen should have a basic knowledge of how our planet, including its climate system, works. Thus, the department offers a wide variety of physical science (PS) general education courses.

Interdisciplinary Programs

The Department of Earth and Environmental Sciences contributes courses and faculty expertise to the interdisciplinary Environmental Science major (BS) sponsored by the College of Science. In addition, the department participates in the interdisciplinary Environmental Studies Minor Program and the Urban and Regional Planning

Emphasis Program. Students who wish to enroll in one of these programs should contact the program coordinator, who will help them select a combination of courses to fit their particular educational goals. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of the catalog.)

The Department of Earth and Environmental Sciences uses the course prefix GEO because "geo", from the Greek, means Earth.

Emphasis Options for Bachelor of Integrated Studies

The Geology Minor and/or Geospatial Studies Minor may be used as a BIS emphasis.

Institutional Certificate

Geospatial Analysis Certificate of Proficiency

Advisor: Dr. Michael Hernandez, 801-626-8186, mhernandez@weber.edu, and Dr. Ryan Frazier, 801-626-7435, ryanfrazier@weber.edu

- **Grade Requirements:** A grade of "C" or better in all courses used toward the certificate (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 16 credit hours from the Department of Earth and Environmental Sciences, and 6 credit hours from the Department of Geography. The remaining 1-3 credit hours earned from completing either the Geospatial Internship (GEO 4840 /GEOG 4840) or Geospatial Capstone (GEO 4850 /GEOG 4850) courses will be taken in the department offering it that year
- Gainful Employment Disclosure
- **Program Code:** 6013CP
- **CIPC:** 450702

Additional information pertaining to the Northern Utah Geospatial Technology Education Program (NUGeoTec) may be found at <https://www.weber.edu/nugeotec> or <http://departments.weber.edu/geosciences>.

Program Learning Outcomes

- Students will demonstrate how to effectively create and communicate geospatial data/results to others through cartographically accurate maps/dynamic products, technical reports, and multimedia presentations.
- Students will demonstrate understanding of basic geospatial concepts, such as data models, spatial databases, data projections and coordinate systems, topology, digitizing spatial data, metadata, and quality control.
- Students will demonstrate understanding of geospatial analysis that can be performed on vector and raster data collected from various platforms such as satellites / drones (Remote Sensing), GPS instruments, field maps. They will demonstrate the ability to perform multiple types of analysis, including spatial overlay, raster processing, statistics, terrain and hydrologic analysis, transportation networks, modeling, and Python programming.
- Students will demonstrate the ability to work in a team environment to complete a set of geospatial tasks or a geospatial project that includes project objectives, methods, data collection, analysis and reporting results in a professional format through completion of a geospatial internship or capstone course.

Course Requirements for Certificate of Proficiency

Geospatial Courses Required (22 credit hours)

Required courses are offered in two departments: Earth and Environmental Sciences (GEO) and Geography (GEOG).

- GEO 3710 - Introduction to Geographic Information Systems **Credits: (4)**
- GEO 3720 - Geospatial Analysis **Credits: (4)**
- GEO 3840 - Remote Sensing: Principles and Methods **Credits: (4)**
- GEO 4200 - Geospatial Data Acquisition **Credits: (4)**
- GEOG 4400 - Cartography and Map Design **Credits: (3)**
- GEOG 4600 - Geospatial Programming and Online Methods **Credits: (3)**

Elective Geospatial Courses (1-3 credit hours)

Select one elective course in the Earth and Environmental Sciences Department (GEO-even years) or the Geography Department (GEOG-odd years), depending on the year, from the following:

- GEO 4840 INT - Geospatial Internship **Credits: (1-3)** taught even years
- GEO 4850 - Geospatial Capstone **Credits: (3)** taught even years

Additional Information:

Other applicable geospatial and support courses (e. g., computer programming, applications development, relational database, and field-based courses) and co-curricular experiences (e. g., CCEL) may be considered at the discretion of the program advisor.

A sample of degree programs that this certificate complements include Applied Environmental Geosciences, Geology, Geography, Botany, Computer Science, Information Systems& Technologies, Archaeology, Anthropology, Epidemiology, Business, Criminal Justice, other social sciences, or a combination of three emphasis areas for a Bachelor of Integrated Studies (BIS) Degree. The Geospatial Analysis Certificate of Proficiency provides students with the essential skills necessary to analyze/model/solve today's applied geospatial problems.

Bachelor of Arts

Geology (BA)

- **Program Prerequisite:** None.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C-" or better in courses required for this major in addition to an overall GPA for all courses of 2.00 or higher.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 51-58 of these are required within the major. A total of 40 upper division credit hours are required (courses numbered 3000 and above).
- **Program Code:** 6010BA
- **CIPC:** 400601

* Students may benefit from having a minor in such fields as chemistry, physics, mathematics, computer science, geospatial analysis, a life science, or professional and technical writing and should consult with an advisor prior to choosing an option.

Advisement

Advisors: Dr. Adolph Yonkee, 801-626-7419, ayonkee@weber.edu, and Liz Balgord 801-626-6225, elizabethbalgord@weber.edu

All Geology students are required to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-7139 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). No special admission or application requirements are needed for this program. However, students should meet with an advisor to plan and declare their program of study.

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. MATH 1050 or MATH 1080 or MATH 1210 is recommended for the Quantitative Literacy requirement. The following courses required for the Geology major will also satisfy general education requirements: BTNY 1203, CHEM 1210, GEO 1110, PHYS 2010, and PHYS 2210.

Program Learning Outcomes

- Be able to identify common minerals and rocks, describe rock characteristics, and interpret the environments/conditions (igneous, sedimentary, or metamorphic) in which rocks formed. {Earth Materials}
- Be able to identify major physical and biological events in Earth history and describe the methods used to interpret this history, including radiometric dating, fossil succession, and stratigraphic correlation. {Earth History}
- Be able to identify landforms from maps and imagery, construct topographic profiles, and interpret the development of landforms in terms of common surface processes. {Surface Processes}
- Be able to identify the different types of lithospheric plate boundaries based on types of activity, estimate rates of plate motion, describe the driving mechanisms for plate tectonics, and interpret geologic structures and construct cross sections from geologic map data. {Tectonic Processes}
- Be able to describe key geological cycles - including the hydrologic cycle, rock cycle, and carbon cycle. {Earth Systems}
- Have demonstrated an understanding of scientific methodology and the interdisciplinary nature of the geosciences, culminating in a capstone experience involving collection and analysis of multiple data sets to interpret Earth processes. {Capstone Experience}

Language Courses Required to fulfill the BA (12 credit hours)

- 6 semester hours of a foreign language

Select an additional 6 semester hours from the following:

- ENGL 3610 - American Literature I **Credits: (3)**

- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3140 - Professional and Technical Editing **Credits: (3)**
- ENGL 3190 CEL - Document Design **Credits: (3)**
- ENGL 3520 HU - Literature of the Natural World **Credits: (3)**
- Or additional foreign language

Major Course Requirements for BA Degree

Geology Courses Required (23 credit hours)

- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)**
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- GEO 1220 - Historical Geology **Credits: (4)**
- GEO 2050 - Earth Materials **Credits: (4)**
- GEO 3000 - Geoscience Methods and Careers **Credits: (3)**
- GEO 3080 - Applied Hydrology **Credits: (3)** or
- GEO 3550 - Sedimentology and Stratigraphy **Credits: (4)**
- GEO 3150 - Geomorphology **Credits: (4)**

Electives Courses (15 credit hours)

- Select an additional 15 hours from GEO courses numbered 3000 and above and/or up to 6 hours from other Earth/environmentally related classes approved by the Earth and Environmental Sciences Department.

Support Courses Required (13-21 credit hours)

- BTNY 1203 LS - Plant Biology **Credits: (3)** or
- BTNY 1403 LS SUS - Principles of Environmental Science **Credits: (4)**
- CHEM 1010 PS - Introductory Chemistry **Credits: (3)**
OR
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
OR
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** ** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)** or
- PHYS 2010 PS - College Physics I **Credits: (5)** or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** **
- either**
- MATH 1050 QL - College Algebra **Credits: (4)** and
- MATH 1060 QL - Trigonometry **Credits: (3)**
OR
- MATH 1080 QL - Pre-calculus **Credits: (5)**

OR

- MATH 1210 - Calculus I **Credits: (4)** **

Notes:

* Students should consider a minor or complementary set of elective classes that supports their career plans (please consult an advisor).

**Students planning to attend graduate school in science or engineering areas should take additional Chemistry, Physics, and Math classes (please consult an advisor).

Bachelor of Science

Applied Environmental Geosciences (BS)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** None.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C-" or better in each courses required by this major in addition to a minimum cumulative GPA for all courses of 2.0.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation; 77 to 82 of these are required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 38 to 40 of these are required within the major.
- **Program Code:** 6012BS
- **CIPC:** 400601

Advisement

All Geoscience students are required to meet with a faculty advisor (see above) at least annually for course and program advisement. Call 801-626-7139 for more information or to schedule an appointment.

Advisor: Dr. Marek Matyjasik, 801-626-7726

Admission Requirements

Declare your program of study (see Enrollment Services and Information). No special admission or application requirements are needed for this program. However, students should meet with an advisor to plan and declare their program of study.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. MATH 1050 or MATH 1080 is recommended for the Quantitative Literacy requirement. The following courses required for the Applied Environmental Geoscience major will also satisfy general education requirements: CHEM 1210, GEO 1060, GEO 1110, PHYS 2010, and PHYS 2210.

Course Prefix GEO

The Department of Earth and Environmental Sciences uses the course prefix GEO because geo means "earth." The prefix GEO also aids in course articulation with other colleges and universities.

Program Learning Outcomes

- Be able to identify common minerals and rocks, describe rock characteristics, and interpret the environments/conditions (igneous, sedimentary, or metamorphic) in which rocks formed. {Earth Materials}
- Be able to identify major physical and biological events in Earth history and describe the methods used to interpret this history, including radiometric dating, fossil succession, and stratigraphic correlation. {Earth History}
- Be able to identify landforms from maps and imagery, construct topographic profiles, and interpret the development of landforms in terms of common surface processes. {Surface Processes}
- Be able to identify the different types of lithospheric plate boundaries based on types of activity, estimate rates of plate motion, describe the driving mechanisms for plate tectonics, and interpret geologic structures and construct cross sections from geologic map data. {Tectonic Processes}
- Be able to describe key geological cycles - including the hydrologic cycle, rock cycle, and carbon cycle. {Earth Systems}
- Have demonstrated an understanding of scientific methodology and the interdisciplinary nature of the geosciences, culminating in a capstone experience involving collection and analysis of multiple data sets to interpret Earth processes. {Capstone Experience}

Major Course Requirements for BS Degree

Earth Science Courses Required (39-40 credit hours)

- GEO 1060 PS - Environmental Geosciences **Credits: (3)**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)**
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- GEO 1220 - Historical Geology **Credits: (4)**
- GEO 2050 - Earth Materials **Credits: (4)**
- GEO 3000 - Geoscience Methods and Careers **Credits: (3)**
- GEO 3080 - Applied Hydrology **Credits: (3)**
- GEO 3150 - Geomorphology **Credits: (4)**
- GEO 3710 - Introduction to Geographic Information Systems **Credits: (4)**
- GEO 3753 - Geomicrobiology **Credits: (3)** or
- GEO 4560 - Environmental Geochemistry **Credits: (4)**
- GEO 4060 - Geoscience Field Methods **Credits: (4)**
- GEO 4990 - Earth Science and Society Seminar **Credits: (2)**

Applied Geoscience Electives Required (11-12 credit hours)

Complete three (3) of the following courses:

- GEO 3214 - Soils **Credits: (4)**
- GEO 3720 - Geospatial Analysis **Credits: (4)**
- GEO 3840 - Remote Sensing: Principles and Methods **Credits: (4)**
- GEO 4080 - Groundwater and Environmental Assessment **Credits: (4)**

- GEO 4100 - Engineering Geology **Credits: (3)**
- GEO 4200 - Geospatial Data Acquisition **Credits: (4)**
- GEO 4560 - Environmental Geochemistry **Credits: (4)** or
- GEO 3753 - Geomicrobiology **Credits: (3)**

Additional Electives Required (3 credit hours minimum)

Complete a minimum of 3 credit hours in additional upper-division Earth Science (GEO) courses (numbered 3000 and above), which could include an additional applied geoscience course listed above or another approved environmental/sustainability science course.

Support Courses Required (24-27 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- PHYS 2010 PS - College Physics I **Credits: (5)** and
- PHYS 2020 - College Physics II **Credits: (5)**
or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)** *
- either**
- MATH 1050 QL - College Algebra **Credits: (4)** and
- MATH 1060 QL - Trigonometry **Credits: (3)**
or
- MATH 1080 QL - Pre-calculus **Credits: (5)**
or
- MATH 1210 - Calculus I **Credits: (4)** **

Note:

**Students planning to attend graduate school in Geology or a related geotechnical area should take PHYS 2210-PHYS 2220, Physics for Scientists & Engineers, instead of the General Physics series (PHYS 2010-PHYS 2020).*

***Students planning to attend graduate school in Geology or a related geotechnical area should also take MATH 1210/MATH 1220, Calculus I and II (8).*

Students planning a career or advanced degree in geospatial science and technologies are encouraged to complete the Geospatial Analysis certificate program. Students planning a career or advanced degree in geotechnical applications are encouraged to take GEO 3060, GEO 4080, GEO 4100 and as electives. Course work in microbiology, especially Environmental Microbiology (MICR 3484), is recommended for students pursuing environmental or remediation-related careers.

Earth Science Teaching (BS)

- **Program Prerequisite:** Must satisfy Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C-" or better in courses required for this major.
- **Credit Hour Requirements:** A total of 125-126 credit hours is required for graduation; 70 to 72 of these are required within the major. Teacher Education Licensure requires 9 credit hours of support courses and 24 credit hours of professional education courses (see Teacher Education Department). This major requires a total of 44 upper division credit hours (courses numbered 3000 and above); 17 of these are required Geosciences courses and 24 are Teacher Education courses.
- **Program Code:** 6011BS
- **CIPC:** 131316

Advisement

All Earth Science Teaching students are required to meet with a faculty advisor (see previous column) at least annually for course and program advisement. Call 801-626-7139 for more information or to schedule an appointment. In addition, teaching majors are encouraged to consult with an advisor in the Jerry and Vickie Moyes College of Education (call 801-626-6269). (Also refer to the Department Advisor Referral List.)

Advisor: Dr. Caitlin Tems, 801-626-7421.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). Earth Science Teaching majors must satisfy Teacher Education admission and licensure requirements. (See Teacher Education Department.)

General Education

Refer to Degree Requirements for Bachelor of Science requirements. MATH 1050 or MATH 1080 is recommended for the Quantitative Literacy requirement. The following courses required for the Earth Science Teaching major will also satisfy general education requirements: BTNY 1203, CHEM 1210, GEO 1060, GEO 1110, GEO 1130, PHYS 1040, PHYS 2010, and PHYS 2210. The following required education support courses will also satisfy general education requirements: CHF 1500 and COMM 1020 or COMM 2110.

Program Learning Outcomes

- Be able to collect data, apply algebraic and graphical techniques to analyze data, and interpret results. {Problem-Solving Skills}
- Be able to clearly express geoscience concepts orally and in writing, present results from laboratory and field investigations, and effectively incorporate appropriate maps and graphs into presentations and reports. {Communication Skills}
- Be proficient in the use of appropriate technologies - including basic computer skills (word processing, spread sheets), geospatial skills (GPS, accessing geospatial databases), and information technology (search, compile, and evaluate information from scientific literature and web resources). {Technology Skills}

Major Course Requirements for BS Degree

Earth Science Courses Required (42 credit hours)

- GEO 1060 PS - Environmental Geosciences **Credits: (3)** or

- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)**
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- GEO 1130 PS - Introduction to Meteorology **Credits: (3)**
- GEO 1220 - Historical Geology **Credits: (4)**
- GEO 2050 - Earth Materials **Credits: (4)**
- GEO 2600 - Laboratory Safety **Credits: (1)**
- GEO 3010 SUS - Oceans and Climate **Credits: (3)** or
- GEOG 3050 - Weather and Climate: from daily storms to decades of drought **Credits: (3)**
- GEO 3150 - Geomorphology **Credits: (4)**
- GEO 3570 - Foundations of Science Education **Credits: (3)**
- GEO 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)**
- GEO 4800 CRE - Independent Research **Credits: (1-3)** (only 1 credit hour required)
- PHYS 1040 PS - Elementary Astronomy **Credits: (3)** or
- ASTR 1040 PS - Elementary Astronomy **Credits: (3)**
- BTNY 1203 LS - Plant Biology **Credits: (3)**

Select one or more of the following for a minimum of 3 credit hours:

- GEO 3060 - Structural Geology **Credits: (4)**
- GEO 3080 - Applied Hydrology **Credits: (3)**
- GEO 3180 - Paleontology **Credits: (4)**
- GEO 3214 - Soils **Credits: (4)**
- GEO 3250 - Geology of Utah **Credits: (3)**
- GEO 3550 - Sedimentology and Stratigraphy **Credits: (4)**
- GEO 3710 - Introduction to Geographic Information Systems **Credits: (4)**
- GEO 3753 - Geomicrobiology **Credits: (3)**
- GEO 4750 - Special Topics in Geosciences **Credits: (1-4)**
- GEO 4950 - Advanced Geoscience Fieldtrips **Credits: (1-3)**

Required Support Courses (27-30 credit hours)

Note: CHEM 1210/1215 requires CHEM 1200 as a pre-requisite.

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- PHYS 2010 PS - College Physics I **Credits: (5)** and
- PHYS 2020 - College Physics II **Credits: (5)**
- or**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and

- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- HIST 3350 - History and Philosophy of Science **Credits: (3)**

either

- MATH 1050 QL - College Algebra **Credits: (4)** and
- MATH 1060 QL - Trigonometry **Credits: (3)**
- or*
- MATH 1080 QL - Pre-calculus **Credits: (5)**
- or*
- MATH 1210 - Calculus I **Credits: (4)**

Recommended Support Courses

any additional upper division (numbered 3000 and above) GEO course

- GEOG 3060 SUS - Environmental Issues: Local to Global Impacts and Solutions **Credits: (3)**
- MATH 1040 QL - Introduction to Statistics **Credits: (3)**
- ZOOL 1010 LS - Animal Biology **Credits: (3)** *

Note:

*The Utah State Office of Education also requires Earth Science Teaching graduates to pass the Earth and Space Sciences Praxis exam to receive the Earth Science endorsement (9th grade). Earth Science Teaching graduates who pass the General Science Praxis exam may also receive the Middle Level Science endorsement (7th and 8th grades). Completion of ZOOL 1010 will help prepare students for the General Science Praxis exam.

Geology (BS)

- **Program Prerequisite:** None.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C-" or better in courses required for this major in addition to an overall GPA for all courses of 2.00 or higher.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 79-82 of these are required within the major. A total of 40 upper division credit hours is required; 40 of these are required within the major (courses numbered 3000 and above).
- **Program Code:** 6010BS
- **CIPC:** 400601

Students may benefit from having a minor in such fields as chemistry, physics, mathematics, computer science, geospatial analysis, or a life science, and should consult with an advisor prior to choosing an option.

Advisement

Advisors: Dr. Adolph Yonkee, 801-626-7419, ayonkee@weber.edu, and Liz Balgord 801-626-6225, elizabethbalgord@weber.edu

All Geology students are required to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-7139 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). No special admission or application requirements are needed for this program. However, students should meet with an advisor to plan and declare their program of study.

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. MATH 1050 or MATH 1080 or MATH 1210 is recommended for the Quantitative Literacy requirement. The following courses required for the Geology major will also satisfy general education requirements: CHEM 1210, GEO 1110, PHYS 2010, and PHYS 2210.

Course Prefix GEO

The Department of Earth and Environmental Sciences uses the course prefix GEO because geo means "earth." The prefix GEO also aids in course articulation with other colleges and universities.

Program Learning Outcomes

- Be able to identify common minerals and rocks, describe rock characteristics, and interpret the environments/conditions (igneous, sedimentary, or metamorphic) in which rocks formed. {Earth Materials}
- Be able to identify major physical and biological events in Earth history and describe the methods used to interpret this history, including radiometric dating, fossil succession, and stratigraphic correlation. {Earth History}
- Be able to identify landforms from maps and imagery, construct topographic profiles, and interpret the development of landforms in terms of common surface processes. {Surface Processes}
- Be able to identify the different types of lithospheric plate boundaries based on types of activity, estimate rates of plate motion, describe the driving mechanisms for plate tectonics, and interpret geologic structures and construct cross sections from geologic map data. {Tectonic Processes}
- Be able to describe key geological cycles - including the hydrologic cycle, rock cycle, and carbon cycle. {Earth Systems}
- Have demonstrated an understanding of scientific methodology and the interdisciplinary nature of the geosciences, culminating in a capstone experience involving collection and analysis of multiple data sets to interpret Earth processes. {Capstone Experience}

Major Course Requirements for BS Degree

Earth Science Courses Required (49 credit hours)

- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)**
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- GEO 1220 - Historical Geology **Credits: (4)**
- GEO 2050 - Earth Materials **Credits: (4)**
- GEO 3000 - Geoscience Methods and Careers **Credits: (3)**
- GEO 3060 - Structural Geology **Credits: (4)**
- GEO 3080 - Applied Hydrology **Credits: (3)**
- GEO 3150 - Geomorphology **Credits: (4)**
- GEO 3550 - Sedimentology and Stratigraphy **Credits: (4)**

- GEO 3710 - Introduction to Geographic Information Systems **Credits: (4)**
- GEO 4060 - Geoscience Field Methods **Credits: (4)**
- GEO 4510 - Geology Field Camp **Credits: (4)**
- GEO 4560 - Environmental Geochemistry **Credits: (4)**
- GEO 4990 - Earth Science and Society Seminar **Credits: (2)**

Electives Courses (6 credit hours minimum)

Complete GEO 1060 PS - Environmental Geosciences **(3)** and/or additional upper-division geoscience Earth science (GEO) courses (numbered 3000 and complete above) for a minimum of 6 credit hours.

Support Courses Required (24-27 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- PHYS 2010 PS - College Physics I **Credits: (5)** and
- PHYS 2020 - College Physics II **Credits: (5)**
or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** * and
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)** *
- either**
- MATH 1050 QL - College Algebra **Credits: (4)** and
- MATH 1060 QL - Trigonometry **Credits: (3)**
or
- MATH 1080 QL - Pre-calculus **Credits: (5)**
or
- MATH 1210 - Calculus I **Credits: (4)** **

Note:

* Students planning to attend graduate school should take PHYS 2210-PHYS 2220, Physics for Scientists & Engineers, instead of the General Physics series (PHYS 2010-PHYS 2020).

**Students planning to attend graduate school should also take MATH 1210/MATH 1220, Calculus I and II (8).

The physical chemistry sequence, CHEM 3410-CHEM 4420 (8), is recommended for students planning advanced study in geochemistry, mineralogy, or mineral deposits. Advanced course work in zoology, microbiology or botany is recommended for students planning advanced work in paleontology, stratigraphy, or related fields. Environmental Microbiology (MICR 3484) is recommended for students pursuing environmental or remediation-related careers.

Minor

Geology Minor

Advisors: Dr. Adolph Yonkee, 801-626-7419, ayonkee@weber.edu, and Liz Balgord 801-626-6225, elizabethbalgord@weber.edu

- **Grade Requirements:** A grade of "C-" or better in courses used toward the minor.
- **Credit Hour Requirements:** Minimum of 19 credit hours in Earth science (GEO) courses.
- **Program Code:** 6010
- **CIPC:** 400601

Course Requirements for Minor

Earth Science Courses Required (12 credit hours)

- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)**
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- GEO 1220 - Historical Geology **Credits: (4)**
- GEO 3150 - Geomorphology **Credits: (4)**

Earth Science Electives (minimum 7 credit hours)

Complete GEO 2050 - Earth Materials (4) and/or additional upper-division Earth science (GEO) courses (numbered 3000 and above) for a minimum of 7 credit hours.

Geospatial Studies Minor

Advisor: Dr. Michael Hernandez, 801-626-8186, mhernandez@weber.edu, and Dr. Ryan Frazier, 801-626-7435, ryanfrazier@weber.edu

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** 6040
- **CIPC:** 450702

Course Requirements for Minor

Geospatial Courses Required (15 credit hours)

Required courses are offered in two departments: Earth and Environmental Sciences (GEO) and Geography (GEOG).

- GEO 3710 - Introduction to Geographic Information Systems **Credits: (4)**
- GEO 3720 - Geospatial Analysis **Credits: (4)**
- GEO 3840 - Remote Sensing: Principles and Methods **Credits: (4)**
- GEOG 4400 - Cartography and Map Design **Credits: (3)**

Note:

If any required courses for the Geospatial Studies Minor are also required in a student's major, then an elective of equivalent hours may need to be substituted.

Elective Geospatial Courses (3 credit hours)

Select one or more elective courses in the Earth and Environmental Sciences (GEO) and Geography (GEOG) Departments from the following list:

- GEO 4200 - Geospatial Data Acquisition **Credits: (4)**
- GEOG 4410 SUS - Sustainable Land Use Planning **Credits: (3)**
- GEOG 4600 - Geospatial Programming and Online Methods **Credits: (3)**
- GEO 4840 INT - Geospatial Internship **Credits: (1-3)** taught even years
- GEO 4850 - Geospatial Capstone **Credits: (3)** taught even years

Teaching Minor

Earth Science Teaching Minor

- **Grade Requirements:** A grade of "C-" or better in courses used toward the minor.
- **Credit Hour Requirements:** Minimum of 20 credit hours in Geosciences courses.
- **Program Code:** 6011
- **CIPC:** 131316

Students who select the Earth Science Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Advising

Advisor: Dr. Caitlin Tems, 801-626-7421.

Course Requirements for Minor

Earth Science Courses Required (20 credit hours)

- GEO 1060 PS - Environmental Geosciences **Credits: (3)**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)**
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- GEO 1130 PS - Introduction to Meteorology **Credits: (3)**
- GEO 1220 - Historical Geology **Credits: (4)**
- GEO 3010 SUS - Oceans and Climate **Credits: (3)** or
- GEOG 3050 - Weather and Climate: from daily storms to decades of drought **Credits: (3)**
- PHYS 1040 PS - Elementary Astronomy **Credits: (3)** or
- ASTR 1040 PS - Elementary Astronomy **Credits: (3)**

If not taken as part of a student's major requirements, then the following courses are also required (up to 20 credit hours):

Note: CHEM 1210/1215 requires CHEM 1200 as a pre-requisite.

- GEO 3570 - Foundations of Science Education **Credits: (3)**
- GEO 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)**
- PHYS 2010 PS - College Physics I **Credits: (5)** or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- ZOOL 3450 CRE - Ecology **Credits: (4)**

Note:

Any deviation from the above requirements must be approved by the department in advance.

This minor is best for students majoring in another area of science or science teaching, as one semester of chemistry, one semester of physics, and one semester of ecology are required to obtain Earth Science teaching certification in the state of Utah.

Department of Mathematics

Department Chair: Sandra Fital-Akelbek

Location: Tracy Hall Science Center, Room 381

Contact: June Thomas, 801-626-6095 or math@weber.edu

Department Website: weber.edu/mathematics

Professors: Mahmud Akelbek, Chloe Cai, Julian Chan, Sandra Fital-Akelbek, Afshin Ghoreishi, Kent Kidman, George Kvernadze, Matthew Ondrus, Timothy Steele, Paul Talaga; **Associate Professors:** Rachel Bachman, Shawn Broderick, Mihail Cocos, Cora Neal, James Peters; **Assistant Professors:** Alees Lee, Amila Muthunayake, C. David Walters; **Instructors:** Natalie Anderson, Shannon Dixon, Thomas Roybal

From data mining to forensics, mathematics is the language of choice for an ever-increasing number of disciplines. The scientist, the engineer, the actuary, the financial planner - all use algebra, geometry, calculus and statistics. But also, the voter needs to understand these concepts, albeit at a less advanced level, to reach informed decisions about a multitude of issues from utility rates and retirement saving to information security and global warming.

The Department of Mathematics offers a variety of courses (from general interest to advanced levels of applicability), two minors, departmental honors, and five majors. The Mathematics major may be the best choice for someone planning to go directly to graduate school; the Applied Mathematics major prepares one for a job that uses mathematics; the Mathematics Teaching major prepares students to be teachers of mathematics in elementary through high school, and the Computational Statistics and Data Science major is for students who can convert big data into actionable insight, improve decision making, and provide a competitive advantage for their employers. We also offer an Associate's of Science degree in Mathematics that complements all STEM degrees.

Prerequisites

Since each course in mathematics requires a working knowledge of principles from prerequisite courses, students are required to earn a "C" grade in each prerequisite course before registering for the next course. Math prerequisites for math courses up to MATH 2210 expire after 24 months.

Placement

Weber State University students will be placed into mathematics courses by the following procedure.

A. To enroll in mathematics courses MATH 1030 QL, MATH 1040, MATH 1120 QL, or MATH 2010 a student must have, **within the past 24 months**, either:

1. Completed the prerequisite course with a grade of "C" or higher; *OR*
2. Received a Math ACT score of 21 or above; *OR*
3. Scored sufficiently high on a placement exam at a WSU testing center

B. To enroll in mathematics courses MATH 1050 QL, MATH 1060 QL, MATH 1080 QL, or MATH 1090 QL a student must have, **within the past 24 months**, either:

1. Completed the prerequisite course with a grade of "C" or higher; *OR*
2. Received a Math ACT score of 23 or above; *OR*
3. Scored sufficiently high on a placement exam at a WSU testing center

C. To enroll in MATH 1035 QL - Contemporary Mathematics with Prerequisite Topics QL a student must have, **within the past 24 months**, either:

1. Completed MATH 0950 with a grade of "C" or higher; *OR*
2. Received a Math ACT score of 14 or above; *OR*
3. Scored sufficiently high on a placement exam at a WSU testing center

D. To enroll in MATH 2020 QL a student must have completed MATH 2010 and 2015 with a grade of "C" or better. Students may not use a placement exam to test into MATH 2020 QL.

E. To enroll in mathematics courses numbered 1210 through 2210, a student must have, **within the past 24 months**, either:

1. Completed the prerequisite course(s) with a grade of "C" or higher
2. Scored sufficiently high on a placement exam at a WSU testing center. (Placement scores only available up to MATH 1210 - Calculus I)
3. Obtained the appropriate AP Calculus score described below:
 - Three on the AB test places the student in MATH 1210
 - Four or five on the AB test places the student in MATH 1220
 - Three or four on the BC test places the student in MATH 1220
 - Five on the BC test places the student in MATH 2210 or higher

Students who score below 21 on the Math ACT may be placed into developmental courses. See the Math Placement Standards listed in the WSU Core General Education Requirements.

Failure to comply with this policy will normally result in the cancellation of the student's math course registration.

It is recommended that students have their programs (majors and minors) approved before registering for upper division courses.

Associate of Science

Mathematics (AS)

- **Program prerequisite:** None

- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable), in addition to an overall 2.0 GPA and a 2.0 GPA in mathematics classes numbered 1210 or above.
- **Credit Hour Requirements:** A total of 60 credit hours are required; a minimum of 18 credit hours are required in mathematics courses.
- **Program Code:** 6035AS
- **CIPC:** 270101

Advisement

All Mathematics AS students should see the Mathematics Department to be assigned an advisor. They should meet with their advisors at least once a year to help plan their programs and check on their progress. Call 801-626-6095 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Program of Study (Major/Minor) Declaration) with your advisor. There are no special admission or application requirements for the AS degree.

General Education

Refer to Degree Requirements for Associate of Science degree.

Course Requirements for Mathematics AS Degree

Mathematics courses required (18 credit hours):

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**

One course chosen from:

- MATH 2280 - Ordinary Differential Equations **Credits: (3)**
- Any upper division MATH course (MATH 3xxx or MATH 4XXX)

Institutional Certificate

Data Science & Applied Statistics Certificate of Proficiency

The WSU Data Science and Computational Statistics Certificate of Proficiency will provide students the opportunity to study a variety of applications of data using statistics across a range of disciplines while providing a theoretical framework and tools for managing data. The rapidly evolving digital landscape has made data the cornerstone of decision-making across industries, amplifying the demand for skilled data professionals who can adeptly handle,

analyze, and interpret this data. This program is tailored to equip students with these very competencies. The program is designed to be a comprehensive blend of both theory and practice, with a focus on hands-on experience, collaborative learning, and ethical data usage. More broadly this will empower students to think critically with data while analyzing the world around them in their chosen discipline.

- **Program Prerequisite:** Application for admission to Weber State University and/or current degree-seeking status.
- **Grade Requirements:** Students must complete all certificate courses with a grade of "C" or higher.
- **Credit Hour Requirements:** 19-21
- **Program Code:** 6071CP
- **CIPC:** 307099

Advisement

Navigating the multidisciplinary landscape of Data Science and Applied Statistics requires a robust support system. Our advisement for this certificate program is carefully crafted to cater to this emerging field. Recognizing the interdisciplinary nature of Data Science and the specialized nuances of Applied Statistics, our advisement team provides tailored guidance. Students will receive one-on-one consultations to help them align their coursework with career aspirations or advanced study intentions. Please contact math@weber.edu to schedule advising appointment or visit the mathematics website.

Program Learning Outcomes

The program aims to roughly follow the guidelines put forth by the American Statistical Association (ASA) for data science. Additionally, the ASA states that, "Framing questions statistically allows us to leverage data resources to extract knowledge and obtain better answers." The learning outcomes based on these recommendations are as follows:

- Students will apply data analysis methods and critical thinking to understand data in the world around them or their fields of study.
- Students will use data management and statistical software to prepare data and perform data analysis.
- Students will learn mathematical and statistical foundations of data science and data analysis.

Students will effectively communicate the findings from data.

Major Course Requirements

Note: Courses marked with (*) may require additional prerequisites. Please check with the university catalog or click on the course link below and that will direct you to the university catalog.

Required Courses (13-15)

Required math & statistics classes (7 credits):

- MATH 3450 - Advanced Statistical Methods **Credits: (4)**
and
take one of the following courses:
- MATH 1040 QL - Introduction to Statistics **Credits: (3)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 1120 QL - Foundations of Data Science **Credits: (3)**

Required Data Base (Take one of the following database courses) (3-4 credits):

- CS 2550 - Introduction to Database Design and SQL **Credits: (4)**

- MIS 3210 - Database Design and Implementation **Credits: (3)**

Required programming (Take one of the following (intro) programming courses)(3-4 credits):

- CS 1400 - Programming I **Credits: (4)**
- MIS 2110 - Software Development I **Credits: (3)**
- PHYS 2300 - Scientific Computing for Physical Systems **Credits: (3)**

Elective Courses

Select two classes (minimum 6 credits) from the following list (they do not need to be from the same category).

Physical Sciences Computing & Statistics

- GEO 3710 - Introduction to Geographic Information Systems **Credits: (4)**
- GEO 3720 - Geospatial Analysis **Credits: (4)**
- PHYS 3320 - Advanced Computational Physics **Credits: (3)**
- PHYS 3420 - Data Analysis, Statistics, and Instrumentation **Credits: (3)**
- CHEM 3000 - Quantitative Analysis **Credits: (4)**
- CHEM 3020 - Computer Applications in Chemistry **Credits: (1)**
- MLS 2003 - Applied Laboratory Mathematics and Operations **Credits: (3)**

Life Sciences & statistical applications

- BTNY 3303 - Plant Genetics **Credits: (4)**
- BTNY 3454 - Plant Ecology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**
- ZOOL 3450 CRE - Ecology **Credits: (4)**
- MICR 3813 CRE - Bioinformatics **Credits: (3)**
- MICR 4154 - Microbial Genetics **Credits: (4)**
- MICR 3154 - Microbial Ecology **Credits: (4)**

Applications in Health & Statistics

- HIM 2500 - Healthcare Data Management **Credits: (3)**
- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)**
- PUBH 3210 - Advanced Epidemiology & Population Health **Credits: (3)**
- HIM 3550 - Healthcare Data Analytics **Credits: (3)**
- ESS 3600 - Measurement and Statistics in Exercise Science **Credits: (3)**

Statistics & Data applications

- MATH 4400 - Statistical Learning **Credits: (3)**
- MIS 2030 - Introduction to Business Analytics **Credits: (3)**
- QUAN 3610 - Business Statistics II **Credits: (3)**
- CS 4580 - Data Science Algorithms **Credits: (4)**
- PSY 3600 - Statistics in Psychology **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)**
- PSY 3615 - Psychological Statistics and Methods I **Credits: (4)**
- PSY 3616 - Psychological Statistics and Methods II **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**
- MATH 1210 - Calculus I **Credits: (4)**

Communications applications

- COMM 3840 - Data Visualization and Storytelling **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- SOC 4300 - Qualitative Methods **Credits: (3)**

Data Ethics & applications

- PHIL 2050 HU - Practical Ethics **Credits: (3)**
- PHIL 4600 - Ethical Theory **Credits: (3)**
- CJ 1010 SS - Introduction to Criminal Justice **Credits: (3)**
- CJ 4200 - Ethical Issues in Criminal Justice **Credits: (3)**
- SW 1010 SS CEL - Introduction to Generalist Social Work **Credits: (3)**
- SW 3900 - Social Work Methods, Values, and Ethics **Credits: (3)**
- PS 3563 - Principles of Sales Supervision **Credits: (3)**
- PS 4203 - Ethical Sales and Service **Credits: (3)**
- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)**
- BSAD 2899 - Business Foundations Check **Credits: (0)**
- BSAD 1010 - Introduction to Business **Credits: (3)**

Middle School Mathematics Endorsement Pathway Certificate of Proficiency

This certificate is designed to award students for completion of the required coursework outlined by the Utah State Board of Education for the Special Education Mathematics Teaching endorsement. It can only be earned upon completion of a bachelor's degree.

- **Program Prerequisite:** None
- **Grade Requirements:** C or better
- **Credit Hour Requirements:** 19
- **Program Code:** 6074CP
- **CIPC:** 131311

Advisement

Students should be advised that this certificate acknowledges that the coursework needed for the Utah State Board of Education Middle School Mathematics Teaching Endorsement has been satisfied. Until the student also satisfies the requirements for a teaching licensure through the Weber State University College of Education or through a local educational agency (LEA), the student cannot apply for this endorsement from the state.

While any major is invited to complete the courses required of this endorsement, students majoring in a mathematics or education related field would be more prepared for the courses required. Students should be advised of the prerequisite requirements for the course required in this certificate.

MATH 1210 prerequisite is MATH 1050 and MATH 1060

MTHE 3060 prerequisite is MATH 1210

MTHE 3070 prerequisite is MATH 2020 (preceded by MATH 2010 and MATH 2015)

MTHE 3117 prerequisite is MATH 3110 (preceded by MATH 1210)

MTHE 3015 prerequisite is MATH 2015 (preceded by MATH 2010)

MTHE 3115 prerequisite is MATH 1210

MTHE 4000 prerequisite is two MTHE courses

Admission Requirements

Any major is invited to complete this sets of courses, however, majors in Elementary Education, Special Education, mathematics, and physics would be most likely to have completed the prerequisite requirements of the required courses.

Program Learning Outcomes

Students completing this set of courses will have satisfied the coursework requirements by the state of Utah to earn the Middle School Teaching endorsement. These students will have acquired the mathematical content knowledge and pedagogical content knowledge needed to teach Grades 7-9 mathematics.

Major Course Requirements

Completing these courses satisfies the Utah State Board of Education requires to earn a Special Education Mathematics Teaching Certificate

Required Courses (19 credit hours)

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 2020 QL - Geometry for Elementary Teachers **Credits: (3)**
Or MATH 3110 - Foundations of Algebra (3)
- MTHE 3060 - Probability and Statistics from a Teaching Perspective **Credits: (3)**
- MTHE 3015 - Middle School Algebra from a Teaching Perspective **Credits: (3)**
Or MTHE 3115 - Algebra from a Secondary Teaching Perspective (3)
- MTHE 3070 - Middle School Geometry from a Teaching Perspective **Credits: (3)**
Or MTHE 3117 - Geometry from a Secondary Teaching Perspective (3)
- MTHE 4000 - Methods and Technology for Teaching Secondary Mathematics **Credits: (3)**

Secondary Mathematics Endorsement Pathway Certificate of Proficiency

This certificate is designed to award students for completion of the required coursework outlined by the Utah State Board of Education for the Secondary Mathematics Teaching endorsement. It can only be earned upon completion of a bachelor's degree.

- **Program Prerequisite:** Major from Department of Mathematics or Department of Physics
- **Minor:** None
- **Grade Requirements:** C or better
- **Credit Hour Requirements:** 21
- **Program Code:** 6072CP
- **CIPC:** 131311

Advisement

Students should be advised that this certificate acknowledges that the coursework needed for the Utah State Board of Education Secondary Mathematics Teaching Endorsement has been satisfied. Until the student also satisfies the requirements for a teaching licensure through the Weber State University College of Education or through a local educational agency (LEA), the student cannot apply for this endorsement from the state.

Admission Requirements

To receive the certificate, the student must be a major in the Department of Mathematics or the Department of Physics. However, for students interested in completing this set of courses outside of those majors, the student may still declare intentions to pursue this certificate so that the required courses populate on CatTracks.

Program Learning Outcomes

Students completing this set of courses will have satisfied the coursework requirements by the state of Utah to earn the Secondary Mathematics Teaching endorsement. These students will have acquired the mathematical content knowledge and pedagogical content knowledge needed to teach Grades 7-12 mathematics.

Major Course Requirements

Completing these courses satisfies the Utah State Board of Education requires to earn a Secondary Mathematics Teaching Certificate

Required Courses (21 credit hours)

- MATH 3110 - Foundations of Algebra **Credits: (3)**
- MATH 4210 - Introductory Real Analysis I **Credits: (3)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)** or
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MTHE 3060 - Probability and Statistics from a Teaching Perspective **Credits: (3)**
- MTHE 3115 - Algebra from a Secondary Teaching Perspective **Credits: (3)**
- MTHE 3117 - Geometry from a Secondary Teaching Perspective **Credits: (3)**
- MTHE 4000 - Methods and Technology for Teaching Secondary Mathematics **Credits: (3)**

Special Education Mathematics Endorsement Pathway Certificate of Proficiency

This certificate is designed to award students for completion of the required coursework outlined by the Utah State Board of Education for the Special Education Mathematics Teaching endorsement. It can only be earned upon completion of a bachelor's degree.

- **Program Prerequisite:** None
- **Grade Requirements:** C or better
- **Credit Hour Requirements:** 19
- **Program Code:** 6073CP

- **CIPC: 131311**

Advisement

Students should be advised that this certificate acknowledges that the coursework needed for the Utah State Board of Education Special Education Mathematics Teaching Endorsement has been satisfied. Until the student also satisfies the requirements for a teaching licensure through the Weber State University College of Education or through a local educational agency (LEA), the student cannot apply for this endorsement from the state.

While any major is invited to complete the courses required of this endorsement, students majoring in a mathematics or education related field would be more prepared for the courses required. Students should be advised of the prerequisite requirements for the course required in this certificate.

MATH 1210 prerequisite is MATH 1050 and MATH 1060

MTHE 3060 prerequisite is MATH 1210

MTHE 3070 prerequisite is MATH 2020 (preceded by MATH 2010 and MATH 2015)

MTHE 3117 prerequisite is MATH 3110 (preceded by MATH 1210)

MTHE 3015 prerequisite is MATH 2015 (preceded by MATH 2010)

MTHE 3115 prerequisite is MATH 1210

MTHE 4000 prerequisite is two MTHE courses

Admission Requirements

Any major is invited to complete this sets of courses, however, majors in Elementary Education, Special Education, mathematics, and physics would be most likely to have completed the prerequisite requirements of the required courses. Additionally, Special Education majors would be best positioned to use the certificate for employment as they would also have met the requirements to be a special education teacher.

Program Learning Outcomes

Students completing this set of courses will have satisfied the coursework requirements by the state of Utah to earn the Special Education Mathematics Teaching endorsement. These students will have acquired the mathematical content knowledge and pedagogical content knowledge needed to teach Grades 7-12 mathematics to special education students.

Major Course Requirements

Completing these courses satisfies the Utah State Board of Education requires to earn a Special Education Mathematics Teaching Certificate

Required Courses (19 credit hours)

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 3110 - Foundations of Algebra **Credits: (3)**
- MTHE 3060 - Probability and Statistics from a Teaching Perspective **Credits: (3)**
- MTHE 3115 - Algebra from a Secondary Teaching Perspective **Credits: (3)**

- MTHE 3117 - Geometry from a Secondary Teaching Perspective **Credits: (3)**
- MTHE 4000 - Methods and Technology for Teaching Secondary Mathematics **Credits: (3)**

Bachelor of Arts

Mathematics (BA)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

All Mathematics Majors

- **Program Prerequisite:** Not required for Mathematics and Applied Mathematics majors. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required only for the regular mathematics major.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable), in addition to an overall 2.0 GPA and a 2.0 GPA in mathematics classes numbered 1210 or above.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation; 31-46 of these are required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); at least nine credit hours of upper division Mathematics must be completed at Weber State University.
- **Program Code:** Mathematics (6029BA or 6029BS), Mathematics Teaching (6030BA or 6030BS), Applied Mathematics (6031BA or 6031BS) with Regular Track (6022), Computing Track (6023), Physical Mathematics Track (6024), Engineering Mathematics Track (6025), Actuarial/Financial Mathematics Track (6026), Natural/Life Sciences Track (6028)
- **CIPC:** Mathematics (270101), Applied Mathematics (270301), Mathematics Teaching (131311)

Advisement

All Mathematics majors should see the Mathematics Department to be assigned an advisor. They should meet with their advisors at least once a year to help plan their programs and check on their progress. Call 801-626-6095 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information) with your advisor. There are no special admission or application requirements for the Regular or Applied mathematics emphases. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. PHYS 2210 will fulfill requirements for both the major and general education. PSY 1010 (3) in the Social Sciences area is recommended for the Mathematics Teaching emphasis.

Program Learning Outcomes

- Knowledge of and the ability to apply the concepts of differentiable, integral, and multivariable calculus
- Knowledge of and ability to apply the concepts of matrices and Euclidean vector spaces, and ordinary differential equations
- Ability to comprehend and write proofs that are logically, grammatically, and mathematically correct
- Knowledge of and ability to prove results in analysis and algebra

Language Courses Required to fulfill the BA (14 credit hours)

• 6 credit hour of foreign language
and the following language arts courses

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**

Major Course Requirements for Mathematics BS or BA Degree

Mathematics Courses Required (33 credit hours)

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**
- MATH 3110 - Foundations of Algebra **Credits: (3)**
- MATH 4110 - Modern Algebra I **Credits: (3)**
- MATH 4120 - Modern Algebra II **Credits: (3)** or
- MATH 4320 - Topology **Credits: (3)**
- MATH 4210 - Introductory Real Analysis I **Credits: (3)** and
- MATH 4220 - Introductory Real Analysis II **Credits: (3)**

Mathematics Electives (at least 9 credit hours)

Complete any upper division Mathematics courses (not including any required courses) so that required mathematics courses and mathematics electives total at least 42 credit hours.

Minor

A minor is required or

- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**

and one course chosen from:

- CS 2130 - Computational Structures **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**
- CS 2450 - Software Engineering I **Credits: (4)**

- CS 2810 - Computer Architecture/Organization **Credits: (4)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**

Support Courses Required (10 credit hours)

- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**

Graduate School Preparation

It is highly recommended that students planning on graduate work in Mathematics take Linear Algebra (MATH 3270) and Topology (MATH 4320) in addition to the above. See the Mathematics Department for counseling.

Mathematics Teaching (BA)

All Mathematics Majors

- **Program Prerequisite:** Not required for Mathematics and Applied Mathematics majors. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required only for the regular mathematics major.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable), in addition to an overall 2.0 GPA and a 2.0 GPA in mathematics classes numbered 1210 or above.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation; 31-46 of these are required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); at least nine credit hours of upper division Mathematics must be completed at Weber State University.
- **Program Code:** Mathematics (6029BA or 6029BS), Mathematics Teaching (6030BA or 6030BS), Applied Mathematics (6031BA or 6031BS) with Regular Track (6022), Computing Track (6023), Physical Mathematics Track (6024), Engineering Mathematics Track (6025), Actuarial/Financial Mathematics Track (6026), Natural/Life Sciences Track (6028)
- **CIPC:** Mathematics (270101), Applied Mathematics (270301), Mathematics Teaching (131311)

Advisement

All Mathematics majors should see the Mathematics Department to be assigned an advisor. They should meet with their advisors at least once a year to help plan their programs and check on their progress. Call 801-626-6095 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information) with your advisor. There are no special admission or application requirements for the Regular or Applied mathematics emphases. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. PHYS 2210 will fulfill requirements for both the major and general education. PSY 1010 (3) in the Social Sciences area is recommended for the Mathematics Teaching emphasis.

Program Learning Outcomes

- Knowledge of and the ability to apply the concepts of differentiable, integral, and multivariable calculus
- Knowledge of and ability to apply the concepts of matrices and Euclidean vector spaces, and ordinary differential equations
- Ability to comprehend and write proofs that are logically, grammatically, and mathematically correct
- Knowledge of and ability to prove results in analysis and algebra

Language Courses Required to fulfill the BA (14 credit hours)

- 6 credit hour of foreign language
and the following language arts courses

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**

Major Course Requirements for Mathematics Teaching BS or BA Degree

Program Learning Outcomes

- Knowledge of and the ability to apply the concepts of differentiable, integral, and multivariable calculus
- Knowledge of and ability to apply the concepts of matrices and Euclidean vector spaces, and ordinary differential equations
- Ability to comprehend and write proofs that are logically, grammatically, and mathematically correct
- Knowledge of basic probability and statistics, analysis, and number theory
- Knowledge of and ability to teach concepts of high school level mathematics

Mathematics Courses Required (48 credit hours)

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)** or
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3110 - Foundations of Algebra **Credits: (3)** or
- MATH 4110 - Modern Algebra I **Credits: (3)**
- MTHE 3117 - Geometry from a Secondary Teaching Perspective **Credits: (3)**
- MATH 3120 - Foundations of Euclidean and Non-Euclidean Geometry **Credits: (3)**

- MATH 3160 - Number Theory **Credits: (3)**
- MTHE 3060 - Probability and Statistics from a Teaching Perspective **Credits: (3)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MTHE 3115 - Algebra from a Secondary Teaching Perspective **Credits: (3)**
- MTHE 4000 - Methods and Technology for Teaching Secondary Mathematics **Credits: (3)**
- MATH 4210 - Introductory Real Analysis I **Credits: (3)**
- One upper division MATH course not otherwise required **(3)**

Support Courses Required (5-10 credit hours)

Complete either

- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
or
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
AND
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

Note:

A student must also complete requirements for a secondary education licensure as determined by the Jerry and Vickie Moyes College of Education .

Mathematics, Applied (BA)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

All Mathematics Majors

- **Program Prerequisite:** Not required for Mathematics and Applied Mathematics majors. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required only for the regular mathematics major.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable), in addition to an overall 2.0 GPA and a 2.0 GPA in mathematics classes numbered 1210 or above.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation; 31-46 of these are required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); at least nine credit hours of upper division Mathematics must be completed at Weber State University.
- **Program Code:** Mathematics (6029BA or 6029BS), Mathematics Teaching (6030BA or 6030BS), Applied Mathematics (6031BA or 6031BS) with Regular Track (6022), Computing Track (6023), Physical Mathematics Track (6024), Engineering Mathematics Track (6025), Actuarial/Financial Mathematics Track (6026), Natural/Life Sciences Track (6028)
- **CIPC:** Mathematics (270101), Applied Mathematics (270301), Mathematics Teaching (131311)

Advisement

All Mathematics majors should see the Mathematics Department to be assigned an advisor. They should meet with their advisors at least once a year to help plan their programs and check on their progress. Call 801-626-6095 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information) with your advisor. There are no special admission or application requirements for the Regular or Applied mathematics emphases. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. PHYS 2210 will fulfill requirements for both the major and general education. PSY 1010 (3) in the Social Sciences area is recommended for the Mathematics Teaching emphasis.

Program Learning Outcomes

- Knowledge of and the ability to apply the concepts of differentiable, integral, and multivariable calculus
- Knowledge of and ability to apply the concepts of matrices and Euclidean vector spaces, and ordinary differential equations
- Ability to comprehend and write proofs that are logically, grammatically, and mathematically correct
- Knowledge of and ability to prove results in analysis and algebra

Language Courses Required to fulfill the BA (14 credit hours)

- 6 credit hours of foreign language
- and the following language arts courses*

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**

Major Course Requirements for Applied Mathematics BS or BA Degree

The Applied Mathematics Program provides an opportunity for WSU students to apply mathematics to different fields. The program requires 19 credit hours of core lower division mathematics courses, a minimum of 12 credit hours of upper division applied mathematics courses and additional upper division courses in specified fields, including mathematics, so the total upper division credit hours reaches at least 40. To design a specific program different from the following tracks, students must get approval from a Mathematics Department advisor.

Program Learning Outcomes

- Knowledge of and the ability to apply the concepts of differentiable, integral, and multivariable calculus

- Knowledge of and ability to apply the concepts of matrices and Euclidean vector spaces, and ordinary differential equations
- Knowledge and ability to apply concepts of several areas of applied mathematics (probability and stats, numerical analysis, etc.)
- Ability to comprehend and write correct mathematical arguments

Lower Division Mathematics Courses Required for All Tracks (19 credit hours)

- MATH 1200 - Mathematics Computer Laboratory **Credits: (1)**
- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**

1. Regular Track

A traditional diversified program in applied mathematics.

Required Upper Division Mathematics Courses (12 credit hours)

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)** or
- MATH 3280 - Dynamical Systems **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**

Mathematics Electives (at least 12 credit hours)

Complete at least an additional 12 credit hours of upper division Mathematics courses.

Support Courses Required (6-10 credit hours)

Complete 2 calculus based courses outside the Mathematics Department, for example PHYS 2210 PS - Physics for Scientists and Engineers I (5), ECON 3030 - Managerial Economics (3), CHEM 3400 - Molecular Symmetry and Applied Math for Physical Chemistry (3), etc.

Graduate School Preparation

It is recommended that students planning on graduate work in Applied Mathematics take MATH 4210/MATH 4220 - Introductory Real Analysis II and all Mathematics courses in the future area of graduate study. See the Mathematics Department for counseling.

2. Computing Track

Additional Required Lower Division Courses (12 credit hours)

- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)** or
- MATH 1630 - Discrete Mathematics Applied to Computing **Credits: (4)**

Required Upper Division Mathematics Courses (15 credit hours)

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3610 - Graph Theory **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**
- MATH 4620 - Numerical Analysis II **Credits: (3)** or
- MATH 3620 - Enumeration **Credits: (3)** or
- MATH 4160 - Introduction to Mathematical Cryptography **Credits: (3)** or
- MATH 3450 - Advanced Statistical Methods **Credits: (4)**

Electives (at least 25 credit hours)

Complete at least an additional 25 credit hours of upper division courses in Computer Science or Mathematics. At least 6 of these credit hours must be in Computer Science.

3. Physical Mathematics Track

Required Upper Division Mathematics Courses (18 credit hours)

Complete 6 of the following courses

- MATH 3280 - Dynamical Systems **Credits: (3)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)**
- MATH 3810 - Complex Variables **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**
- MATH 4710 - Partial Differential Equations **Credits: (3)**

Electives (at least 22 credit hours)

Complete at least an additional 22 credit hours of upper division courses in Chemistry, Geosciences, Mathematics, or Physics. At least 6 of these credit hours must be outside Mathematics.

4. Engineering Mathematics Track

Required Upper Division Mathematics Courses (18 credit hours)

Complete 6 of the following courses

- MATH 3280 - Dynamical Systems **Credits: (3)**

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)**
- MATH 3810 - Complex Variables **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**
- MATH 4620 - Numerical Analysis II **Credits: (3)**
- MATH 4710 - Partial Differential Equations **Credits: (3)**

Electives (at least 22 credit hours)

Complete at least an additional 22 credit hours of upper division Mathematics or upper division courses from the Engineering Technology programs. At least 6 of these credit hours must be outside of Mathematics.

5. Actuarial/Financial Mathematics Track

Required Upper Division Mathematics Courses (15 credit hours)

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3420 - Probability and Statistics II **Credits: (3)**

And three of the following courses

- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**
- MATH 4710 - Partial Differential Equations **Credits: (3)**
- MATH 3450 - Advanced Statistical Methods **Credits: (4)**

Electives (at least 25 credit hours)

Complete at least an additional 25 credit hours of upper division Mathematics courses or courses from the list below offered by the John B. Goddard School of Business and Economics:

- ACTG 3110 - Intermediate Financial Accounting I **Credits: (3)**
- ACTG 3120 - Intermediate Financial Accounting II **Credits: (3)**
- ECON 3030 - Managerial Economics **Credits: (3)**
- ECON 4010 - Intermediate Microeconomic Theory **Credits: (3)**
- ECON 4020 - Intermediate Macroeconomic Theory **Credits: (3)**
- ECON 4550 - Introduction to Econometrics **Credits: (3)**
- ECON 4560 - Mathematical Economics **Credits: (3)**
- FIN 3200 - Financial Management **Credits: (3)**
- FIN 3300 - Investments **Credits: (3)**
- FIN 4400 - Financial Problems - Corporate Finance **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- QUAN 3610 - Business Statistics II **Credits: (3)**

6. Natural/Life Sciences Track

Required Upper Division Mathematics Courses (12 credit hours)

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)** or
- MATH 3280 - Dynamical Systems **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**

Electives (at least 28 credit hours)

Complete at least an additional 28 credit hours of upper division courses in Botany, Mathematics, Microbiology or Zoology. At least 6 of these credit hours must be outside of Mathematics.

Bachelor of Science

Computational Statistics and Data Science (BS)

Computational Statistics and Data Science (BS)

- **Program Prerequisite:** Not required for Computational Statistics and Data Science.
- **Minor:** No minor required
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable), in addition to an overall 2.0 GPA and a 2.0 GPA in mathematics courses numbered 1210 or above.
- **Credit Hour Requirements:** A minimum total of 120 credit hours are required for graduation; 48 of these are required within the major. A total of 40 upper division credit hours are required (courses numbered 3000 and above); at least nine (9) credit hours of upper division Mathematics must be completed at Weber State University.
- **Program Code:** 6037BS
- **CIPC:** 27.9999

Advisement

All Mathematics majors should see the Mathematics Department to be assigned an advisor. They should meet with their advisors at least once a year to help plan their programs and check on their progress. Call 801-626-6095 for more information or go to mathadvising.youcanbook.me to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Use Grad MAPs to plan your degree.

Admission Requirements

Declare your program of study (see Program of Study (Major/Minor) Declaration) with your major department. There are no special admission or application requirements for the Regular Mathematics, Applied Mathematics, or Computational Statistics and Data Science majors. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (See Teacher Education Department).

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. COMM 1020 (HU), COMM 2110 (HU), ECON 2010 (SS), ECON 2020 (SS), and PHYS 2210 (PS) will fulfill requirements for both the major and general education.

Program Learning Outcomes

- Students will understand the theoretical, conceptual, and applied underpinnings of Statistics
- Students will understand the theoretical, conceptual, and applied underpinnings of Data Science
- Students will demonstrate fundamentals and fluency in computation.
- Students will effectively analyze and reason with data.
- Students will be able to effectively communicate their results

Major Course Requirements for Computational Statistics and Data Science BS Degree

Required Lower Division Mathematics Courses Required (15 credit hours)

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**

Required Computer Courses (20 credit hours)

- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**
- CS 2550 - Introduction to Database Design and SQL **Credits: (4)**
- CS 4580 - Data Science Algorithms **Credits: (4)**

Required Upper Division Mathematics Courses (13 credit hours)

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3420 - Probability and Statistics II **Credits: (3)**
- MATH 3450 - Advanced Statistical Methods **Credits: (4)**
- MATH 4400 - Statistical Learning **Credits: (3)**

Statistical Concepts Electives (3 credit hours)

Take 3 credit hours from the following:

- MATH 1040 QL - Introduction to Statistics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- PSY 3600 - Statistics in Psychology **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)**

Business Communication Electives (3 credit hours)

Take 3 credit hours from the following:

- PS 3250 - Business Communication **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- * COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- * COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**

Math and Computing Electives (6 credit hours)

Take at least 6 credits from the following:

- MATH 2280 - Ordinary Differential Equations **Credits: (3)**
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3610 - Graph Theory **Credits: (3)**
- MATH 3620 - Enumeration **Credits: (3)**
- MATH 4210 - Introductory Real Analysis I **Credits: (3)**
- MATH 4220 - Introductory Real Analysis II **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**
- MATH 4620 - Numerical Analysis II **Credits: (3)**
- MATH 4160 - Introduction to Mathematical Cryptography **Credits: (3)**
- CS 2130 - Computational Structures **Credits: (4)**
- CS 3550 - Advanced Database Programming **Credits: (4)**
- CS 4500 - Introduction to Artificial Intelligence **Credits: (4)**
- CS 5600 - Machine Learning **Credits: (3)**
- MATH 4075 - Time Series Data Analysis **Credits: (3)**
- MATH 3310 - Statistical Data Mining and Text Analytics **Credits: (3)**

Electives (9 credit hours)

Take at least 9 credit hours from the following:

Business Principles

- BSAD 1010 - Introduction to Business **Credits: (3)**
- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- ACTG 3110 - Intermediate Financial Accounting I **Credits: (3)**
- MKTG 3100 - Consumer Behavior **Credits: (3)**
- MKTG 3200 - Selling and Sales Management **Credits: (3)**
- ART 2430 - Introduction to Graphic Design **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- QUAN 3610 - Business Statistics II **Credits: (3)**
- * ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- * ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- ECON 4550 - Introduction to Econometrics **Credits: (3)**

Health Statistics

- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)**
- PUBH 3210 - Advanced Epidemiology & Population Health **Credits: (3)**
- HIM 3300 - Introduction to Quality Improvement in Healthcare **Credits: (3)**
- PUBH 3500 - Biomedical Research Support **Credits: (2)**
- HIM 3550 - Healthcare Data Analytics **Credits: (3)**

Computing

- MIS 2010 - Business Computer Skills **Credits: (1)**
- MIS 2110 - Software Development I **Credits: (3)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- MIS 3210 - Database Design and Implementation **Credits: (3)**
- ^ CS 1030 - Foundations of Computing **Credits: (4)**
- CS 2450 - Software Engineering I **Credits: (4)**
- CS 2705 - Network Fundamentals and Design **Credits: (4)**
- CS 2810 - Computer Architecture/Organization **Credits: (4)**
^ (CS 1030 Foundations of Computing is recommended to apply for an Institutional Certificate of Proficiency in Programming Essentials provided student has completed CS 1030, CS 1400, CS 1410, and CS 2420).

Science and Mapping

- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- PHYS 3310 - Scientific Computing for Physical Systems **Credits: (3)**
- GEOG 4400 - Cartography and Map Design **Credits: (3)**
- GEO 3710 - Introduction to Geographic Information Systems **Credits: (4)**
- GEO 3720 - Geospatial Analysis **Credits: (4)**
- MATH 3040 - Applied Statistical Computing **Credits: (4)**
- MATH 4650 - Probabilistic Deep Learning **Credits: (4)**

Alternatively, 9 elective credits may be approved by the Department of Mathematics.

These courses are typically, but not limited to 3000 or 4000 level course, in the College of Science or in the College of Engineering, Applied Science and Technology, or in the Goddard School of Business and Economics.

Mathematics (BS)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

All Mathematics Majors

- **Program Prerequisite:** Not required for Mathematics and Applied Mathematics majors. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required only for the regular mathematics major.

- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable), in addition to an overall 2.0 GPA and a 2.0 GPA in mathematics classes numbered 1210 or above.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation; 31-46 of these are required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); at least nine credit hours of upper division Mathematics must be completed at Weber State University.
- **Program Code:** Mathematics (6029BA or 6029BS), Mathematics Teaching (6030BA or 6030BS), Applied Mathematics (6031BA or 6031BS) with Regular Track (6022), Computing Track (6023), Physical Mathematics Track (6024), Engineering Mathematics Track (6025), Actuarial/Financial Mathematics Track (6026), Natural/Life Sciences Track (6028)
- **CIPC:** Mathematics (270101), Applied Mathematics (270301), Mathematics Teaching (131311)

Advisement

All Mathematics majors should see the Mathematics Department to be assigned an advisor. They should meet with their advisors at least once a year to help plan their programs and check on their progress. Call 801-626-6095 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information) with your advisor. There are no special admission or application requirements for the Regular or Applied mathematics emphases. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. PHYS 2210 will fulfill requirements for both the major and general education. PSY 1010 (3) in the Social Sciences area is recommended for the Mathematics Teaching emphasis.

Program Learning Outcomes

- Knowledge of and the ability to apply the concepts of differentiable, integral, and multivariable calculus
- Knowledge of and ability to apply the concepts of matrices and Euclidean vector spaces, and ordinary differential equations
- Ability to comprehend and write proofs that are logically, grammatically, and mathematically correct
- Knowledge of and ability to prove results in analysis and algebra

Major Course Requirements for Mathematics BS or BA Degree

Mathematics Courses Required (33 credit hours)

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**

- MATH 3110 - Foundations of Algebra **Credits: (3)**
- MATH 4110 - Modern Algebra I **Credits: (3)**
- MATH 4120 - Modern Algebra II **Credits: (3)** or
- MATH 4320 - Topology **Credits: (3)**
- MATH 4210 - Introductory Real Analysis I **Credits: (3)** and
- MATH 4220 - Introductory Real Analysis II **Credits: (3)**

Mathematics Electives (at least 9 credit hours)

Complete any upper division Mathematics courses (not including any required courses) so that required mathematics courses and mathematics electives total at least 42 credit hours.

Minor

A minor is required or

- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- and one course chosen from:**
- CS 2130 - Computational Structures **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**
- CS 2450 - Software Engineering I **Credits: (4)**
- CS 2810 - Computer Architecture/Organization **Credits: (4)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**

Support Courses Required (10 credit hours)

- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**

Graduate School Preparation

It is highly recommended that students planning on graduate work in Mathematics take Linear Algebra (MATH 3270) and Topology (MATH 4320) in addition to the above. See the Mathematics Department for counseling.

Mathematics Teaching (BS)

All Mathematics Majors

- **Program Prerequisite:** Not required for Mathematics and Applied Mathematics majors. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required only for the regular mathematics major.

- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable), in addition to an overall 2.0 GPA and a 2.0 GPA in mathematics classes numbered 1210 or above.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation; 31-46 of these are required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); at least nine credit hours of upper division Mathematics must be completed at Weber State University.
- **Program Code:** Mathematics (6029BA or 6029BS), Mathematics Teaching (6030BA or 6030BS), Applied Mathematics (6031BA or 6031BS) with Regular Track (6022), Computing Track (6023), Physical Mathematics Track (6024), Engineering Mathematics Track (6025), Actuarial/Financial Mathematics Track (6026), Natural/Life Sciences Track (6028)
- **CIPC:** Mathematics (270101), Applied Mathematics (270301), Mathematics Teaching (131311)

Advisement

All Mathematics majors should see the Mathematics Department to be assigned an advisor. They should meet with their advisors at least once a year to help plan their programs and check on their progress. Call 801-626-6095 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information) with your advisor. There are no special admission or application requirements for the Regular or Applied mathematics emphases. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. PHYS 2210 will fulfill requirements for both the major and general education. PSY 1010 (3) in the Social Sciences area is recommended for the Mathematics Teaching emphasis.

Program Learning Outcomes

- Knowledge of and the ability to apply the concepts of differentiable, integral, and multivariable calculus
- Knowledge of and ability to apply the concepts of matrices and Euclidean vector spaces, and ordinary differential equations
- Ability to comprehend and write proofs that are logically, grammatically, and mathematically correct
- Knowledge of and ability to prove results in analysis and algebra

Major Course Requirements for Mathematics Teaching BS or BA Degree

Program Learning Outcomes

- Knowledge of and the ability to apply the concepts of differentiable, integral, and multivariable calculus
- Knowledge of and ability to apply the concepts of matrices and Euclidean vector spaces, and ordinary differential equations
- Ability to comprehend and write proofs that are logically, grammatically, and mathematically correct

- Knowledge of basic probability and statistics, analysis, and number theory
- Knowledge of and ability to teach concepts of high school level mathematics

Mathematics Courses Required (48 credit hours)

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)** or
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3110 - Foundations of Algebra **Credits: (3)** or
- MATH 4110 - Modern Algebra I **Credits: (3)**
- MTHE 3117 - Geometry from a Secondary Teaching Perspective **Credits: (3)**
- MATH 3120 - Foundations of Euclidean and Non-Euclidean Geometry **Credits: (3)**
- MATH 3160 - Number Theory **Credits: (3)**
- MTHE 3060 - Probability and Statistics from a Teaching Perspective **Credits: (3)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MTHE 3115 - Algebra from a Secondary Teaching Perspective **Credits: (3)**
- MTHE 4000 - Methods and Technology for Teaching Secondary Mathematics **Credits: (3)**
- MATH 4210 - Introductory Real Analysis I **Credits: (3)**
- One upper division MATH course not otherwise required **(3)**

Support Courses Required (5-10 credit hours)

Complete either

- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
or
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
AND
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

Note:

A student must also complete requirements for a secondary education licensure as determined by the Jerry and Vickie Moyes College of Education .

Mathematics, Applied (BS)

All Mathematics Majors

- **Program Prerequisite:** Not required for Mathematics and Applied Mathematics majors. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required only for the regular mathematics major.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable), in addition to an overall 2.0 GPA and a 2.0 GPA in mathematics classes numbered 1210 or above.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation; 31-46 of these are required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); at least nine credit hours of upper division Mathematics must be completed at Weber State University.
- **Program Code:** Mathematics (6029BA or 6029BS), Mathematics Teaching (6030BA or 6030BS), Applied Mathematics (6031BA or 6031BS) with Regular Track (6022), Computing Track (6023), Physical Mathematics Track (6024), Engineering Mathematics Track (6025), Actuarial/Financial Mathematics Track (6026), Natural/Life Sciences Track (6028)
- **CIPC:** Mathematics (270101), Applied Mathematics (270301), Mathematics Teaching (131311)

Advisement

All Mathematics majors should see the Mathematics Department to be assigned an advisor. They should meet with their advisors at least once a year to help plan their programs and check on their progress. Call 801-626-6095 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information) with your advisor. There are no special admission or application requirements for the Regular or Applied mathematics emphases. Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. PHYS 2210 will fulfill requirements for both the major and general education. PSY 1010 (3) in the Social Sciences area is recommended for the Mathematics Teaching emphasis.

Program Learning Outcomes

- Knowledge of and the ability to apply the concepts of differentiable, integral, and multivariable calculus
- Knowledge of and ability to apply the concepts of matrices and Euclidean vector spaces, and ordinary differential equations
- Ability to comprehend and write proofs that are logically, grammatically, and mathematically correct
- Knowledge of and ability to prove results in analysis and algebra

Major Course Requirements for Applied Mathematics BS or BA Degree

The Applied Mathematics Program provides an opportunity for WSU students to apply mathematics to different fields. The program requires 19 credit hours of core lower division mathematics courses, a minimum of 12 credit

hours of upper division applied mathematics courses and additional upper division courses in specified fields, including mathematics, so the total upper division credit hours reaches at least 40. To design a specific program different from the following tracks, students must get approval from a Mathematics Department advisor.

Program Learning Outcomes

- Knowledge of and the ability to apply the concepts of differentiable, integral, and multivariable calculus
- Knowledge of and ability to apply the concepts of matrices and Euclidean vector spaces, and ordinary differential equations
- Knowledge and ability to apply concepts of several areas of applied mathematics (probability and stats, numerical analysis, etc.)
- Ability to comprehend and write correct mathematical arguments

Lower Division Mathematics Courses Required for All Tracks (19 credit hours)

- MATH 1200 - Mathematics Computer Laboratory **Credits: (1)**
- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**

1. Regular Track

A traditional diversified program in applied mathematics.

Required Upper Division Mathematics Courses (12 credit hours)

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)** or
- MATH 3280 - Dynamical Systems **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**

Mathematics Electives (at least 12 credit hours)

Complete at least an additional 12 credit hours of upper division Mathematics courses.

Support Courses Required (6-10 credit hours)

Complete 2 calculus based courses outside the Mathematics Department, for example PHYS 2210 PS - Physics for Scientists and Engineers I (5), ECON 3030 - Managerial Economics (3), CHEM 3400 - Molecular Symmetry and Applied Math for Physical Chemistry (3), etc.

Graduate School Preparation

It is recommended that students planning on graduate work in Applied Mathematics take MATH 4210/MATH 4220 - Introductory Real Analysis II and all Mathematics courses in the future area of graduate study. See the Mathematics Department for counseling.

2. Computing Track

Additional Required Lower Division Courses (12 credit hours)

- CS 1400 - Programming I **Credits: (4)**
- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)** or
- MATH 1630 - Discrete Mathematics Applied to Computing **Credits: (4)**

Required Upper Division Mathematics Courses (15 credit hours)

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3610 - Graph Theory **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**
- MATH 4620 - Numerical Analysis II **Credits: (3)** or
- MATH 3620 - Enumeration **Credits: (3)** or
- MATH 4160 - Introduction to Mathematical Cryptography **Credits: (3)** or
- MATH 3450 - Advanced Statistical Methods **Credits: (4)**

Electives (at least 25 credit hours)

Complete at least an additional 25 credit hours of upper division courses in Computer Science or Mathematics. At least 6 of these credit hours must be in Computer Science.

3. Physical Mathematics Track

Required Upper Division Mathematics Courses (18 credit hours)

Complete 6 of the following courses

- MATH 3280 - Dynamical Systems **Credits: (3)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)**
- MATH 3810 - Complex Variables **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**
- MATH 4710 - Partial Differential Equations **Credits: (3)**

Electives (at least 22 credit hours)

Complete at least an additional 22 credit hours of upper division courses in Chemistry, Geosciences, Mathematics, or Physics. At least 6 of these credit hours must be outside Mathematics.

4. Engineering Mathematics Track

Required Upper Division Mathematics Courses (18 credit hours)

Complete 6 of the following courses

- MATH 3280 - Dynamical Systems **Credits: (3)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)**
- MATH 3810 - Complex Variables **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**
- MATH 4620 - Numerical Analysis II **Credits: (3)**
- MATH 4710 - Partial Differential Equations **Credits: (3)**

Electives (at least 22 credit hours)

Complete at least an additional 22 credit hours of upper division Mathematics or upper division courses from the Engineering Technology programs. At least 6 of these credit hours must be outside of Mathematics.

5. Actuarial/Financial Mathematics Track

Required Upper Division Mathematics Courses (15 credit hours)

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3420 - Probability and Statistics II **Credits: (3)**

And three of the following courses

- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**
- MATH 4710 - Partial Differential Equations **Credits: (3)**
- MATH 3450 - Advanced Statistical Methods **Credits: (4)**

Electives (at least 25 credit hours)

Complete at least an additional 25 credit hours of upper division Mathematics courses or courses from the list below offered by the John B. Goddard School of Business and Economics:

- ACTG 3110 - Intermediate Financial Accounting I **Credits: (3)**
- ACTG 3120 - Intermediate Financial Accounting II **Credits: (3)**
- ECON 3030 - Managerial Economics **Credits: (3)**
- ECON 4010 - Intermediate Microeconomic Theory **Credits: (3)**
- ECON 4020 - Intermediate Macroeconomic Theory **Credits: (3)**
- ECON 4550 - Introduction to Econometrics **Credits: (3)**
- ECON 4560 - Mathematical Economics **Credits: (3)**
- FIN 3200 - Financial Management **Credits: (3)**

- FIN 3300 - Investments **Credits: (3)**
- FIN 4400 - Financial Problems - Corporate Finance **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- QUAN 3610 - Business Statistics II **Credits: (3)**

6. Natural/Life Sciences Track

Required Upper Division Mathematics Courses (12 credit hours)

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3550 - Introduction to Mathematical Modeling **Credits: (3)**
- MATH 3710 - Boundary Value Problems **Credits: (3)** or
- MATH 3280 - Dynamical Systems **Credits: (3)**
- MATH 4610 - Numerical Analysis I **Credits: (3)**

Electives (at least 28 credit hours)

Complete at least an additional 28 credit hours of upper division courses in Botany, Mathematics, Microbiology or Zoology. At least 6 of these credit hours must be outside of Mathematics.

Minor

Mathematics Minor/BIS

Mathematics

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 20 credit hours for regular emphasis and 26 credit hours for Mathematics Teaching minor. At least one upper-division mathematics course for three credit hours must be completed at Weber State University.
- **Program Code:** Mathematics (6029), Mathematics Teaching (6030)
- **CIPC:** Mathematics (270101), Mathematics Teaching (131311)

Students who select the Mathematics Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department).

Course Requirements for Mathematics Minor (Regular Emphasis)

Mathematics Courses Required (11 credit hours)

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**

Electives (9-10 credit hours)

Take three courses chosen from the following:

- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**
- any upper division mathematics courses (courses numbered 3000 and higher)

Teaching Minor

Mathematics Teaching Minor

Mathematics

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 26 credit hours for Mathematics Teaching minor. At least one upper-division mathematics course for three credit hours must be completed at Weber State University.
- **Program Code:** Mathematics (6029), Mathematics Teaching (6030)
- **CIPC:** Mathematics (270101), Mathematics Teaching (131311)

Students who select the Mathematics Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department).

A student who is ready to take calculus is considered prepared for the Mathematics Teaching Minor.

Course Requirements for Mathematics Teaching Minor

Mathematics Courses Required (26 credit hours)

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MTHE 3117 - Geometry from a Secondary Teaching Perspective **Credits: (3)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**
- MATH 3110 - Foundations of Algebra **Credits: (3)** or
- MATH 4110 - Modern Algebra I **Credits: (3)**
- MTHE 4000 - Methods and Technology for Teaching Secondary Mathematics **Credits: (3)**
- MTHE 3060 - Probability and Statistics from a Teaching Perspective **Credits: (3)**
- MTHE 3115 - Algebra from a Secondary Teaching Perspective **Credits: (3)**

Middle School Mathematics Teaching Minor/Endorsement

The courses required for this minor match the recommendations from the Utah State Board of Education for the Middle School Mathematics Teaching endorsement effective July 1, 2021. Students who select the Mathematics Teaching Minor must satisfy the Teacher Education admission and licensure requirements.

- **Program Prerequisite:** MATH 1010 or MATH 1050 placement.
- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor
- **Credit Hour Requirements:** Minimum of 23 credits for the Middle School Mathematics Teaching minor
- **Program Code:** 6070
- **CIPC:** 131311

Advisement

Students pursuing an undergraduate in elementary education or special education are encouraged to elect MTHE 3015 and MTHE 3070 since the major requirements of MATH 2010, 2015, and 2020 will satisfy the prerequisites for MTHE 3015 and MTHE 3070.

Students pursuing a secondary teaching major are encouraged to take MTHE 3115 and MTHE 3117. The prerequisites for these courses are MATH 1210 and MATH 3110, respectively. The prerequisite for MATH 3110 is MATH 1210.

Program Learning Outcomes

- Build procedural fluency from conceptual understanding related to the algebra, geometry, and probability and statistics standards for Grades 6 - 9.
- Develop effective teaching practices to foster student use of the standards of mathematical practice to learn the mathematics associated with Grade 6 - 9 standards.
- Grow as an educator in understanding of the psychological, emotional, social, and physiological needs of Grades 6 - 9 students.

Required Courses (23 credit hours)

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1060 QL - Trigonometry **Credits: (3)**
- MATH 1210 - Calculus I **Credits: (4)**
- MTHE 3060 - Probability and Statistics from a Teaching Perspective **Credits: (3)**
- MTHE 3070 - Middle School Geometry from a Teaching Perspective **Credits: (3)** Or
- MTHE 3117 - Geometry from a Secondary Teaching Perspective **Credits: (3)**
- MTHE 3015 - Middle School Algebra from a Teaching Perspective **Credits: (3)** Or
- MTHE 3115 - Algebra from a Secondary Teaching Perspective **Credits: (3)**
- MTHE 4000 - Methods and Technology for Teaching Secondary Mathematics **Credits: (3)**

Developmental Mathematics Program

Director: Dr. Kathryn Van Wagoner

Advisor & Telephone Contact: Katrina Marriott, 801-626-7451

Admin Asst. & Telephone Contact: Shawnette Horton, 801-626-7585

Email Contact: devmath@weber.edu

Location: Tracy hall Science Center 207

Instructors: Brenda Acor, Christopher Dunn, Amber Hansen, Christine Jennings-Lewis, Charity Jones, Debi McKee, Janette Penrod, Darrell Poore, Carrie Quesnell, Michelle Rich, and Kassidy Symonds

The Developmental Mathematics Program prepares students to take the Quantitative Literacy courses offered by the Mathematics Department. See the Core Requirements listed under the General Education Requirements of this catalog.

For more information about our courses or assistance selecting the best course for your needs:
www.weber.edu/mathoptions

Placement in Mathematics Courses

To prevent delay of graduation, all students requiring developmental courses should begin those courses immediately and stay registered in mathematics until completing a Quantitative Literacy course. Developmental Math courses provide foundational skills necessary for most college level courses. See Math Placement for details on our placement options and Choose Your Math Path for course options.

Course Delivery Options

Individual students have individual learning needs. The Developmental Math Program offers three types of courses to meet student learning needs.

Inquiry & Exploration Learning (IEL) - Students explore and solve real-world problems collaboratively in class with instructor guidance. Homework is completed online. In-class workbook and tests are on paper. Classes taught in this format: MATH 0950, MATH 0970, and MATH 1010.

Mastery-Based Learning (MBL) - Students take notes from videos or the textbook before class and collaboratively work on homework in class with instructor guidance. The videos, textbook, homework, quizzes, and tests are all online. Classes taught in this format: MATH 0950, MATH 0990, and MATH 1010.

Online Learning (ONL) - Online classes are mastery-based learning and completed entirely online with no face-to-face class meetings. All materials are online. Computerized quizzes and tests must be proctored in an approved location. Classes taught in this format: MATH 0950, 0990, and 1010.

Get more information at www.weber.edu/mathoptions or email devmath@weber.edu

Department of Microbiology

Department Chair: Michele Culumber

Location: Tracy Hall Science Center, Room 450

Telephone: Katie Nelson, 801-626-6949

Professor: Michele Culumber; **Assistant Professors:** Daniel Clark, Matthew Crook, Jeremy Dyke, Katrina Twing, Lisa Wiltbank

Microbiology is the study of microorganisms (bacteria, viruses, algae, fungi, and protozoa) including their structure, metabolism, distribution, and ecological relationships. Knowledge gained by microbiologists leads to a better understanding of molecular-level life processes and to beneficial applications in agriculture, industry, and medicine. The field is expanding, with special emphasis being given to genetic engineering, biotechnology, cell culture, disease and the immune response, production and storage of food, research and development and quality assurance of industrial products, disposal and detoxification of wastes, and the monitoring of environmental quality.

Interdisciplinary Programs

The Department of Microbiology contributes courses and faculty expertise to the interdisciplinary Environmental Science major (BS) sponsored by the College of Science. In addition, the department participates in A.S. Biology.

Bachelor of Science

Microbiology (BS)

Areas of Emphasis

Select at least one of the following areas of emphasis:

- Microbiology (BS), Microbiology Major Emphasis
- Microbiology (BS), Industrial Microbiology and Biotechnology Emphasis
- Microbiology (BS), Medical Microbiology Emphasis
- Microbiology (BS), Public and Environmental Health Emphasis

Microbiology (BS), Industrial Microbiology and Biotechnology Emphasis

Microbiology majors pursuing this emphasis should consult the appropriate advisor. The courses listed below are for the Bachelors of Science (BS) Degree in Microbiology with an emphasis in Industrial Microbiology and Biotechnology. The total number of credits required for the emphasis are the same as those required for the Microbiology degree, but are more specifically defined. An emphasis is not a major. Your major will be Microbiology with an emphasis in Industrial Microbiology and Biotechnology.

- **Program Prerequisite:** Not required.
- **Minor:** Not required. However, Microbiology majors will meet the requirements for a minor in Chemistry. If desired for another program, a Microbiology Minor is offered. Please see Microbiology Minor for requirements.
- **Grade Requirements:** An overall GPA of 2.00 or higher in Microbiology courses is required for this major in addition to an overall GPA of 2.00 or higher. Also refer to the General Grade Requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 71 credits is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

- **Program Code:** 6015BS and emphasis code 6041 (Industrial Microbiology and Biotechnology).
- **CIPC:** 260502.

Advisement

All Microbiology students are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6949 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.) Please note, careful planning is essential as most courses have prerequisites and some upper division courses are only offered in one semester.

Students interested in Graduate School should discuss their plans with the major advisor.

Use Grad MAPs to plan your degree.

Admission Requirements

Declare your program of study with the Microbiology Department. No special admission or application requirements are needed for this program. However, students should meet with an advisor to plan and declare their program of study.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following courses are required for the Microbiology major and will also satisfy general education requirements: MICR 2054, CHEM 1210/1215, PHYS 1010 or PHYS 2010.

Program Learning Outcomes

- Describe how microorganisms are used as model systems to study basic biology, genetics, metabolism and ecology.
- Identify ways microorganisms play an integral role in disease, and microbial and immunological methodologies are used in disease treatment and prevention.
- Explain why microorganisms are ubiquitous in nature; inhabiting a multitude of habitats and occupying a wide range of ecological habitats.
- Cite examples of the vital role of microorganisms in biotechnology, fermentation, medicine, and other industries important to human well being.
- Demonstrate that microorganisms have an indispensable role in the environment, including elemental cycles, biodegradation, etc.
- Nature of Science and Scientific Inquiry: Microbiology majors should be able to discuss science and scientific methodology as a way of knowing. Microbiology majors should make observations, develop hypotheses, and design and execute experiments using appropriate methods. They should be able to explain how the nature of science is applied to every day problems.
- Laboratory Skills: Microbiology students should master the following laboratory skills: aseptic and pure culture techniques, preparation of and viewing samples for microscopy, use appropriate methods to identify microorganisms, estimate the number of microorganisms in a sample, and use common lab equipment. They should practice safe microbiology, using appropriate protective and emergency procedures.
- Data analysis skills: Microbiology majors should be able to systematically collect, record, and analyze data, identify sources of error, interpret the results, and reach logical conclusions. They should be able to appropriately format data into tables, graphs, and charts for presentation and publication.
- Critical Thinking Skills: Microbiology majors should be able to (1) differentiate between fact and opinion, (2) recognize and evaluate author bias and rhetoric, (3) develop inferential skills, (4) recognize logical fallacies and faulty reasoning, and (5) make decisions and judgments by drawing logical conclusions using sound quantitative and statistically-based reasoning.

- **Problem-Solving Skills:** Microbiology majors should be competent problem-solvers. They should be able to assess the elements of a problem and develop and test a solution based on logic and the best possible information. Microbiology students should be able to analyze and interpret results from a variety of microbiological methods, and apply these methods to analogous situations. They should use mathematical and graphing skills and reasoning to solve problems in microbiology.
- **Communication Skills:** Microbiology majors will demonstrate competence in written and oral communication.
- **Cooperation/Social Responsibility:** Microbiology majors should understand and appreciate the value of cooperating and working effectively with peers and be able to demonstrate a commitment to the process of developing such skills.
- **Values:** Microbiology majors should identify and discuss the ethical issues and responsibilities of doing science

Required Core Microbiology Major Courses (19 credit hours)

- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- MICR 3053 - Microbiological Procedures **Credits: (3)**
- MICR 3154 - Microbial Ecology **Credits: (4)**
- MICR 4054 - Microbial Physiology **Credits: (4)**
- MICR 4154 - Microbial Genetics **Credits: (4)**

Foundational Industrial Microbiology and Biotechnology Courses (9 credit hours)

- MICR 3853 - Food Microbiology **Credits: (3)**
- MICR 4253 - Cell Culture **Credits: (3)**
- MICR 4354 - Industrial Microbiology and Biotechnology **Credits: (4)**

Industrial Microbiology and Biotechnology Elective Courses (11 credit hours)

Select 11 credit hours from the following categories A-C (may not be counted twice except where noted in the course description):

Category A: Upper-division Microbiology Courses

- MICR 3012 GLB - Microbiology and Global Public Health **Credits: (2)**
- MICR 3254 - Immunology **Credits: (4)**
- MICR 3305 - Medical Microbiology **Credits: (5)**
- MICR 3403 GLB - Tropical Diseases **Credits: (3)**
- MICR 3484 - Environmental Microbiology **Credits: (4)**
- MICR 3502 SUS - Environmental Health **Credits: (2)**
- MICR 3753 - Geomicrobiology **Credits: (3)**
- MICR 3813 CRE - Bioinformatics **Credits: (3)**
- MICR 4554 - Virology **Credits: (4)**

Category B: Experience in Microbiology Courses

- MICR 2600 - Laboratory Safety **Credits: (1)** or
- CHEM 2600 - Laboratory Safety **Credits: (1)**
- MICR 2920 - Short Courses, Workshop, Institutes, and Special Programs **Credits: (1-6)**
- MICR 4800 - Directed Research **Credits: (1-2)** *
- MICR 4830 - Directed Readings **Credits: (1-2)** *
- MICR 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- MICR 4991 - Microbiology Seminar **Credits: (1)**

**No more than 3 credit hours of MICR 4800 and no more than 2 credit hours of MICR 4830 may count toward the major.*

Category C: Other elective courses in the College of Science (maximum 4 credit hours)

- BTNY 3504 - Mycology **Credits: (4)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**

Required Support Courses (26-29 credit hours)

A grade of D- or better is required in each support course.

Chemistry (19 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)** and
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**

Math (minimum of 1 course from the following)

- MATH 1050 QL - College Algebra **Credits: (4)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)** or
- MATH 1210 - Calculus I **Credits: (4)**

Physics (minimum of 1 course from the following)

- PHYS 1010 PS - Elementary Physics **Credits: (3)** or

- PHYS 2010 PS - College Physics I **Credits: (5)**
- PHYS 2019 - College Physics I Lab **Credits: (0)** or
- PHYS 2020 - College Physics II **Credits: (5)**
- PHYS 2029 - College Physics II Lab **Credits: (0)** or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- PHYS 2219 - Physics for Scientists and Engineers I Lab **Credits: (0)** or
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- PHYS 2229 - Physics for Scientists and Engineers II Lab **Credits: (0)**

Life Science Course Electives (6 credit hours)

Minimum of 6 credit hours from 2 Life Science courses in the following:

Botany

- BTNY 1203 LS - Plant Biology **Credits: (3)**
- BTNY 2104 - Plant Form and Function **Credits: (4)**
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**
- BTNY 3105 - Anatomy of Vascular Plants **Credits: (4)**
- BTNY 3204 - Plant Physiology **Credits: (4)**
- BTNY 3214 - Soils **Credits: (4)**
- BTNY 3454 - Plant Ecology **Credits: (4)**
- BTNY 3473 - Plant Geography **Credits: (3)**
- BTNY 3624 - Taxonomy of Vascular Plants **Credits: (4)**

Zoology

- ZOOL 1010 LS - Animal Biology **Credits: (3)**
- ZOOL 1610 LS - Principles of Zoology **Credits: (4)**
- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- ZOOL 3450 CRE - Ecology **Credits: (4)**
- ZOOL 3470 - Zoogeography **Credits: (3)**
- ZOOL 3500 - Conservation Biology **Credits: (3)**
- ZOOL 3720 - Evolution **Credits: (3)**
- ZOOL 4050 - Comparative Vertebrate Anatomy **Credits: (4)**
- ZOOL 4100 - Vertebrate Embryology **Credits: (4)**
- ZOOL 4120 - Histology **Credits: (4)**
- ZOOL 4210 - Advanced Human Physiology **Credits: (4)**
- ZOOL 4220 - Endocrinology **Credits: (4)**
- ZOOL 4300 - Research Applications in Genetics **Credits: (4)**
- ZOOL 4470 - Wildlife Ecology and Management **Credits: (4)**
- ZOOL 4480 - Freshwater Ecology **Credits: (4)**
- ZOOL 4490 - Marine Ecology **Credits: (4)**

- ZOOL 4640 - Entomology **Credits: (4)**
- ZOOL 4650 - Ichthyology **Credits: (4)**
- ZOOL 4660 - Herpetology **Credits: (4)**
- ZOOL 4670 - Ornithology **Credits: (4)**
- ZOOL 4680 - Mammalogy **Credits: (4)**

Microbiology (BS), Medical Microbiology Emphasis

Microbiology majors pursuing this emphasis should consult the appropriate advisor. The courses listed below are for the Bachelors of Science (BS) Degree in Microbiology with an emphasis in Medical Microbiology. The total number of credits required for the emphasis are the same as those required for the Microbiology degree, but are more specifically defined. An emphasis is not a major. Your major will be Microbiology with an emphasis in Medical Microbiology.

Students considering application to medical, dental, veterinary, physical therapy, optometry, and pharmacy schools should consult the beginning of the College of Science section of this catalog. Furthermore, they should meet with the advisors of these programs, each of whom is listed in that section. The Department of Microbiology offers lower and upper level courses that provide superb training for examinations such as the Medical College Admissions Test (MCAT), as well as medical school courses. Students should meet with the appropriate advisor for specific course suggestions. Medical schools do not accept AP or CELP credits in English, Math, or Science courses.

- **Program Prerequisite:** Not required.
- **Minor:** Not required. However, Microbiology majors will meet the requirements for a minor in Chemistry. If desired for another program, a Microbiology Minor is offered. Please see Microbiology Minor for requirements.
- **Grade Requirements:** An overall GPA of 2.00 or higher in Microbiology courses is required for this major in addition to an overall GPA of 2.00 or higher. Also refer to the General Grade Requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 71 credits is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).
- **Program Code:** 6015BS and emphasis 6042 (Medical Microbiology).
- **CIPC:** 260502.

Advisement

All Microbiology students are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6949 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.) Please note, careful planning is essential as most courses have prerequisites and some upper division courses are only offered in one semester.

Students interested in Graduate School should discuss their plans with the major advisor.

Use Grad MAPs to plan your degree.

Admission Requirements

Declare your program of study with the Microbiology Department. No special admission or application requirements are needed for this program. However, students should meet with an advisor to plan and declare their program of study.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following courses are required for the Microbiology major and will also satisfy general education requirements: MICR 2054, CHEM 1210/1215, PHYS 1010 or PHYS 2010 .

Program Learning Outcomes

- Describe how microorganisms are used as model systems to study basic biology, genetics, metabolism and ecology.
- Identify ways microorganisms play an integral role in disease, and microbial and immunological methodologies are used in disease treatment and prevention.
- Explain why microorganisms are ubiquitous in nature; inhabiting a multitude of habitats and occupying a wide range of ecological habitats.
- Cite examples of the vital role of microorganisms in biotechnology, fermentation, medicine, and other industries important to human well being.
- Demonstrate that microorganisms have an indispensable role in the environment, including elemental cycles, biodegradation, etc.
- Nature of Science and Scientific Inquiry: Microbiology majors should be able to discuss science and scientific methodology as a way of knowing. Microbiology majors should make observations, develop hypotheses, and design and execute experiments using appropriate methods. They should be able to explain how the nature of science is applied to every day problems.
- Laboratory Skills: Microbiology students should master the following laboratory skills: aseptic and pure culture techniques, preparation of and viewing samples for microscopy, use appropriate methods to identify microorganisms, estimate the number of microorganisms in a sample, and use common lab equipment. They should practice safe microbiology, using appropriate protective and emergency procedures.
- Data analysis skills: Microbiology majors should be able to systematically collect, record, and analyze data, identify sources of error, interpret the results, and reach logical conclusions. They should be able to appropriately format data into tables, graphs, and charts for presentation and publication.
- Critical Thinking Skills: Microbiology majors should be able to (1) differentiate between fact and opinion, (2) recognize and evaluate author bias and rhetoric, (3) develop inferential skills, (4) recognize logical fallacies and faulty reasoning, and (5) make decisions and judgments by drawing logical conclusions using sound quantitative and statistically-based reasoning.
- Problem-Solving Skills: Microbiology majors should be competent problem-solvers. They should be able to assess the elements of a problem and develop and test a solution based on logic and the best possible information. Microbiology students should be able to analyze and interpret results from a variety of microbiological methods, and apply these methods to analogous situations. They should use mathematical and graphing skills and reasoning to solve problems in microbiology.
- Communication Skills: Microbiology majors will demonstrate competence in written and oral communication.
- Cooperation/Social Responsibility: Microbiology majors should understand and appreciate the value of cooperating and working effectively with peers and be able to demonstrate a commitment to the process of developing such skills.
- Values: Microbiology majors should identify and discuss the ethical issues and responsibilities of doing science

Required Core Microbiology Major Courses (19 credit hours)

- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- MICR 3053 - Microbiological Procedures **Credits: (3)**
- MICR 3154 - Microbial Ecology **Credits: (4)**

- MICR 4054 - Microbial Physiology **Credits: (4)**
- MICR 4154 - Microbial Genetics **Credits: (4)**

Foundational Medical Microbiology Courses (9 credit hours)

- MICR 3254 - Immunology **Credits: (4)**
- MICR 3305 - Medical Microbiology **Credits: (5)**

Medical Microbiology Elective Courses (11 credit hours)

Select 11 credit hours from the following categories A-C: (may not be counted twice except where noted in the course description)

Category A: Upper-division Microbiology Courses

- MICR 3012 GLB - Microbiology and Global Public Health **Credits: (2)**
- MICR 3403 GLB - Tropical Diseases **Credits: (3)**
- MICR 3484 - Environmental Microbiology **Credits: (4)**
- MICR 3502 SUS - Environmental Health **Credits: (2)**
- MICR 3813 CRE - Bioinformatics **Credits: (3)**
- MICR 3853 - Food Microbiology **Credits: (3)**
- MICR 4253 - Cell Culture **Credits: (3)**
- MICR 4554 - Virology **Credits: (4)**

Category B: Experience in Microbiology Courses

- MICR 2600 - Laboratory Safety **Credits: (1)** or
- CHEM 2600 - Laboratory Safety **Credits: (1)**
- MICR 2920 - Short Courses, Workshop, Institutes, and Special Programs **Credits: (1-6)**
- MICR 4800 - Directed Research **Credits: (1-2)** *
- MICR 4830 - Directed Readings **Credits: (1-2)** *
- MICR 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- MICR 4991 - Microbiology Seminar **Credits: (1)**

**No more than 3 credit hours of MICR 4800 and no more than 2 credit hours of MICR 4830 may count toward the major.*

Category C: Other elective courses in the College of Science (maximum 4 credit hours)

- BTNY 3504 - Mycology **Credits: (4)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**

Required Support Courses (26-29 credit hours)

A grade of D- or better is required in each support course.

Chemistry (19 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)** and
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**

Math (minimum of 1 course from the following)

- MATH 1050 QL - College Algebra **Credits: (4)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)** or
- MATH 1210 - Calculus I **Credits: (4)**

Physics (minimum of 1 course from the following)

- PHYS 1010 PS - Elementary Physics **Credits: (3)** or
- PHYS 2010 PS - College Physics I **Credits: (5)**
- PHYS 2019 - College Physics I Lab **Credits: (0)** or
- PHYS 2020 - College Physics II **Credits: (5)**
- PHYS 2029 - College Physics II Lab **Credits: (0)** or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- PHYS 2219 - Physics for Scientists and Engineers I Lab **Credits: (0)** or
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- PHYS 2229 - Physics for Scientists and Engineers II Lab **Credits: (0)**

Life Science Course Electives (6 credit hours)

Minimum of 6 credit hours from 2 Life Science courses in the following:

Botany

- BTNY 1203 LS - Plant Biology **Credits: (3)**
- BTNY 2104 - Plant Form and Function **Credits: (4)**
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**

- BTNY 3105 - Anatomy of Vascular Plants **Credits: (4)**
- BTNY 3204 - Plant Physiology **Credits: (4)**
- BTNY 3214 - Soils **Credits: (4)**
- BTNY 3454 - Plant Ecology **Credits: (4)**
- BTNY 3473 - Plant Geography **Credits: (3)**
- BTNY 3624 - Taxonomy of Vascular Plants **Credits: (4)**

Zoology

- ZOOL 1010 LS - Animal Biology **Credits: (3)**
- ZOOL 1610 LS - Principles of Zoology **Credits: (4)**
- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- ZOOL 3450 CRE - Ecology **Credits: (4)**
- ZOOL 3470 - Zoogeography **Credits: (3)**
- ZOOL 3500 - Conservation Biology **Credits: (3)**
- ZOOL 3720 - Evolution **Credits: (3)**
- ZOOL 4050 - Comparative Vertebrate Anatomy **Credits: (4)**
- ZOOL 4100 - Vertebrate Embryology **Credits: (4)**
- ZOOL 4120 - Histology **Credits: (4)**
- ZOOL 4210 - Advanced Human Physiology **Credits: (4)**
- ZOOL 4220 - Endocrinology **Credits: (4)**
- ZOOL 4300 - Research Applications in Genetics **Credits: (4)**
- ZOOL 4470 - Wildlife Ecology and Management **Credits: (4)**
- ZOOL 4480 - Freshwater Ecology **Credits: (4)**
- ZOOL 4490 - Marine Ecology **Credits: (4)**
- ZOOL 4640 - Entomology **Credits: (4)**
- ZOOL 4650 - Ichthyology **Credits: (4)**
- ZOOL 4660 - Herpetology **Credits: (4)**
- ZOOL 4670 - Ornithology **Credits: (4)**
- ZOOL 4680 - Mammalogy **Credits: (4)**

Microbiology (BS), Microbiology Major Emphasis

Microbiology majors should consult the appropriate advisor. The courses listed below are for the Bachelors of Science (BS) Degree in Microbiology with an emphasis in Microbiology. The total number of credits required for the emphasis are the same as those required for the Microbiology degree.

- **Program Prerequisite:** Not required.
- **Minor:** Not required. However, Microbiology majors will meet the requirements for a minor in Chemistry. If desired for another program, a Microbiology Minor is offered. Please see Microbiology Minor for requirements.
- **Grade Requirements:** An overall GPA of 2.00 or higher in Microbiology courses is required for this major in addition to an overall GPA of 2.00 or higher. Also refer to the General Grade Requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 71 credits is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

- **Program Code:** 6015BS and emphasis 6044 (Microbiology).
- **CIPC:** 260502.

Advisement

All Microbiology students are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6949 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.) Please note, careful planning is essential as most courses have prerequisites and some upper division courses are only offered in one semester.

Students interested in Graduate School should discuss their plans with the major advisor.

Use Grad MAPs to plan your degree.

Admission Requirements

Declare your program of study with the Microbiology Department. No special admission or application requirements are needed for this program. However, students should meet with an advisor to plan and declare their program of study.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following courses are required for the Microbiology major and will also satisfy general education requirements: MICR 2054, CHEM 1210/CHEM 1215, PHYS 1010 or PHYS 2010.

Program Learning Outcomes

- Describe how microorganisms are used as model systems to study basic biology, genetics, metabolism and ecology.
- Identify ways microorganisms play an integral role in disease, and microbial and immunological methodologies are used in disease treatment and prevention.
- Explain why microorganisms are ubiquitous in nature; inhabiting a multitude of habitats and occupying a wide range of ecological habitats.
- Cite examples of the vital role of microorganisms in biotechnology, fermentation, medicine, and other industries important to human well being.
- Demonstrate that microorganisms have an indispensable role in the environment, including elemental cycles, biodegradation, etc.
- Nature of Science and Scientific Inquiry: Microbiology majors should be able to discuss science and scientific methodology as a way of knowing. Microbiology majors should make observations, develop hypotheses, and design and execute experiments using appropriate methods. They should be able to explain how the nature of science is applied to every day problems.
- Laboratory Skills: Microbiology students should master the following laboratory skills: aseptic and pure culture techniques, preparation of and viewing samples for microscopy, use appropriate methods to identify microorganisms, estimate the number of microorganisms in a sample, and use common lab equipment. They should practice safe microbiology, using appropriate protective and emergency procedures.
- Data analysis skills: Microbiology majors should be able to systematically collect, record, and analyze data, identify sources of error, interpret the results, and reach logical conclusions. They should be able to appropriately format data into tables, graphs, and charts for presentation and publication.
- Critical Thinking Skills: Microbiology majors should be able to (1) differentiate between fact and opinion, (2) recognize and evaluate author bias and rhetoric, (3) develop inferential skills, (4) recognize logical fallacies

and faulty reasoning, and (5) make decisions and judgments by drawing logical conclusions using sound quantitative and statistically-based reasoning.

- **Problem-Solving Skills:** Microbiology majors should be competent problem-solvers. They should be able to assess the elements of a problem and develop and test a solution based on logic and the best possible information. Microbiology students should be able to analyze and interpret results from a variety of microbiological methods, and apply these methods to analogous situations. They should use mathematical and graphing skills and reasoning to solve problems in microbiology.
- **Communication Skills:** Microbiology majors will demonstrate competence in written and oral communication.
- **Cooperation/Social Responsibility:** Microbiology majors should understand and appreciate the value of cooperating and working effectively with peers and be able to demonstrate a commitment to the process of developing such skills.
- **Values:** Microbiology majors should identify and discuss the ethical issues and responsibilities of doing science

Major Course Requirements for Microbiology BS Degree

Required Core Microbiology Major Courses (19 credit hours)

- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- MICR 3053 - Microbiological Procedures **Credits: (3)**
- MICR 3154 - Microbial Ecology **Credits: (4)**
- MICR 4054 - Microbial Physiology **Credits: (4)**
- MICR 4154 - Microbial Genetics **Credits: (4)**

Microbiology Major Elective Courses (20 credit hours)

Select 20 credit hours from the following categories A-C:

Category A: Upper-division Microbiology Courses (minimum 8 credit hours)

- MICR 3012 GLB - Microbiology and Global Public Health **Credits: (2)**
- MICR 3254 - Immunology **Credits: (4)**
- MICR 3305 - Medical Microbiology **Credits: (5)**
- MICR 3403 GLB - Tropical Diseases **Credits: (3)**
- MICR 3484 - Environmental Microbiology **Credits: (4)**
- MICR 3502 SUS - Environmental Health **Credits: (2)**
- MICR 3753 - Geomicrobiology **Credits: (3)**
- MICR 3813 CRE - Bioinformatics **Credits: (3)**
- MICR 3853 - Food Microbiology **Credits: (3)**
- MICR 4253 - Cell Culture **Credits: (3)**
- MICR 4354 - Industrial Microbiology and Biotechnology **Credits: (4)**
- MICR 4554 - Virology **Credits: (4)**

Category B: Experience in Microbiology Courses

- MICR 2600 - Laboratory Safety **Credits: (1)** or
- CHEM 2600 - Laboratory Safety **Credits: (1)**

- MICR 2920 - Short Courses, Workshop, Institutes, and Special Programs **Credits: (1-6)**
- MICR 4800 - Directed Research **Credits: (1-2) ***
- MICR 4830 - Directed Readings **Credits: (1-2) ***
- MICR 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- MICR 4991 - Microbiology Seminar **Credits: (1)**

**No more than 3 credit hours of MICR 4800 and no more than 2 credit hours of MICR 4830 may count toward the major.*

Category C: Other elective courses in the College of Science (maximum 8 credit hours)

- BTNY 3303 - Plant Genetics **Credits: (4)**
- BTNY 3504 - Mycology **Credits: (4)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**

Required Support Courses (26-29 credit hours)

A grade of D- or better is required in each support course.

Chemistry (19 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)** and
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**

Math (minimum of 1 course from the following)

- MATH 1050 QL - College Algebra **Credits: (4)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)** or
- MATH 1210 - Calculus I **Credits: (4)**

Physics (minimum of 1 course from the following)

- PHYS 1010 PS - Elementary Physics **Credits: (3)** or
- PHYS 2010 PS - College Physics I **Credits: (5)**
- PHYS 2019 - College Physics I Lab **Credits: (0)** or
- PHYS 2020 - College Physics II **Credits: (5)**

- PHYS 2029 - College Physics II Lab **Credits: (0)** or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**
- PHYS 2219 - Physics for Scientists and Engineers I Lab **Credits: (0)** or
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- PHYS 2229 - Physics for Scientists and Engineers II Lab **Credits: (0)**

Life Science Course Electives (6 credit hours)

Minimum of 6 credit hours from 2 Life Science courses in the following:

Botany

- BTNY 1203 LS - Plant Biology **Credits: (3)**
- BTNY 2104 - Plant Form and Function **Credits: (4)**
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**
- BTNY 3105 - Anatomy of Vascular Plants **Credits: (4)**
- BTNY 3204 - Plant Physiology **Credits: (4)**
- BTNY 3214 - Soils **Credits: (4)**
- BTNY 3454 - Plant Ecology **Credits: (4)**
- BTNY 3473 - Plant Geography **Credits: (3)**
- BTNY 3624 - Taxonomy of Vascular Plants **Credits: (4)**

Zoology

- ZOOL 1010 LS - Animal Biology **Credits: (3)**
- ZOOL 1610 LS - Principles of Zoology **Credits: (4)**
- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- ZOOL 3450 CRE - Ecology **Credits: (4)**
- ZOOL 3470 - Zoogeography **Credits: (3)**
- ZOOL 3500 - Conservation Biology **Credits: (3)**
- ZOOL 3720 - Evolution **Credits: (3)**
- ZOOL 4050 - Comparative Vertebrate Anatomy **Credits: (4)**
- ZOOL 4100 - Vertebrate Embryology **Credits: (4)**
- ZOOL 4120 - Histology **Credits: (4)**
- ZOOL 4210 - Advanced Human Physiology **Credits: (4)**
- ZOOL 4220 - Endocrinology **Credits: (4)**
- ZOOL 4300 - Research Applications in Genetics **Credits: (4)**
- ZOOL 4470 - Wildlife Ecology and Management **Credits: (4)**
- ZOOL 4480 - Freshwater Ecology **Credits: (4)**
- ZOOL 4490 - Marine Ecology **Credits: (4)**
- ZOOL 4640 - Entomology **Credits: (4)**
- ZOOL 4650 - Ichthyology **Credits: (4)**
- ZOOL 4660 - Herpetology **Credits: (4)**
- ZOOL 4670 - Ornithology **Credits: (4)**
- ZOOL 4680 - Mammalogy **Credits: (4)**

Microbiology Emphases

Microbiology majors pursuing emphases should consult the appropriate advisor and include the specified Foundational and Elective emphasis courses into their Microbiology Major. Regardless of the chosen emphasis, students must successfully complete the REQUIRED CORE MICROBIOLOGY MAJOR COURSES (19 credit hours), [20 credit hours through the specific emphasis] REQUIRED SUPPORT COURSES (26-29 credit hours), and LIFE SCIENCE COURSE ELECTIVES (6 credit hours). Please note that emphases are not a major. Your major will be Microbiology with a specific emphasis.

The emphasis areas are as follows:

- Microbiology (BS)
- Microbiology (BS), Industrial Microbiology and Biotechnology Emphasis
- Microbiology (BS), Medical Microbiology Emphasis
- Microbiology (BS), Public and Environmental Health Emphasis

Students must choose at least one of the four emphases that are offered in order to declare a Microbiology (BS) degree.

Microbiology (BS), Public and Environmental Health Emphasis

Microbiology majors pursuing this emphasis should consult the appropriate advisor. The courses listed below are for the Bachelors of Science (BS) Degree in Microbiology with an emphasis in Public and Environmental Health. The total number of credits required for the emphasis are the same as those required for the Microbiology degree, but are more specifically defined. An emphasis is not a major. Your major will be Microbiology with an emphasis in Public and Environmental Health.

- **Program Prerequisite:** Not required.
- **Minor:** Not required. However, Microbiology majors will meet the requirements for a minor in Chemistry. If desired for another program, a Microbiology Minor is offered. Please see Microbiology Minor for requirements.
- **Grade Requirements:** An overall GPA of 2.00 or higher in Microbiology courses is required for this major in addition to an overall GPA of 2.00 or higher. Also refer to the General Grade Requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 71 credits is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).
- **Program Code:** 6015BS and emphasis 6043 (Public and Environmental Health).
- **CIPC:** 260502.

Advisement

All Microbiology students are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6949 for more information or to schedule an appointment. (Also refer to the Department

Advisor Referral List). Please note, careful planning is essential as most courses have prerequisites and some upper division courses are only offered in one semester.

Students interested in Graduate School should discuss their plans with the major advisor.

Use Grad MAPs to plan your degree.

Admission Requirements

Declare your program of study with the Microbiology Department. No special admission or application requirements are needed for this program. However, students should meet with an advisor to plan and declare their program of study.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following courses are required for the Microbiology major and will also satisfy general education requirements: MICR 2054, CHEM 1210/CHEM 1215, PHYS 1010 or PHYS 2010.

Program Learning Outcomes

- Describe how microorganisms are used as model systems to study basic biology, genetics, metabolism and ecology.
- Identify ways microorganisms play an integral role in disease, and microbial and immunological methodologies are used in disease treatment and prevention.
- Explain why microorganisms are ubiquitous in nature; inhabiting a multitude of habitats and occupying a wide range of ecological habitats. .
- Cite examples of the vital role of microorganisms in biotechnology, fermentation, medicine, and other industries important to human well being.
- Demonstrate that microorganisms have an indispensable role in the environment, including elemental cycles, biodegradation, etc.
- Nature of Science and Scientific Inquiry: Microbiology majors should be able to discuss science and scientific methodology as a way of knowing. Microbiology majors should make observations, develop hypotheses, and design and execute experiments using appropriate methods. They should be able to explain how the nature of science is applied to every day problems.
- Laboratory Skills: Microbiology students should master the following laboratory skills: aseptic and pure culture techniques, preparation of and viewing samples for microscopy, use appropriate methods to identify microorganisms, estimate the number of microorganisms in a sample, and use common lab equipment. They should practice safe microbiology, using appropriate protective and emergency procedures.
- Data analysis skills: Microbiology majors should be able to systematically collect, record, and analyze data, identify sources of error, interpret the results, and reach logical conclusions. They should be able to appropriately format data into tables, graphs, and charts for presentation and publication.
- Critical Thinking Skills: Microbiology majors should be able to (1) differentiate between fact and opinion, (2) recognize and evaluate author bias and rhetoric, (3) develop inferential skills, (4) recognize logical fallacies and faulty reasoning, and (5) make decisions and judgments by drawing logical conclusions using sound quantitative and statistically-based reasoning.
- Problem-Solving Skills: Microbiology majors should be competent problem-solvers. They should be able to assess the elements of a problem and develop and test a solution based on logic and the best possible information. Microbiology students should be able to analyze and interpret results from a variety of microbiological methods, and apply these methods to analogous situations. They should use mathematical and graphing skills and reasoning to solve problems in microbiology.

- Communication Skills: Microbiology majors will demonstrate competence in written and oral communication.
- Cooperation/Social Responsibility: Microbiology majors should understand and appreciate the value of cooperating and working effectively with peers and be able to demonstrate a commitment to the process of developing such skills.
- Values: Microbiology majors should identify and discuss the ethical issues and responsibilities of doing science

Required Core Microbiology Major Courses (19 credit hours)

- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- MICR 3053 - Microbiological Procedures **Credits: (3)**
- MICR 3154 - Microbial Ecology **Credits: (4)**
- MICR 4054 - Microbial Physiology **Credits: (4)**
- MICR 4154 - Microbial Genetics **Credits: (4)**

Foundational Public and Environmental Health Courses (4 credit hours)

- MICR 3012 GLB - Microbiology and Global Public Health **Credits: (2)**
- MICR 3502 SUS - Environmental Health **Credits: (2)**

Public and Environmental Health Elective Courses (16 credit hours)

Select 16 credit hours from the following categories A-C: (may not be counted twice except where noted in the course description):

Category A: Upper-division Microbiology Courses (minimum 8 credit hours)

- MICR 3254 - Immunology **Credits: (4)**
- MICR 3305 - Medical Microbiology **Credits: (5)**
- MICR 3403 GLB - Tropical Diseases **Credits: (3)**
- MICR 3484 - Environmental Microbiology **Credits: (4)**
- MICR 3853 - Food Microbiology **Credits: (3)**
- MICR 4554 - Virology **Credits: (4)**

Category B: Experience in Microbiology Courses

- MICR 2600 - Laboratory Safety **Credits: (1)** or
- CHEM 2600 - Laboratory Safety **Credits: (1)**
- MICR 2920 - Short Courses, Workshop, Institutes, and Special Programs **Credits: (1-6)**
- MICR 4800 - Directed Research **Credits: (1-2)** *
- MICR 4830 - Directed Readings **Credits: (1-2)** *
- MICR 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

- MICR 4991 - Microbiology Seminar **Credits: (1)**

** No more than 3 credit hours of MICR 4800 and no more than 2 credit hours of MICR 4830 may count toward the major.*

Category C: Other elective courses in the College of Science (maximum 8 credit hours)

- BTNY 3504 - Mycology **Credits: (4)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**

Required Support Courses (26-29 credit hours)

A grade of D- or better is required in each support course

Chemistry (19 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)** and
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**

Math (minimum of 1 course from the following)

- MATH 1050 QL - College Algebra **Credits: (4)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)** or
- MATH 1210 - Calculus I **Credits: (4)**

Physics (minimum of 1 course from the following)

- PHYS 1010 PS - Elementary Physics **Credits: (3)** or
- PHYS 2010 PS - College Physics I **Credits: (5)**
- PHYS 2019 - College Physics I Lab **Credits: (0)** or
- PHYS 2020 - College Physics II **Credits: (5)**
- PHYS 2029 - College Physics II Lab **Credits: (0)** or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**

- PHYS 2219 - Physics for Scientists and Engineers I Lab **Credits: (0)** or
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- PHYS 2229 - Physics for Scientists and Engineers II Lab **Credits: (0)**

Life Science Course Electives (6 credit hours)

Minimum of 6 credit hours from 2 Life Science courses in the following:

Botany

- BTNY 1203 LS - Plant Biology **Credits: (3)**
- BTNY 2104 - Plant Form and Function **Credits: (4)**
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**
- BTNY 3105 - Anatomy of Vascular Plants **Credits: (4)**
- BTNY 3204 - Plant Physiology **Credits: (4)**
- BTNY 3214 - Soils **Credits: (4)**
- BTNY 3454 - Plant Ecology **Credits: (4)**
- BTNY 3473 - Plant Geography **Credits: (3)**
- BTNY 3624 - Taxonomy of Vascular Plants **Credits: (4)**

Zoology

- ZOOL 1010 LS - Animal Biology **Credits: (3)**
- ZOOL 1610 LS - Principles of Zoology **Credits: (4)**
- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- ZOOL 3450 CRE - Ecology **Credits: (4)**
- ZOOL 3470 - Zoogeography **Credits: (3)**
- ZOOL 3500 - Conservation Biology **Credits: (3)**
- ZOOL 3720 - Evolution **Credits: (3)**
- ZOOL 4050 - Comparative Vertebrate Anatomy **Credits: (4)**
- ZOOL 4100 - Vertebrate Embryology **Credits: (4)**
- ZOOL 4120 - Histology **Credits: (4)**
- ZOOL 4210 - Advanced Human Physiology **Credits: (4)**
- ZOOL 4220 - Endocrinology **Credits: (4)**
- ZOOL 4300 - Research Applications in Genetics **Credits: (4)**
- ZOOL 4470 - Wildlife Ecology and Management **Credits: (4)**
- ZOOL 4480 - Freshwater Ecology **Credits: (4)**
- ZOOL 4490 - Marine Ecology **Credits: (4)**
- ZOOL 4640 - Entomology **Credits: (4)**
- ZOOL 4650 - Ichthyology **Credits: (4)**
- ZOOL 4660 - Herpetology **Credits: (4)**
- ZOOL 4670 - Ornithology **Credits: (4)**
- ZOOL 4680 - Mammalogy **Credits: (4)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Microbiology (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

BIS students that wish to include Microbiology as one of their emphasis areas should recognize that they should have a clear goal for their BIS program and capstone project. Students need to gain approval of courses for the emphasis from a Microbiology advisor. Because Microbiology research often involves laboratory experiments, students should begin discussing their capstone project with a faculty member a year in advance. They will then work with that faculty mentor, in coordination with the other emphasis mentors, to develop the experiments, methods, and schedule for the project. The student is responsible for securing funding for the supplies needed for their project.

- **Program Prerequisite:** Students seeking a BIS with an emphasis in Microbiology must complete CHEM 1210/1215 and CHEM 1220/ 1225 as prerequisites for upper division Microbiology courses *in addition to* the credits required for Microbiology.
- **Grade Requirements:** A minimum grade of "C" must be achieved in all coursework to satisfy BIS degree requirements.
- **Credit Hours Requirements:** A minimum of 18 credit hours is required in Microbiology, at least one course should be at the 4000 level.
- **Program Code:** 6015
- **CIPC:** 260502

Course Requirements for BIS Emphasis

Required Chemistry Courses (10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

Required Microbiology Courses (7-8 credit hours)

- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- MICR 3053 - Microbiological Procedures **Credits: (3)** or
- MICR 3154 - Microbial Ecology **Credits: (4)**

Microbiology BIS Emphasis Elective Courses

Choose 3 courses to total the remaining 10-11 credits in Microbiology courses. **1 of the 3 courses must be a 4000 level course.** Please be aware that some courses have additional prerequisites.

- MICR 3012 GLB - Microbiology and Global Public Health **Credits: (2)**

- MICR 3053 - Microbiological Procedures **Credits: (3)**
- MICR 3154 - Microbial Ecology **Credits: (4)**
- MICR 3203 - The Immune System in Health & Disease **Credits: (3)** or
- MICR 3254 - Immunology **Credits: (4)**
- MICR 3305 - Medical Microbiology **Credits: (5)** or
- MICR 3603 - Advanced Microbiology for the Health Professions **Credits: (3)**
- MICR 3403 GLB - Tropical Diseases **Credits: (3)**
- MICR 3484 - Environmental Microbiology **Credits: (4)**
- MICR 3502 SUS - Environmental Health **Credits: (2)**
- MICR 3753 - Geomicrobiology **Credits: (3)**
- MICR 3813 CRE - Bioinformatics **Credits: (3)**
- MICR 3853 - Food Microbiology **Credits: (3)**
- MICR 4054 - Microbial Physiology **Credits: (4)**
- MICR 4154 - Microbial Genetics **Credits: (4)**
- MICR 4253 - Cell Culture **Credits: (3)**
- MICR 4354 - Industrial Microbiology and Biotechnology **Credits: (4)**
- MICR 4554 - Virology **Credits: (4)**

The following courses will not be counted toward a BIS degree without the approval of a Microbiology advisor:

- MICR 2600 - Laboratory Safety **Credits: (1)**
- MICR 4800 - Directed Research **Credits: (1-2) ***
- MICR 4830 - Directed Readings **Credits: (1-2) ***
- MICR 4890 INT - Cooperative Work Experience **Credits: (1-5)**
- MICR 4991 - Microbiology Seminar **Credits: (1)**

****No more than 3 credit hours of MICR 4800 and only 1 credit hour of MICR 4830 may count toward the Microbiology BIS Emphasis.***

Minor

Microbiology Minor

- **Grade Requirements:** A grade of "C-" or better in courses used toward the minor.
- **Credit Hour Requirements:** Minimum of 18 credithours in Microbiology courses.
- **Program Code:** 6015
- **CIPC:** 260502

Course Requirements for Minor

Required Microbiology Course (4 credit hours)

- MICR 2054 LS - Principles of Microbiology **Credits: (4)**

Microbiology Minor Elective Courses (14 credit hours)

Select 14 credit hours of Microbiology courses from the following:

- MICR 2600 - Laboratory Safety **Credits: (1)**
- MICR 3012 GLB - Microbiology and Global Public Health **Credits: (2)**
- MICR 3053 - Microbiological Procedures **Credits: (3)**
- MICR 3154 - Microbial Ecology **Credits: (4)**

- MICR 3203 - The Immune System in Health & Disease **Credits: (3)** or
- MICR 3254 - Immunology **Credits: (4)**

- MICR 3305 - Medical Microbiology **Credits: (5)**
- MICR 3403 GLB - Tropical Diseases **Credits: (3)**
- MICR 3484 - Environmental Microbiology **Credits: (4)**
- MICR 3502 SUS - Environmental Health **Credits: (2)**
- MICR 3753 - Geomicrobiology **Credits: (3)**
- MICR 3813 CRE - Bioinformatics **Credits: (3)**
- MICR 3853 - Food Microbiology **Credits: (3)**
- MICR 4054 - Microbial Physiology **Credits: (4)**
- MICR 4154 - Microbial Genetics **Credits: (4)**
- MICR 4253 - Cell Culture **Credits: (3)**
- MICR 4354 - Industrial Microbiology and Biotechnology **Credits: (4)**
- MICR 4554 - Virology **Credits: (4)**
- MICR 4800 - Directed Research **Credits: (1-2)**
- MICR 4830 - Directed Readings **Credits: (1-2)**
- MICR 4991 - Microbiology Seminar **Credits: (1)**

Department of Physics and Astronomy

Department Chair: Colin Inglefield

Location: Tracy Hall Science Center, Room 302

Telephone: Nereyda Hesterberg, 801-626-6163

Website: weber.edu/physics

Professors: John Armstrong, Michelle Arnold, Colin Inglefield, Adam Johnston, Stacy Palen, Daniel Schroeder, John Sohl; **Associate Professor:** Kristin Rabosky; **Assistant Professor:** Jonathan Cornell; **Instructors:** Sebastian Fischetti, Jordyn Redmond

Physics is the study and application of the fundamental laws of nature, including the laws of motion, gravity, electromagnetism, heat, and microscopic interactions. These laws govern the behavior of objects at all scales, from the smallest subatomic particles to the entire observable universe. In between, physicists study nuclear reactions, the interaction of atoms with light, properties of materials, the chaotic dynamics of fluids, and the evolution of stars and galaxies, among many other applications.

Our courses in physics introduce all of the most important fundamental laws and many of their applications. Equally valuable, however, are the skills that students develop in these courses, from analytical thinking and problem solving to experimental design and interpretation. Majoring in physics can thus prepare a student for a variety of careers in research, education, business, industry, and government.

The Department offers three major programs: Physics, Applied Physics, and Physics Teaching. The Physics major places emphasis on understanding nature at the deepest possible level, and offers options that emphasize fundamental theoretical physics, astrophysics, computational physics, and physics of materials. Each of these options provides a strong foundation for graduate work. The Applied Physics major places more emphasis on physical phenomena and hands-on experience. Thus, it is more suitable for those planning to go either directly into industrial employment or into graduate programs in certain applied fields. The Physics Teaching major is designed specifically for those planning to teach physics at the secondary school level.

Students who are majoring in other disciplines are encouraged to consider a minor in physics, which includes a year of introductory physics plus eight credit hours of additional physics courses. These electives may be chosen to emphasize basic theory, experimental techniques, or applied subfields such as optics and astrophysics.

Associate of Applied Science

Physical Science (AAS)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** Minimum overall GPA of 2.00 or "C".
- **Credit Hour Requirements:** A total of 63 credit hours are required for graduation; 34-36 of these are required within the program.
- **Program Code:** 6068AAS
- **CIPC:** 400101

Advisement

It is recommended that a student consult with a departmental advisor annually. Call 801-626-6163 for information or to schedule an appointment.

Use Grad MAPs to plan your degree

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. The following courses required for the Physical Science program will also satisfy the general education requirement for physical sciences: CHEM 1210 PS; GEO 1110 PS; and PHYS 2210 PS (or PHYS 2010 PS).

Program Learning Outcomes

- Students can trace scientific understandings, theory, and models back to their sources in their primary discipline.
- Students demonstrate how scientific knowledge is derived, reviewed, and communicated.
- Nature of science. Scientific knowledge is based on evidence that is repeatedly examined, and can change with new information. Scientific explanations differ fundamentally from those that are not scientific.
- Integration of science. All natural phenomena are interrelated and share basic organizational principles. Scientific explanations obtained from different disciplines should be cohesive and integrated.
- Science and society. The study of science provides explanations that have significant impact on society, including technological advancements, improvement of human life, and better understanding of human and other influences on the earth's environment.

- Problem solving and data analysis. Science relies on empirical data, and such data must be analyzed, interpreted, and generalized in a rigorous manner.
- Organization of systems: The universe is scientifically understandable in terms of interconnected systems. The systems evolve over time according to basic physical laws.
- Matter: Matter comprises an important component of the universe, and has physical properties that can be described over a range of scales.
- Energy: Interactions within the universe can be described in terms of energy exchange and conservation.
- Forces: Equilibrium and change are determined by forces acting at all organizational levels.

Major Course Requirements for AAS Degree (34-39 credits)

Core Courses (26 credits):

- CHEM 1200 - Preparation for College Chemistry **Credits: (3)**
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)** and
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** or
- PHYS 2010 PS - College Physics I **Credits: (5)**
- PHYS 2600 - Laboratory Safety **Credits: (1)** or
- CHEM 2600 - Laboratory Safety **Credits: (1)** or
- GEO 2600 - Laboratory Safety **Credits: (1)**
- PHYS 2820 - Elements of Research in the Sciences **Credits: (3)** or
- CHEM 2820 - Elements of Research in the Sciences **Credits: (3)** or
- GEO 2820 - Elements of Research in the Sciences **Credits: (3)**

Foundational Courses for the Discipline (8-13 credits):

Complete one of the following groups of courses.

For Students most interested in chemistry (10 credits):

- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 2320 - Organic Chemistry II **Credits: (4)** and
- CHEM 2325 - Organic Chemistry II Lab **Credits: (1)**

Please note the combined CHEM 2310 and CHEM 2315, and CHEM 2320 and CHEM 2325, each count as one foundation course. CHEM 2310 and CHEM 2315 must be taken concurrently, same for CHEM 2315 and CHEM 2325

For students most interested in Earth/geological science (8 credits):

- GEO 1220 - Historical Geology **Credits: (4)**
- GEO 2050 - Earth Materials **Credits: (4)**

For students most interested in physics (13 credits):

- MATH 1200 - Mathematics Computer Laboratory **Credits: (1)**
- MATH 1220 - Calculus II **Credits: (4)**
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- PHYS 3310 - Scientific Computing for Physical Systems **Credits: (3)**
** Students should consult with a departmental advisor to determine the appropriate mathematics and physics sequences for their educational and/or career goals.*

Bachelor of Science

Physics (BS)

- **Program Prerequisite:** Not required.
- **Minor:** No minor is required. However, a math minor is automatically satisfied by the requirements.
- **Grade Requirements:** An overall GPA of 2.00 is required. Also refer to the general grade requirements for graduation on Degree Requirements.
- **Credit Hour Requirements:** A total of 120 semester credit hours is required for graduation; 71 to 73 of these (depending on the option chosen) are required within the Physics major. Forty upper-division credit hours are required (courses numbered 3000 and above); 22-28 of these (depending on the option chosen) are required within the Physics major.
- **Program Code:** 6018BS with one of the following options PHYSTRAD (**Traditional**), PHYSMATR (**Physics of Materials**), PHYSASTR (**Astrophysics**), or PHYSCOMP (**Computational Physics**)
- **CIPC:** 400801

Advisement

All Physics majors are strongly encouraged to meet with the chair at least annually for course and program advisement. Call 801-626-6163 for more information or to schedule an appointment. Note that because most courses have prerequisites and some advanced courses are offered only in alternate years, careful planning is essential.

Admissions Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for the Physics major.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for the Physics major will satisfy general education requirements: PHYS 2210 and MATH 1210.

Program Learning Outcomes

- Presentation skills. Physics majors should be able to express (orally and in writing) their understanding of core physical principles, the results of experiments, and their analysis of physical problems.
- Laboratory skills. Physics majors should be competent experimentalists. They should be able to design and set up an experiment, collect and analyze data, identify sources of error, and interpret their result and connect it to related areas of physics.
- Computer skills. Physics majors should be competent users of basic software, such as word processing, spreadsheet, and graphing programs. They should also have an understanding of the fundamental aspects of a programming and/or computer algebra language (Fortran, C++, Mathematica, etc.).
- Problem-solving skills. Physics majors should be competent problem-solvers. They should be able to identify the essential aspects of a problem and formulate a strategy for solving the problem. They should be able to estimate the solution to a problem, apply appropriate techniques to arrive at a solution, test the correctness of their solution, interpret their result and connect it to related areas of physics.
- Physics majors should be adequately trained to apply their physics experience and knowledge to analyze new situations.
- All physics students (majors, minors, support, and Gen Ed students) should understand the nature of science, as assessed by questionnaires, interviews, and student focus groups.
- General Education students should understand several core concepts of physics.
- Physics Teaching majors and Elementary Teaching majors should have an appropriate knowledge of physics and a variety of teaching strategies to accommodate the multiple learning styles of their students.

Physics Major Course Requirements for BS Degree

Physics Courses Required (24 credit hours)

- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- PHYS 1300 - Scientific Data Processing and Visualization **Credits: (1)**
- PHYS 2710 - Introductory Modern Physics **Credits: (3)**
- PHYS 3310 - Scientific Computing for Physical Systems **Credits: (3)**
- PHYS 3500 - Analytical Mechanics **Credits: (3)**
- PHYS 3510 - Electromagnetic Theory **Credits: (3)**
- PHYS 4990 - Seminar in Physics **Credits: (1)**

Physics Electives (3 credit hours)

Select a minimum of three additional credit hours from Physics courses numbered 3000 and above. Courses in closely related disciplines may also satisfy this requirement when appropriate to the option chosen (see below). In all cases, elective courses must be approved by the department chair.

Support Courses Required (19 credit hours)

Students planning for graduate study in physics, engineering, or a related field should consider taking additional mathematics courses.

- MATH 1200 - Mathematics Computer Laboratory **Credits: (1)**
- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**

OPTIONS

Physics Majors must also satisfy the requirements of at least one of the following four options.

1. Traditional Option

By including all of the core courses in theoretical physics, this option provides a strong foundation for graduate study in physics.

Additional Physics Courses Required (17 or 18 credit hours)

- PHYS 3180 - Thermal Physics **Credits: (3)**
- PHYS 3190 CRE - Applied Optics **Credits: (3)** or
- PHYS 3410 - Electronics for Scientists **Credits: (4)**
- PHYS 3540 - Mechanical and Electromagnetic Waves **Credits: (3)**
- PHYS 3710 - Nuclear and Particle Physics **Credits: (3)**
- PHYS 4400 CRE - Advanced Physics Laboratory **Credits: (2)**
- PHYS 4610 - Quantum Mechanics **Credits: (3)**

Additional Support Courses Required (10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

2. Physics of Materials Option

This option is intended for students who have an interest in the properties of materials and their study using advanced instrumentation.

Additional Physics Courses Required (18 credit hours)

- PHYS 3180 - Thermal Physics **Credits: (3)**
- PHYS 3410 - Electronics for Scientists **Credits: (4)**
- PHYS 3540 - Mechanical and Electromagnetic Waves **Credits: (3)**
- PHYS 4200 - The Physics of Materials **Credits: (3)**
- PHYS 4410 CRE - Materials Characterization Laboratory **Credits: (2)**

- PHYS 4610 - Quantum Mechanics **Credits: (3)**

Additional Support Courses Required (10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

3. Astrophysics Option

Supplementing a traditional physics program with several astronomy and astrophysics courses, this option is intended for students with a special interest in astronomy, including those intending to pursue graduate study in astrophysics.

Additional Physics Courses Required (17 or 18 credit hours)

- ASTR 3040 - Principles of Observational Astronomy, Advanced **Credits: (3)**
- ASTR 3160 - Stellar and Planetary Astrophysics **Credits: (3)**
- ASTR 3170 - Galaxies and Cosmology **Credits: (3)**
- PHYS 3180 - Thermal Physics **Credits: (3)**
- PHYS 3190 CRE - Applied Optics **Credits: (3)** or
- PHYS 3410 - Electronics for Scientists **Credits: (4)**
- ***Select a minimum of two additional credit hours from Physics courses numbered 3000 and above. Courses in closely related disciplines may also satisfy this requirement when appropriate. In all cases, elective courses must be approved by the department chair.***

Additional Support Courses Required (9 or 10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**

Select one of the following:

- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- OR**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- OR**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)** and
- GEO 1115 - Physical Geology Lab **Credits: (1)**

4. Computational Physics Option

This option is intended for students with a special interest in computational techniques applied to the physical world.

Additional Physics Courses Required (12 credit hours)

- PHYS 3320 - Advanced Computational Physics **Credits: (3)**
- PHYS 3410 - Electronics for Scientists **Credits: (4)**

- ASTR 3040 - Principles of Observational Astronomy, Advanced **Credits: (3)** or
- PHYS 4400 CRE - Advanced Physics Laboratory **Credits: (2)** or
- PHYS 4410 CRE - Materials Characterization Laboratory **Credits: (2)**

Select one of the following:

- PHYS 3180 - Thermal Physics **Credits: (3)**
- PHYS 3540 - Mechanical and Electromagnetic Waves **Credits: (3)**
- PHYS 4610 - Quantum Mechanics **Credits: (3)**

Additional Support Courses Required (14 credit hours)

- MATH 4610 - Numerical Analysis I **Credits: (3)** and
- MATH 4620 - Numerical Analysis II **Credits: (3)**

Select two of the following:

- CS 1410 - Object-Oriented Programming **Credits: (4)**
- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**
- CS 2450 - Software Engineering I **Credits: (4)**
- CS 2810 - Computer Architecture/Organization **Credits: (4)**

Physics Teaching (BS)

- **Program Prerequisite:** Physics Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Not Required.
- **Grade Requirements:** An overall GPA of 2.00 is required in courses required for this major. Also refer to the general grade requirements for graduation under General Requirements.
- **Credit Hour Requirements:** A total of 120 semester credit hours is required for graduation; 45 hours are required within the major, plus the credits required by the Teacher Education department. Forty upper-division credit hours are required (courses numbered 3000 and above).
- **Program Code:** 6020BS
- **CIPC:** 131329

Advisement

Physics Teaching majors are strongly encouraged to meet with the chair at least annually for course and program advisement. Call 801-626-6163 for more information or to schedule an appointment. Physics Teaching majors are also encouraged to meet with a Jerry and Vickie Moyes College of Education advisor (call 801-626-6269). (Also refer to the Department Advisor Referral List.)

Admissions Requirements

Declare your program of study (see Student Access and Success, Services and Information). Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education.)

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for the Physics and Applied Physics majors will satisfy general education requirements: PHYS 1040 PS, PHYS 2210 PS, and MATH 1210.

Program Learning Outcomes

- Presentation skills. Physics majors should be able to express (orally and in writing) their understanding of core physical principles, the results of experiments, and their analysis of physical problems.
- Laboratory skills. Physics majors should be competent experimentalists. They should be able to design and set up an experiment, collect and analyze data, identify sources of error, and interpret their result and connect it to related areas of physics.
- Computer skills. Physics majors should be competent users of basic software, such as word processing, spreadsheet, and graphing programs. They should also have an understanding of the fundamental aspects of a programming and/or computer algebra language (Fortran, C++, Mathematica, etc.).
- Problem-solving skills. Physics majors should be competent problem-solvers. They should be able to identify the essential aspects of a problem and formulate a strategy for solving the problem. They should be able to estimate the solution to a problem, apply appropriate techniques to arrive at a solution, test the correctness of their solution, interpret their result and connect it to related areas of physics.
- Physics majors should be adequately trained to apply their physics experience and knowledge to analyze new situations.
- All physics students (majors, minors, support, and Gen Ed students) should understand the nature of science, as assessed by questionnaires, interviews, and student focus groups.
- General Education students should understand several core concepts of physics.
- Physics Teaching majors and Elementary Teaching majors should have an appropriate knowledge of physics and a variety of teaching strategies to accommodate the multiple learning styles of their students.

Physics Teaching Major Course Requirements for BS Degree

Physics Courses Required (25 credit hours)

- PHYS 1040 PS - Elementary Astronomy **Credits: (3)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- PHYS 2600 - Laboratory Safety **Credits: (1)**
- PHYS 2710 - Introductory Modern Physics **Credits: (3)**
- PHYS 3570 - Foundations of Science Education **Credits: (3)**
- PHYS 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)**
- PHYS 4800 - Individual Research Problems **Credits: (1-3)** (1 credit hour required)
- PHYS 4990 - Seminar in Physics **Credits: (1)**

Physics Electives (9 credit hours)

Select nine credit hours in approved Physics classes (courses numbered 2300 and above, excluding other explicit course requirements).

Support Courses Required (11 credit hours)

- HIST 3350 - History and Philosophy of Science **Credits: (3)**
- MATH 1210 - Calculus I **Credits: (4)** and
- MATH 1220 - Calculus II **Credits: (4)**

Note:

Students must also complete the Teacher Education Licensure Program.

Physics, Applied (BS)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Not required.
- **Minor:** No minor is required. However, a math minor is automatically satisfied by taking one additional Math course (MATH 2270) beyond the Applied Physics major requirements.
- **Grade Requirements:** An overall GPA of 2.00 is required. Also refer to the general grade requirements for graduation under Degree Requirements.
- **Credit Hour Requirements:** A total of 120 semester credit hours is required for graduation; 75 to 76 of these (depending on choice of courses) are required within the Applied Physics major. Forty upper-division credit hours are required (courses numbered 3000 and above); 32 to 33 of these are required within the Applied Physics major.
- **Program Code:** 6019BS
- **CIPC:** 400801

Advisement

All Applied Physics majors are strongly encouraged to meet with the chair at least annually for course and program advisement. Call 801-626-6163 for more information or to schedule an appointment. Note that because most courses have prerequisites and some advanced courses are offered only in alternate years, careful planning is essential.

Admissions Requirements

Declare your program of study . There are no special admission or application requirements for the Applied Physics major.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for the Applied Physics major will satisfy general education requirements: PHYS 2210PS, CHEM 1210 PS, and MATH 1210.

Program Learning Outcomes

- Presentation skills. Physics majors should be able to express (orally and in writing) their understanding of core physical principles, the results of experiments, and their analysis of physical problems.

- Laboratory skills. Physics majors should be competent experimentalists. They should be able to design and set up an experiment, collect and analyze data, identify sources of error, and interpret their result and connect it to related areas of physics.
- Computer skills. Physics majors should be competent users of basic software, such as word processing, spreadsheet, and graphing programs. They should also have an understanding of the fundamental aspects of a programming and/or computer algebra language (Fortran, C++, Mathematica, etc.).
- Problem-solving skills. Physics majors should be competent problem-solvers. They should be able to identify the essential aspects of a problem and formulate a strategy for solving the problem. They should be able to estimate the solution to a problem, apply appropriate techniques to arrive at a solution, test the correctness of their solution, interpret their result and connect it to related areas of physics.
- Physics majors should be adequately trained to apply their physics experience and knowledge to analyze new situations.
- All physics students (majors, minors, support, and Gen Ed students) should understand the nature of science, as assessed by questionnaires, interviews, and student focus groups.
- General Education students should understand several core concepts of physics.
- Physics Teaching majors and Elementary Teaching majors should have an appropriate knowledge of physics and a variety of teaching strategies to accommodate the multiple learning styles of their students.

Applied Physics Major Course Requirements for BS Degree

Physics Courses Required (35 or 36 credit hours)

- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- PHYS 1300 - Scientific Data Processing and Visualization **Credits: (1)**
- PHYS 2600 - Laboratory Safety **Credits: (1)**
- PHYS 2710 - Introductory Modern Physics **Credits: (3)**
- PHYS 3190 CRE - Applied Optics **Credits: (3)**
- PHYS 3310 - Scientific Computing for Physical Systems **Credits: (3)**
- PHYS 3500 - Analytical Mechanics **Credits: (3)**
- PHYS 3510 - Electromagnetic Theory **Credits: (3)**
- PHYS 3540 - Mechanical and Electromagnetic Waves **Credits: (3)**
- PHYS 4400 CRE - Advanced Physics Laboratory **Credits: (2)** or
- PHYS 4410 CRE - Materials Characterization Laboratory **Credits: (2)**
- PHYS 4800 - Individual Research Problems **Credits: (1-3)**
- PHYS 4990 - Seminar in Physics **Credits: (1)**

Electives (9 credit hours)

Select a minimum of nine additional credit hours from Physics courses numbered 3000 and above. Upper-division courses in closely related disciplines may also satisfy this requirement. In all cases, elective courses must be approved by the department chair.

Support Courses Required (32 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and

- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- MATH 1200 - Mathematics Computer Laboratory **Credits: (1)**
- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2280 - Ordinary Differential Equations **Credits: (3)**
- MATH 3410 - Probability and Statistics I **Credits: (3)** and
- MATH 3420 - Probability and Statistics II **Credits: (3)**

Minor

Physics Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 26 credit hours in Physics and support courses. Prior department approval is required.
- **Program Code:** 6018
- **CIPC:** 400801

Course Requirements for Minor

Physics Courses Required (10 credit hours)

- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**

Elective Physics Courses (8 credit hours)

Select at least three Physics courses from the following

- PHYS 3310 - Scientific Computing for Physical Systems **Credits: (3)**
- PHYS 2710 - Introductory Modern Physics **Credits: (3)**
- PHYS 3160 - Stellar and Planetary Astrophysics **Credits: (3)**
- PHYS 3170 - Galaxies and Cosmology **Credits: (3)**
- PHYS 3180 - Thermal Physics **Credits: (3)**
- PHYS 3190 CRE - Applied Optics **Credits: (3)**
- PHYS 3320 - Advanced Computational Physics **Credits: (3)**
- PHYS 3410 - Electronics for Scientists **Credits: (4)**

- PHYS 3420 - Data Analysis, Statistics, and Instrumentation **Credits: (3)**
- PHYS 3500 - Analytical Mechanics **Credits: (3)**
- PHYS 3510 - Electromagnetic Theory **Credits: (3)**
- PHYS 3540 - Mechanical and Electromagnetic Waves **Credits: (3)**
- PHYS 4200 - The Physics of Materials **Credits: (3)**
- PHYS 4400 CRE - Advanced Physics Laboratory **Credits: (2)**
- PHYS 4410 CRE - Materials Characterization Laboratory **Credits: (2)**
- PHYS 4610 - Quantum Mechanics **Credits: (3)**

Support Courses Required (8 credit hours)

- MATH 1210 - Calculus I **Credits: (4)** and
- MATH 1220 - Calculus II **Credits: (4)**

Teaching Minor

Physics Teaching Minor

- **Grade Requirements:** A grade of C or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 25 credit hours in Physics and support courses. Prior department approval is required.
- **Program Code:** 6020
- **CIPC:** 131329

Students who select the Physics Teaching minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Course Requirements for Minor

Physics Courses Required (11 credit hours)

- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- PHYS 2600 - Laboratory Safety **Credits: (1)**

Elective Physics Courses (6 credit hours)

Select 6 credit hours in approved Physics courses (numbered 2300 and above)

Support Courses Required (11 credit hours)

- MATH 1210 - Calculus I **Credits: (4)** and
- MATH 1220 - Calculus II **Credits: (4)**
- HIST 3350 - History and Philosophy of Science **Credits: (3)**

If a student is not obtaining a Teaching Major in Physical or Life Science, the following courses are also required:

- PHYS 3570 - Foundations of Science Education **Credits: (3)**
- PHYS 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)**

Department of Zoology

Department Chair: Ron Meyers

Location: Tracy Hall Science Center, Room 402

Website: www.weber.edu/zoology

Telephone Contact: Rochelle Fernandez 801-626-6165

Professors: John Cavitt, Brian Chung, Jonathan Clark, Christopher Hoagstrom, Jon Marshall, Ron Meyers, John Mull, Michele Skopec, Barbara Trask; **Associate Professors:** Rebecka Brasso, Elizabeth Sandquist; **Assistant Professor:** Ezgi Yesilyurt; **Instructor:** Brian Pilcher

Zoology is the study of animals. It includes a tremendous diversity of subdivisions and approaches. These range from using electron microscopy to study cells, to field examinations of natural populations. Some zoologists focus their studies on a specific group of animals; others specialize on problems or processes, such as those in physiology or genetics, which are common to many groups. Zoologists have made many important contributions to our understanding of the natural world. Furthermore, they benefit humankind through their work in areas such as medicine and environmental conservation.

Although our majors pursue several tracks, many are involved in pre-medical professional training. We have an excellent record of placing students in the finest medical, dental, veterinary, and physical therapy programs. The faculty strongly encourage majors to pursue guided research, particularly through the department's thesis program.

All students are urged to consult with the department early in their education. Arrangements can then be made for the student to be matched with an appropriate advisor who can offer course and career suggestions.

DNA Laboratory

The Department of Zoology maintains a DNA Laboratory on the first floor of the Science Laboratory building in the College of Science. It is a modern facility with state-of-the-art equipment for DNA isolation and analysis. The laboratory is used for student course work, faculty-supervised student research, and faculty research.

Interdisciplinary Programs

The Zoology Department participates in the interdisciplinary Neuroscience Minor and the Urban and Regional Planning Emphasis programs. Students who wish to enroll in one of these programs should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Bachelor of Science

Zoology (BS)

- **Program Prerequisite:** Not required.
- **Minor:** Not required.
- **Grade Requirements:** Zoology majors must have an average GPA of 2.00 or higher. Students are required to earn a grade of "C-" in each prerequisite course before taking the next course. Zoology majors must have a grade of "C-" or better in all courses that satisfy specific requirements for the major.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 73 of these is required within the major. A total of 40 upper division hours is required (courses number 3000 and above); a minimum of 34 is required within the major.
- **Program Code:** 6021BS
- **CIPC:** 260701

Advisement

All Zoology students should meet with a faculty advisor at least annually for course and program advisement. The department secretary can also assist students. Call 801-626-6165 for more information or to schedule an appointment. (Also, refer to the Department Advisor Referral List.)

Admissions Requirements

Declare your program of study (Enrollment Services and Information). No special admission or application requirements are needed for the Zoology BS.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for the Zoology BS will satisfy general education requirements: CHEM 1210, MATH 1040, MATH 1050, MATH 1080, PHYS 1010, PHYS 2010, PHYS 2210, ZOOL 1610 . The following courses that are electives for the Zoology BS will also satisfy general education requirement: BTNY 1203, BTNY 2303, MICR 2054, ZOOL 2420. Students are encouraged to take general education courses concurrently with required and elective courses in the major.

Program Learning Outcomes

- **The Process of Science:** Students will use observational strategies to test hypotheses and critically evaluate experimental evidence.
- **Quantitative Reasoning:** Students will represent diverse experimental data sets graphically and apply statistical methods to them.
- **Communication:** Students will explain scientific concepts to different audiences and work collaboratively to explore biological problems.
- **Science and Society:** Students will develop biological applications to evaluate and address societal problems.
- **Evolution:** The diversity of life is the result of mutation, adaptation, and selection pressure over time.
- **Cellular Organization:** All living things consist of one or more cells, the units of structure, function, and reproduction.
- **Genetics:** All living things share basic genetic mechanisms, which are responsible for the organization and continuity of life.
- **Ecosystems:** All organisms are interconnected, interacting with each other as well as with their dynamic environment.
- **Structure and Function:** There is a relationship between molecular and organismal structure and function.
- **System Regulation:** Biological systems are governed by chemical transformations and homeostasis.

Major Course Requirements for Zoology BS Degree

Required Zoology Courses

- ZOOL 1610 LS - Principles of Zoology **Credits: (4)**
- ZOOL 2220 - Diversity of Animals **Credits: (4)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**
- ZOOL 3450 CRE - Ecology **Credits: (4)**
- ZOOL 3600 - Comparative Physiology **Credits: (4)**
- ZOOL 3720 - Evolution **Credits: (3)**
- ZOOL 4990 - Seminar **Credits: (1)**

Upper-division Zoology Electives

Select a minimum of 4 courses from the following.

- ZOOL 3470 - Zoogeography **Credits: (3)**
- ZOOL 3500 - Conservation Biology **Credits: (3)**
- ZOOL 3820 - Biology of Cancer **Credits: (3)**
- ZOOL 3930 - Toxicology **Credits: (3)**
- ZOOL 4050 - Comparative Vertebrate Anatomy **Credits: (4)**
- ZOOL 4100 - Vertebrate Embryology **Credits: (4)**
- ZOOL 4120 - Histology **Credits: (4)**
- ZOOL 4210 - Advanced Human Physiology **Credits: (4)**
- ZOOL 4220 - Endocrinology **Credits: (4)**
- ZOOL 4300 - Research Applications in Genetics **Credits: (4)**
- ZOOL 4350 - Animal Behavior **Credits: (4)**
- ZOOL 4470 - Wildlife Ecology and Management **Credits: (4)**
- ZOOL 4480 - Freshwater Ecology **Credits: (4)**
- ZOOL 4490 - Marine Ecology **Credits: (4)**
- ZOOL 4640 - Entomology **Credits: (4)**
- ZOOL 4650 - Ichthyology **Credits: (4)**
- ZOOL 4660 - Herpetology **Credits: (4)**
- ZOOL 4670 - Ornithology **Credits: (4)**
- ZOOL 4680 - Mammalogy **Credits: (4)**
- ZOOL 4700 - Topics in Zoology **Credits: (1-4)** 3 or 4 credits required

Experience in Zoology

Select a minimum of 2 credit hours from the following or select an additional 5th course from Upper Division Zoology electives listed above. Note: The two credit hours can be taken in the same or separate semesters.

- ZOOL 3099 - Teaching the Human Anatomy Laboratory **Credits: (3)**
- ZOOL 3100 - Advanced Human Anatomy **Credits: (3)**
- ZOOL 4800 - Research in Zoology **Credits: (1-4)**
- ZOOL 4820 - Human Physiology Laboratory Teaching Assistant **Credits: (1)**

- ZOOL 4830 - Readings in Zoology **Credits: (1-4)**
- ZOOL 4850 - Projects in Zoology **Credits: (1-4)**
- ZOOL 4890 INT - Cooperative Work Experience **Credits: (1-4)**
- ZOOL 4950 - Field Zoology **Credits: (1-3)**
- ZOOL 4960 - Techniques in Field Ornithology **Credits: (3)**
- ZOOL 4970 - Thesis **Credits: (2)**

Required Chemistry Courses

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** *with*
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** *with*
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

Required Math Courses

Select a minimum of 1 course from the following.

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1080 QL - Pre-calculus **Credits: (5)**
- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1060 QL - Trigonometry **Credits: (3)**

Required Statistics Courses

Select a minimum of 1 course from the following. Courses taken with separate labs count as 1 course.

- MATH 3410 - Probability and Statistics I **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)**
- PSY 3600 - Statistics in Psychology **Credits: (3)**

Required Physics Courses

Select a minimum of 1 course from the following.

- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- PHYS 2010 PS - College Physics I **Credits: (5)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**

Elective Support Courses

Select a minimum 4 courses from the following including at least 1 course in BTNY or MICR. Courses taken with separate labs count as 1 course.

Botany

- BTNY 1203 LS - Plant Biology **Credits: (3)**

- BTNY 2104 - Plant Form and Function **Credits: (4)**
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**
- BTNY 2303 - Ethnobotany **Credits: (3)**
- BTNY 3105 - Anatomy of Vascular Plants **Credits: (4)**
- BTNY 3204 - Plant Physiology **Credits: (4)**
- BTNY 3214 - Soils **Credits: (4)**
- BTNY 3454 - Plant Ecology **Credits: (4)**
- BTNY 3504 - Mycology **Credits: (4)**
- BTNY 3514 - Algology **Credits: (4)**
- BTNY 3523 - Marine Biology **Credits: (3)**
- BTNY 3624 - Taxonomy of Vascular Plants **Credits: (4)**
- BTNY 4113 - Plant Evolution **Credits: (3)**

Chemistry

- CHEM 2310 - Organic Chemistry I **Credits: (4)** *with*
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 2320 - Organic Chemistry II **Credits: (4)** *with*
- CHEM 2325 - Organic Chemistry II Lab **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)**

Earth and Environmental Sciences

- GEO 3710 - Introduction to Geographic Information Systems **Credits: (4)**
- GEO 3840 - Remote Sensing: Principles and Methods **Credits: (4)**

Mathematics

- MATH 3450 - Advanced Statistical Methods **Credits: (4)**

Microbiology

- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- MICR 3053 - Microbiological Procedures **Credits: (3)**
- MICR 3203 - The Immune System in Health & Disease **Credits: (3)**
- MICR 3254 - Immunology **Credits: (4)**
- MICR 3305 - Medical Microbiology **Credits: (5)**
- MICR 3484 - Environmental Microbiology **Credits: (4)**
- MICR 3853 - Food Microbiology **Credits: (3)**
- MICR 4054 - Microbial Physiology **Credits: (4)**
- MICR 4554 - Virology **Credits: (4)**

Neuroscience

- NEUR 2950 - Introduction to Neuroscience **Credits: (3)**

Physics

- PHYS 2020 - College Physics II **Credits: (5)**
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**

Zoology

- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

Special Emphases

Pre-Medical Professional Training

Students considering application to medical, dental, veterinary, physical therapy, optometry, and pharmacy schools should consult the beginning of the College of Science section of this catalog. Furthermore, they should meet with the advisors of these programs, each of whom is listed in that section. The Department of Zoology offers lower and upper level courses that provide superb training for examinations such as the Medical College Admissions Test, as well as medical school courses. Students should meet with the appropriate advisor for specific course suggestions.

Ecological/Environmental Training

Students interested in ecologically or environmentally oriented careers should follow the Zoology major and select courses to fill their elective requirements from the following:

Zoology Course Electives

- ZOOL 3500 - Conservation Biology **Credits: (3)**
- ZOOL 4300 - Research Applications in Genetics **Credits: (4)**
- ZOOL 4470 - Wildlife Ecology and Management **Credits: (4)**
- ZOOL 4480 - Freshwater Ecology **Credits: (4)**
- ZOOL 4640 - Entomology **Credits: (4)**
- ZOOL 4650 - Ichthyology **Credits: (4)**
- ZOOL 4660 - Herpetology **Credits: (4)**
- ZOOL 4670 - Ornithology **Credits: (4)**
- ZOOL 4680 - Mammalogy **Credits: (4)**

Support Course Electives in Botany

- BTNY 3624 - Taxonomy of Vascular Plants **Credits: (4)**
- BTNY 3473 - Plant Geography **Credits: (3)**

Note:

Students desiring employment as a conservation officer should minor in Criminal Justice with a Law Enforcement concentration (see Department of Criminal Justice section of the catalog). Students desiring a career as a wildlife biologist or wildlife manager, or intending to pursue advanced studies in ecology or conservation biology following

graduation (MS or PhD degrees), should minor in Botany. (Consult with the department secretary at 801-626- 6165 for information about the advisor of this program.)

Emphasis Option for Bachelor of Interdisciplinary Studies

Zoology (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** A grade of "C -" or better in courses used toward the Zoology Emphasis in BIS.
- **Credit Hour Requirements:** A minimum of 18 credit hours in Zoology courses.
- **Program Code:** 6021
- **CIPC:** 260701

Advisement

Students must have their Zoology BIS Emphasis contract approved by the departmental advisor and the BIS program coordinator. Call 801-626-6165 for the departmental advisor's contact information. (Also refer to the Departmental Advisor Referral List.)

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for BIS Emphasis

Zoology Courses Required (11 credit hours)

- ZOOL 1610 LS - Principles of Zoology **Credits: (4)**
- ZOOL 2220 - Diversity of Animals **Credits: (4)**
- ZOOL 3720 - Evolution **Credits: (3)**

Zoology BIS Emphasis Electives (7 credit hours)

Select 7 credit hours of approved upper division Zoology courses (numbered 3000 and above).

Note:

ZOOL 2320 – Human Anatomy Credits: (4) and ZOOL 2420 – Human Physiology Credits: (4) may be used at half credit (2 credit hours per each) to fulfill elective credit hours in the Zoology BIS Emphasis.

Minor

Zoology Minor

- **Grade Requirements:** A grade of "C-" or better in courses used toward the minor.
- **Credit Hour Requirements:** Minimum of 19 credit hours in Zoology courses.
- **Program Code:** 6021
- **CIPC:** 260701

Course Requirements for Minor

Zoology Courses Required (11 Credit Hours)

- ZOOL 1610 LS - Principles of Zoology **Credits: (4)**
- ZOOL 2220 - Diversity of Animals **Credits: (4)**
- ZOOL 3720 - Evolution **Credits: (3)**

Zoology Minor Elective Courses (8 credit hours)

Select 8 credit hours of Zoology courses at or above the 2000 level.

- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- ZOOL 3099 - Teaching the Human Anatomy Laboratory **Credits: (3)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**
- ZOOL 3340 - Information Resources in the Life Sciences **Credits: (2)**
- ZOOL 3450 CRE - Ecology **Credits: (4)**
- ZOOL 3470 - Zoogeography **Credits: (3)**
- ZOOL 3500 - Conservation Biology **Credits: (3)**
- ZOOL 3600 - Comparative Physiology **Credits: (4)**
- ZOOL 3820 - Biology of Cancer **Credits: (3)**
- ZOOL 3930 - Toxicology **Credits: (3)**
- ZOOL 4050 - Comparative Vertebrate Anatomy **Credits: (4)**
- ZOOL 4100 - Vertebrate Embryology **Credits: (4)**
- ZOOL 4120 - Histology **Credits: (4)**
- ZOOL 4210 - Advanced Human Physiology **Credits: (4)**
- ZOOL 4220 - Endocrinology **Credits: (4)**
- ZOOL 4300 - Research Applications in Genetics **Credits: (4)**
- ZOOL 4350 - Animal Behavior **Credits: (4)**
- ZOOL 4470 - Wildlife Ecology and Management **Credits: (4)**
- ZOOL 4480 - Freshwater Ecology **Credits: (4)**
- ZOOL 4490 - Marine Ecology **Credits: (4)**

- ZOOL 4640 - Entomology **Credits: (4)**
- ZOOL 4650 - Ichthyology **Credits: (4)**
- ZOOL 4660 - Herpetology **Credits: (4)**
- ZOOL 4670 - Ornithology **Credits: (4)**
- ZOOL 4680 - Mammalogy **Credits: (4)**
- ZOOL 4700 - Topics in Zoology **Credits: (1-4)**
- ZOOL 4950 - Field Zoology **Credits: (1-3)**
- ZOOL 4990 - Seminar **Credits: (1)**

Maximum 2 credit hours from the following courses:

- ZOOL 4800 - Research in Zoology **Credits: (1-4)**
- ZOOL 4820 - Human Physiology Laboratory Teaching Assistant **Credits: (1)**
- ZOOL 4830 - Readings in Zoology **Credits: (1-4)**
- ZOOL 4850 - Projects in Zoology **Credits: (1-4)**
- ZOOL 4890 INT - Cooperative Work Experience **Credits: (1-4)**

College of Science Interdisciplinary Programs

Associate of Science

Biology (AS)

Location: College of Science (Department of Botany, Department of Microbiology, and Department of Zoology)

Telephone: Botany (801) 626-6174; Microbiology (801) 626-6949; Zoology (801) 626-6165

Grade Requirements: Cumulative GPA of 2.00 or higher for all WSU work. No more than 20 credit hours of "D" grade may be applied toward graduation.

Credit Hour Requirements: Total of 61 credit hours are required.

- **Program Code:** 6038AS
- **CIPC:** 26.0101

Advisement

Students should meet with the advisor listed below for advisement on Biology A.S. courses:

Advisor: Monica Lindford

Office: TY 201A (College of Science Advising Center)

Phone: 801-626-6578

To schedule an appointment: cosadvising.youcanbook.me or "My Success Network" in Starfish (see College of Science Academic Advisement)

General Education

Students who plan to complete a B.S. in Botany, Microbiology, or Zoology or who are fulfilling pre-professional requirements should meet with the relevant program advisor or the College of Science advisor for guidance selecting

CHEM, MATH, and electives. Refer to Degree Requirements for Associate of Science requirements. The following courses required for the Biology AS program will satisfy the quantitative core and life sciences portion of the general education requirements:

Students should complete the AS program in two years.

Program Learning Outcomes

- Students can articulate the fundamental similarities of life on earth.
- Students learn and practice fundamental lab skills in biology and chemistry.
- Students demonstrate how scientific knowledge is derived, reviewed, and communicated.
- Nature of Science. Scientific knowledge is based on evidence that is repeatedly examined, and can change with new information. Scientific explanations differ fundamentally from those that are not scientific.
- Integration of Science. All natural phenomena are interrelated and share basic organizational principles. Scientific explanations obtained from different disciplines should be cohesive and integrated.
- Science and Society. The study of science provides explanations that have significant impact on society, including technological advancements, improvement of human life, and better understanding of human and other influences on the earth's environment.
- Problem Solving & Data Analysis. Science relies on empirical data, and such data must be analyzed, interpreted, and generalized in a rigorous manner.
- Levels of Organization. All life shares an organization that is based on molecules and cells and extends to organisms and ecosystems
- Metabolism and homeostasis: Living things obtain and use energy, and maintain homeostasis via organized chemical reactions known as metabolism
- Genetics and evolution: Shared genetic processes and evolution by natural selection are universal features of all life
- Ecological interactions: All organisms, including humans, interact with their environment and other living organisms.

Requirements for AS Degree (61-63 credit hours)

Required Courses (26-28 credit hours)

One of the following Laboratory Safety Courses:

- BTNY 2600 - Laboratory Safety **Credits: (1)** or
- CHEM 2600 - Laboratory Safety **Credits: (1)** or
- GEO 2600 - Laboratory Safety **Credits: (1)** or
- MICR 2600 - Laboratory Safety **Credits: (1)** or
- PHYS 2600 - Laboratory Safety **Credits: (1)**

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1080 QL - Pre-calculus **Credits: (5)**

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- BTNY 2104 - Plant Form and Function **Credits: (4)**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**

- CHEM 1110 PS - Elementary Chemistry **Credits: (4)**
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- CHEM 1120 - Elementary Organic Bio-Chemistry **Credits: (4)**
- CHEM 1125 - Elementary Organic Bio-Chemistry Lab **Credits: (1)**

Additional General Education Requirements (22 credit hours)

Composition

Earn a "C" grade or better:

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**

American Institutions

Select 1 of the following options and earn a "C" grade or better:

- POLS 1100 AI - American National Government **Credits: (3)**
- HIST 1700 AI - American History **Credits: (3)**
- ECON 1740 AI - Economic History of the United States **Credits: (3)**

Social Sciences

Select 6 credits and earn a passing grade:

- ANTH 1000 SS/CC - Introduction to Anthropology **Credits: (3)**
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)**
- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3)**
- CJ 1010 SS - Introduction to Criminal Justice **Credits: (3)**
- ECON 1100 SS - Environmental Issues and Economic Policy **Credits: (3)**
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**
- GERT 1010 SS - Introduction to Gerontology **Credits: (3)**
- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**
- MIS 1100 SS - The Digital Society **Credits: (3)**
- POLS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)**
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)**
- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- WGS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)**

Humanities & Creative Arts

Select 9 credits (with at least 3 credits from Humanities and at least 3 credits from Creative Arts) and earn a passing grade:

Humanities

- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**

- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- ENGL 2200 HU/CC - Introduction to Literature **Credits: (3)**
- ENGL 2710 HU/CC - Perspectives on Women's Literature **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- ENGL 3520 HU - Literature of the Natural World **Credits: (3)**
- PHIL 1000 HU/CC - Introduction to Philosophy **Credits: (3)**
- PHIL 2050 HU - Practical Ethics **Credits: (3)**
- PHIL 1250 HU - Critical Thinking **Credits: (3)**

Creative Arts

- ART 1030 CA - Studio Art for the Non-Art Major **Credits: (3)**
- CS 1010 CA - Introduction to Interactive Entertainment **Credits: (3)**
- ENGL 2250 CA/CC - CW: Introduction to Creative Writing **Credits: (3)**
- ENGL 2270 CA/CC - CW: Introduction to Writing Poetry **Credits: (3)**
- MUSC 1040 CA - Music of World Cultures **Credits: (3)**
- THEA 1053 - Introduction to Technical Production **Credits: (3)**

Information Literacy

Complete an exam or course option (see table below) and earn a "C" grade or better for a course or a passing exam score:

- LIBS 1704 - Information Navigator **Credits: (1)**
- LIBS 2604 - Information Resources in Education **Credits: (1)**
- LIBS 2904 - Information Resources in the Health Professions **Credits: (1)**

Electives

Choose 13 or more credit hours from the following:

- BTNY 1403 LS SUS - Principles of Environmental Science **Credits: (4)**
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**
- BTNY 2121 - Career Planning for Botanists **Credits: (1)**
- BTNY 2303 - Ethnobotany **Credits: (3)**
- BTNY 2413 - Introduction to Natural Resource Management **Credits: (3)**
- CHEM 1200 - Preparation for College Chemistry **Credits: (3)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 2320 - Organic Chemistry II **Credits: (4)** and
- CHEM 2325 - Organic Chemistry II Lab **Credits: (1)**
- ENGL 1010 EN1 - Introductory College Writing **Credits: (3)**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)** or
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**

- MATH 1010 - Intermediate Algebra **Credits: (4-5)**
- MATH 1050 QL - College Algebra **Credits: (4)** (if not taken as required MATH course)
- MATH 1060 QL - Trigonometry **Credits: (3)**
- MATH 1210 - Calculus I **Credits: (4)**
- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- ZOOL 2220 - Diversity of Animals **Credits: (4)**

Elective courses requiring advisor approval (career goals determine selection):

- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- PHYS 2010 PS - College Physics I **Credits: (5)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**

WSU courses are new interdisciplinary, variable credit (3-5), team taught, and limited enrollment courses that satisfy requirements in two General Education areas (Core or Breadth). Must earn a passing grade.*

Students may take as many WSU Courses as they wish, but only the non-overlapping General Education attributes from subsequent WSU Courses will count toward General Education requirements.

Counts toward these two General Education areas:

- WSU 1450 CA/HU - Perspectives in Creative Arts and Humanities **Credits: (3-5)**
- WSU 1560 SS/HU - Perspectives in Social Science and Humanities **Credits: (3-5)**

Bachelor of Science

Biology Composite Teaching (BS)

- **Program Prerequisite:** Must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** This major requires 120-124 credit hours. The student must also complete requirements for a secondary education license as determined by the Jerry and Vicki Moyes College of Education.
- **Program Code:** 6008BS
- **CIPC:** 131322

Advisement

Teaching majors are encouraged to consult with advisors in both the College of Science (call 801-626-6160) and the College of Education (call 801-626-6269).

Admission Requirements

Declare your program of study (see Enrollment Services and Information). Biology Composite Teaching majors must satisfy Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for the Biology Composite Teaching major also will satisfy general education requirements: MICR 2054, GEO 1110, CHEM 1110 or CHEM 1210, PHYS 1010, CHF 1500, COMM 1020, and MATH 1050.

Program Learning Outcomes

- The Process of Science: Students will use observational strategies to test hypotheses and critically evaluate experimental evidence.
- Quantitative Reasoning: Students will represent diverse experimental data sets graphically and apply statistical methods to them.
- Communication: Students will explain scientific concepts to different audiences and work collaboratively to explore biological problems.
- Science and Society: Students will develop biological applications to evaluate and address societal problems.
- Evolution: The diversity of life is the result of mutation, adaptation, and selection pressure over time.
- Cellular Organization: All living things consist of one or more cells, the units of structure, function, and reproduction.
- Genetics: All living things share basic genetic mechanisms, which are responsible for the organization and continuity of life.
- Ecosystems: All organisms are interconnected, interacting with each other as well as with their dynamic environment.
- Structure and Function: There is a relationship between molecular and organismal structure and function.
- System Regulation: Biological systems are governed by chemical transformations and homeostasis.

Major Course Requirements for BS Degree

Biological Science Courses Required (46 credit hours)

- BTNY 2104 - Plant Form and Function **Credits: (4)**
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- ZOOL 2220 - Diversity of Animals **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)** or
- ZOOL 3600 - Comparative Physiology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**
- ZOOL 3720 - Evolution **Credits: (3)** or
- BTNY 4113 - Plant Evolution **Credits: (3)**
- BTNY 3454 - Plant Ecology **Credits: (4)** or
- ZOOL 3450 CRE - Ecology **Credits: (4)** or
- MICR 3154 - Microbial Ecology **Credits: (4)**

- BTNY 2600 - Laboratory Safety **Credits: (1)** or
- MICR 2600 - Laboratory Safety **Credits: (1)** or
- BTNY 3000+ - Electives **(3)** or
- ZOOL 3000+ - Electives **(3)** or
- MICR 3000+ - Electives **(3)**
- BTNY 3570 - Foundations of Science Education **Credits: (3)** or
- MICR 3570 - Foundations of Science Education **Credits: (3)** or
- ZOOL 3570 - Foundations of Science Education **Credits: (3)**
- ZOOL 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)** or
- BTNY 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)** or
- MICR 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)**
- BTNY 4800 - Individual Research **Credits: (2)** or
- MICR 4800 - Directed Research **Credits: (1-2)** or
- ZOOL 4800 - Research in Zoology **Credits: (1-4)**

Support Courses Required (23-25 credit hours)

- CHEM 1110 PS - Elementary Chemistry **Credits: (4)**
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- CHEM 1120 - Elementary Organic Bio-Chemistry **Credits: (4)**
- CHEM 1125 - Elementary Organic Bio-Chemistry Lab **Credits: (1)**
- OR**
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)** or
- PHYS 2010 PS - College Physics I **Credits: (5)**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)**
- HIST 3350 - History and Philosophy of Science **Credits: (3)**

Note:

It is recommended that more advanced courses in Mathematics, Physics and Chemistry be taken, especially if graduate studies are planned. These should be discussed in advance with the advisor.

Environmental Science (BS)

- **Program Prerequisite:** Not required.

- **Minor:** Though not required, students may benefit from completing a minor, especially one focused on developing workforce skills such as communication, data analytics, geospatial studies, or professional and technical writing. Students should consult with an advisor prior to adding a minor to their program of study.
- **Grade Requirements:** A grade of "C-" or better in courses required for the major (a grade of "D+" is not acceptable). A 2.00 institutional GPA is required by the university for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. Of this total, 58 credit hours in Environmental Science courses are required. Including the required support courses, 78-79 credit hours are required within the major. A total of 40 upper-division credit hours (courses numbered 3000 and above from any department) is required by the university for graduation.
- **Website:** <http://weber.edu/enviroscience>
- **Program Code:** 6066BS
- **CIP:** 030104

Advisement

All Environmental Science majors should meet with a faculty advisor at least annually for course and program advisement. New majors are strongly encouraged to meet with an advisor. Email enviroscience@weber.edu or call 801-626-6160 for more information or to schedule an appointment.

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (see Enrollment Services and Information) with the program administrative specialist. Email enviroscience@weber.edu or call 801-626-6160. There are no special admission or application requirements.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The Quantitative Literacy (QL) requirement will be fulfilled by degree requirements (MATH 1050 QL or MATH 1080 QL or MATH 1210). The natural science breadth requirement (LS/PS) will be fulfilled by degree requirements. The required support course ECON 1100 SS will count towards the social science (SS) breadth requirement.

Program Learning Outcomes

- Demonstrate an interdisciplinary approach to complex problems using the basic tools from geoscience, biology, chemistry, mathematics, economics and social science.
- Be able to develop and test hypotheses through collecting data in the field and/or analyzing samples in the laboratory, including qualitative and quantitative analyses.
- Understand the human and natural environment in the Intermountain West in the context of the varying timescales at which Earth systems operate.
- Be able to work effectively as a member of a team and independently.
- Be able to effectively communicate complex problems, approaches, and solutions to both specialists and general audiences in written and oral formats.
- Demonstrate an understanding of interconnected Earth and human systems to reflect critically on their roles in the protection and management of our environment and climate.

Environmental Science Core Courses (59.5-60.5 credit hours)

- MATH 1050 QL - College Algebra **Credits: (4)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)** or
- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1040 QL - Introduction to Statistics **Credits: (3)** or
- MATH 3410 - Probability and Statistics I **Credits: (3)** or
- SOC 3600 - Social Statistics **Credits: (3)** or
- PSY 3600 - Statistics in Psychology **Credits: (3)**
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- BTNY 2600 - Laboratory Safety **Credits: (1)** or
- CHEM 2600 - Laboratory Safety **Credits: (1)** or
- GEO 2600 - Laboratory Safety **Credits: (1)** or
- MICR 2600 - Laboratory Safety **Credits: (1)** or
- PHYS 2600 - Laboratory Safety **Credits: (1)**
- BTNY 1403 LS SUS - Principles of Environmental Science **Credits: (4)** (4 hr course is required)
- ECON 1100 SS - Environmental Issues and Economic Policy **Credits: (3)**
- GEO 1060 PS - Environmental Geosciences **Credits: (3)** or
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)**
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- PHYS 2090 PS SUS - Energy and the Environment **Credits: (3)**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- MICR 3502 SUS - Environmental Health **Credits: (2)**
- GEO 3010 SUS - Oceans and Climate **Credits: (3)**
- GEO 3710 - Introduction to Geographic Information Systems **Credits: (4)**
- CHEM 3510 - Environmental Chemistry **Credits: (4)**
- Either***
- BTNY 2104 - Plant Form and Function **Credits: (4)** and
- BTNY 3454 - Plant Ecology **Credits: (4)**
- or***
- ZOOL 1610 LS - Principles of Zoology **Credits: (4)** and
- ZOOL 3450 CRE - Ecology **Credits: (4)**
- GEO 4990 - Earth Science and Society Seminar **Credits: (2)**
- ENVS 4999 - Environmental Science ePortfolio **Credits: (.5)**

Environmental Science Electives (22 credit hours minimum)

Select 22 additional Environmental Science elective credits, in consultation with your advisor, with at least 3 credits from each elective category. The remaining 10 credits minimum will come from the elective pool. Some upper-division electives may have prerequisites not listed as an environmental science core or elective course. Those courses are marked with an asterisk (*) and students should consult with an academic advisor before adding them to their program of study.

Elective Category 1 - Natural Resources, Biodiversity, & Environmental Health

- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**
- BTNY 2413 - Introduction to Natural Resource Management **Credits: (3)**
- BTNY 3420 - Wildland Fire Ecology **Credits: (3)**
- BTNY 3473 - Plant Geography **Credits: (3)**
- MICR 3154 - Microbial Ecology **Credits: (4)**
- MICR 3403 GLB - Tropical Diseases **Credits: (3)**
- MICR 3484 - Environmental Microbiology **Credits: (4)**
- MICR 4054 - Microbial Physiology **Credits: (4) ***
- ZOOL 2220 - Diversity of Animals **Credits: (4)**
- ZOOL 3470 - Zoogeography **Credits: (3)**
- ZOOL 3500 - Conservation Biology **Credits: (3)**
- ZOOL 4480 - Freshwater Ecology **Credits: (4)**
- ZOOL 4490 - Marine Ecology **Credits: (4)**
- ZOOL 4700 - Topics in Zoology **Credits: (1-4) *** (must be taken as Animal Toxicology)

Elective Category 2 - Earth Systems & Water Science

- BTNY 3214 - Soils **Credits: (4)**
- GEO 3214 - Soils **Credits: (4)**
- GEO 3080 - Applied Hydrology **Credits: (3)**
- GEO 3150 - Geomorphology **Credits: (4)**
- GEO 3210 SUS - Paleoclimate **Credits: (3)**
- GEO 3753 - Geomicrobiology **Credits: (3)**
- MICR 3753 - Geomicrobiology **Credits: (3)**
- GEO 4560 - Environmental Geochemistry **Credits: (4)**
- CHEM 4560 - Environmental Geochemistry **Credits: (4)**
- GEOG 3050 - Weather and Climate: from daily storms to decades of drought **Credits: (3)**
- GEOG 3080 - Arid Lands: Resources, Landforms, and the Quest for Water **Credits: (3)**
- GEOG 3090 - Arctic and Alpine Environments **Credits: (3)**

Elective Category 3 - Laboratory, Data Analysis, & Workforce Skills

Choose one course of at least 3 credits.

- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3000 - Quantitative Analysis **Credits: (4)**

- CHEM 3610 - Foundations in Inorganic Chemistry **Credits: (4)**
- GEO 3720 - Geospatial Analysis **Credits: (4)**
- GEO 3840 - Remote Sensing: Principles and Methods **Credits: (4)**
- GEO 4200 - Geospatial Data Acquisition **Credits: (4)**
- MATH 3450 - Advanced Statistical Methods **Credits: (4)**
- MATH 4400 - Statistical Learning **Credits: (3)**
- MATH 4910 - Senior Research Project **Credits: (3)**
- BTNY 4800 - Individual Research **Credits: (2)** or
- CHEM 4800 - Research and Independent Study in Chemistry **Credits: (1-3)** or
- GEO 4800 CRE - Independent Research **Credits: (1-3)** or
- MICR 4800 - Directed Research **Credits: (1-2)** or
- PHYS 4800 - Individual Research Problems **Credits: (1-3)** or
- ZOOL 4800 - Research in Zoology **Credits: (1-4)**
- ENVS 4890 - Environmental Science Internship **Credits: (1-6)**

Elective Category 4 - Sustainability

- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)**
- GEOG 3060 SUS - Environmental Issues: Local to Global Impacts and Solutions **Credits: (3)**
- GEOG 3210 - Urban Geography: The How and Why of Cities **Credits: (3)**
- GEOG 4400 - Cartography and Map Design **Credits: (3)**
- GEOG 4410 SUS - Sustainable Land Use Planning **Credits: (3)**
- GEOG 4950 - Advanced Regional Field Studies or Field Trips **Credits: (1-3)**
- SOC 3300 SUS - Environment and Society **Credits: (3)**

Elective Pool

10 credits should come from the elective pool. Some upper-division electives may have prerequisites not listed as an environmental science core or elective course. Those courses are marked with an asterisk (*) and students should consult with an academic advisor before adding them to their program of study.

- BTNY 3214 - Soils **Credits: (4)** or
- GEO 3214 - Soils **Credits: (4)**
- BTNY 3473 - Plant Geography **Credits: (3)**
- BTNY 3624 - Taxonomy of Vascular Plants **Credits: (4)**
- BTNY 3643 - Intermountain Flora **Credits: (3)**
- BTNY 4950 - Advanced Field Botany **Credits: (3)**
- MICR 3012 GLB - Microbiology and Global Public Health **Credits: (2)**
- MICR 3154 - Microbial Ecology **Credits: (4)**
- MICR 3403 GLB - Tropical Diseases **Credits: (3)**
- MICR 3484 - Environmental Microbiology **Credits: (4)**
- MICR 4054 - Microbial Physiology **Credits: (4)**
- ZOOL 3470 - Zoogeography **Credits: (3)**
- ZOOL 3500 - Conservation Biology **Credits: (3)**
- ZOOL 4480 - Freshwater Ecology **Credits: (4)**

- ZOOL 4490 - Marine Ecology **Credits: (4)**
- ZOOL 4640 - Entomology **Credits: (4)**
- ZOOL 4700 - Topics in Zoology **Credits: (1-4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 3450 - Advanced Statistical Methods **Credits: (4)**
- MATH 4400 - Statistical Learning **Credits: (3)**
- MATH 4910 - Senior Research Project **Credits: (3)**
- CHEM 3000 - Quantitative Analysis **Credits: (4)**
- CHEM 3050 - Instrumental Analysis **Credits: (4)**
- CHEM 3070 - Biochemistry I **Credits: (3)** and
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**
- CHEM 3610 - Foundations in Inorganic Chemistry **Credits: (4)**
- GEO 3080 - Applied Hydrology **Credits: (3)**
- GEO 3150 - Geomorphology **Credits: (4)**
- GEO 3210 SUS - Paleoclimate **Credits: (3)**
- GEO 3720 - Geospatial Analysis **Credits: (4)**
- GEO 3753 - Geomicrobiology **Credits: (3)** or
- MICR 3753 - Geomicrobiology **Credits: (3)**
- GEO 3840 - Remote Sensing: Principles and Methods **Credits: (4)**
- GEO 4080 - Groundwater and Environmental Assessment **Credits: (4)**
- GEO 4200 - Geospatial Data Acquisition **Credits: (4)**
- GEO 4560 - Environmental Geochemistry **Credits: (4)** or
- CHEM 4560 - Environmental Geochemistry **Credits: (4)**
- GEOG 3050 - Weather and Climate: from daily storms to decades of drought **Credits: (3)** or
- GEOG 3080 - Arid Lands: Resources, Landforms, and the Quest for Water **Credits: (3)** or
- GEOG 3090 - Arctic and Alpine Environments **Credits: (3)**
- BTNY 4800 - Individual Research **Credits: (2)** or
- CHEM 4800 - Research and Independent Study in Chemistry **Credits: (1-3)** or
- GEO 4800 CRE - Independent Research **Credits: (1-3)** or
- MICR 4800 - Directed Research **Credits: (1-2)** or
- PHYS 4800 - Individual Research Problems **Credits: (1-3)** or
- ZOOL 4800 - Research in Zoology **Credits: (1-4)**
- ENVS 4890 - Environmental Science Internship **Credits: (1-6)**

Physical Science Composite Teaching (BS)

- **Program Prerequisite:** Composite Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Not required.

- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation on Degree Requirements.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation; a minimum of 69 of these is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); a minimum of 13 of these is required within the major.
- **Program Code:** 6009BS
- **CIPC:** 131399

Advisement

Teaching majors are encouraged to consult with advisors in both the College of Science (call 801-626-6160) and the College of Education (call 801-626-6269). (Also refer to the Department Advisor Referral List.) Students in this program should work closely with their advisor to ensure their teaching endorsements in multiple subject areas within physical science.

Admission Requirements

Declare your program of study . Physical Science Composite Teaching majors must satisfy Teacher Education admission and licensure requirements (see Teacher Education Department).

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for this major will satisfy physical science general education requirements: CHEM 1210, GEO 1110 and PHYS 2210.

Program Learning Outcomes

- **Presentation skills.** Physics majors should be able to express (orally and in writing) their understanding of core physical principles, the results of experiments, and their analysis of physical problems.
- **Laboratory skills.** Physics majors should be competent experimentalists. They should be able to design and set up an experiment, collect and analyze data, identify sources of error, and interpret their result and connect it to related areas of physics.
- **Computer skills.** Physics majors should be competent users of basic software, such as word processing, spreadsheet, and graphing programs. They should also have an understanding of the fundamental aspects of a programming and/or computer algebra language (Fortran, C++, Mathematica, etc.).
- **Problem-solving skills.** Physics majors should be competent problem-solvers. They should be able to identify the essential aspects of a problem and formulate a strategy for solving the problem. They should be able to estimate the solution to a problem, apply appropriate techniques to arrive at a solution, test the correctness of their solution, interpret their result and connect it to related areas of physics.
- **Physics majors should be adequately trained to apply their physics experience and knowledge to analyze new situations.**
- **All physics students (majors, minors, support, and Gen Ed students) should understand the nature of science, as assessed by questionnaires, interviews, and student focus groups.**
- **General Education students should understand several core concepts of physics.**
- **Physics Teaching majors and Elementary Teaching majors should have an appropriate knowledge of physics and a variety of teaching strategies to accommodate the multiple learning styles of their students.**

Major Course Requirements for BS Degree

Required Courses (minimum of 69 credit hours)

Physics Courses (19 credit hours)

- PHYS 1040 PS - Elementary Astronomy **Credits: (3)**
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)** and
- PHYS 2220 - Physics for Scientists and Engineers II **Credits: (5)**
- Physics electives PHYS 3310 and above **(6)**

Geology Courses (17 credit hours)

- GEO 1060 PS - Environmental Geosciences **Credits: (3)**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)**
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- GEO 1130 PS - Introduction to Meteorology **Credits: (3)**
- GEO 1220 - Historical Geology **Credits: (4)**
- GEO 3010 SUS - Oceans and Climate **Credits: (3)** or
- GEO 3210 SUS - Paleoclimate **Credits: (3)**

Chemistry Courses (14-15 credit hours)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- **or**
- CHEM 3000 - Quantitative Analysis **Credits: (4)**

General Science Courses (8 credit hours)

- PHYS 2600 - Laboratory Safety **Credits: (1)** or
- CHEM 2600 - Laboratory Safety **Credits: (1)** or
- GEO 2600 - Laboratory Safety **Credits: (1)**
- PHYS 3570 - Foundations of Science Education **Credits: (3)** or
- CHEM 3570 - Foundations of Science Education **Credits: (3)** or
- GEO 3570 - Foundations of Science Education **Credits: (3)**
- PHYS 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)** or
- CHEM 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)** or
- GEO 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)**

- PHYS 4800 - Individual Research Problems **Credits: (1-3)** (1 credit hour required) or
- CHEM 4800 - Research and Independent Study in Chemistry **Credits: (1-3)** (1 credit hour required) or
- GEO 4800 CRE - Independent Research **Credits: (1-3)** (1 credit hour required)

Science Support Courses (11 credit hours)

- HIST 3350 - History and Philosophy of Science **Credits: (3)**
- MATH 1210 - Calculus I **Credits: (4)** and
- MATH 1220 - Calculus II **Credits: (4)**

Note:

Students must also complete the Teacher Education Licensure Program.

Teaching Minor

Biology Teaching Minor

This minor replaces and is a consolidation of the Botany and Zoology Teaching Minors.

- **Grade Requirements:** A grade of "C-" or better in courses used towards the minor.
- **Credit Hour Requirements:** A minimum of 47 credit hours. Students who select the Biology Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Program Code:** 6002
- **CIPC:** 131322

Course Requirements for Biology Teaching Minor

Science Courses Required (39 credit hours)

- ZOOL 2220 - Diversity of Animals **Credits: (4)**
- BTNY 2104 - Plant Form and Function **Credits: (4)**
- BTNY 2114 - Evolutionary Survey of Plants **Credits: (4)**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**
- ZOOL 3600 - Comparative Physiology **Credits: (4)** or
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- MICR 3154 - Microbial Ecology **Credits: (4)** or
- BTNY 3454 - Plant Ecology **Credits: (4)** or
- ZOOL 3450 CRE - Ecology **Credits: (4)**
- BTNY 3570 - Foundations of Science Education **Credits: (3)** or

- MICR 3570 - Foundations of Science Education **Credits: (3)** or
- ZOOL 3570 - Foundations of Science Education **Credits: (3)**
- BTNY 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)** or
- MICR 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)** or
- ZOOL 4570 CEL - Secondary School Science Teaching Methods **Credits: (3)**
- BTNY 2600 - Laboratory Safety **Credits: (1)** or
- MICR 2600 - Laboratory Safety **Credits: (1)**

Required Support Courses (8 credit hours)

- HIST 3350 - History and Philosophy of Science **Credits: (3)**
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
OR
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**

College of Social Sciences & Education

Dr. Julie Rich, Dean

The College of Social Sciences and Education is dedicated to studying behavior and thought in their individual, social, cultural, physical, and historical contexts, and to the beneficial application of this knowledge. The College prepares students for productive careers and engaged citizenship through general education instruction, and major, minor and interdisciplinary programs which emphasize critical and scientific thinking. Through teaching, scholarship, and service, the College's faculty aims to enhance social justice, environmental awareness, and the quality of life in northern Utah and beyond.

Dean: Dr. Julie Rich

Associate Dean: Dr. Brent Horn

Telephone Contact: Tracy Hicks 801-626-6232

Location: Lindquist Hall, Room 161

College Advisors: Nicholas Ferre, Christy Cottrell, Genesis Vasques Rivas, Victor Blocher

Telephone: 801-626-7809

Locations: Lindquist Hall, Rooms 107A, 107B, 151, 157

Department Chairs/Directors

Child & Family Studies: Dr. Ryan Dunn 385-244-0141

Criminal Justice: Dr. Molly Sween 801-626-7293

Geography, Environment and Sustainability: Dr. Eric Ewert 801-626-6197

Graduate Studies in Education: Dr. Wei Qiu 801-626-7386

History: Dr. Matthew Romaniello 801-626-6699

Political Science & Philosophy: Dr. Mary Beth Willard 801-626-6694

Post-Baccalaureate Certificate in Teaching: Dr. Sheryl Rushton

Psychological Science: Dr. Shannon McGillvray 801-626-8743

Social Work & Gerontology: Dr. Kerry Kennedy 801-626-6155

Sociology & Anthropology: Dr. Huiying Hill 801-626-7888

Teacher Education: Dr. Ryan Cain 385-288-1024

ROTC Units 801-581-6236

Aerospace Studies: Lt Col Angelique P. Brown (SLC) 801-581-6236

or contact the College of Social & Behavioral Sciences

801-626-6232

Military Science: Lieutenant Colonel Benjamin Gillespie

801-626-6938

Social Science Education Center

Director: Dr. Stephen Francis

Location: Lindquist Hall, Room 273

Telephone: 801-626-6781

The Social Science Education Center was initiated and organized in 1990 to promote, coordinate, and encourage social science education. The faculty of the College of Social & Behavioral Sciences, the College of Education, public and private schools and their respective districts collaborate in programs and activities designed to improve and enhance the teaching of the Social Sciences. This includes seminars for social science teachers in the area and presentations by Weber State University professors.

The Olene S. Walker Institute of Politics and Public Service

Directors: Leah Murray

Location: Lindquist Hall, Room 167

Telephone: 801-626-6252

Email: walkerinstitute@weber.edu

The non-partisan Walker Institute is committed to upholding the highest standards of American democracy and providing a visible and vibrant hub of political engagement for the Weber State University community. Through forums, workshops, seminars, symposiums and panel discussions, the Walker Institute strives to bring a better understanding of the political process to students and community members. The Walker Institute is dedicated to the training of future leaders by inspiring students to embrace public service and engaging them in internship opportunities at the local, state and national levels.

The Richard Richards Institute for Ethics

Director: Dr. Richard Greene

Location: Lindquist Hall, Room 132

Telephone: 801-626-6694

The Richard Richards Institute for Ethics was established in 2007 in order to promote ethical leadership in both private industry and government. It works to do so via outreach and education by offering scholarship opportunities to high school and college students, hosting workshops and ethics related activities for community members, and by acknowledging and honoring those leaders of our community who exemplify the highest ethical ideals and standards.

Aerospace Studies (Air Force ROTC)

Weber State provides a program in Aerospace Studies (Air Force) through an inter-campus agreement with the University of Utah. Students may minor in Aerospace Studies by satisfying requirements identified.

Chair: Lt Col Angelique P. Brown (SLC)

Location: Building 4, Room 421J

Telephone Contact: 801-626-7649 or 801-581-6236

Professor: Lt Col Michael Eliason

Assistant Professor: Capt Daniel Luczak

The Department of Aerospace Studies offers two, three, and four-year programs through the Air Force Reserve Officer Training Corps (AFROTC). These provide matriculated students an opportunity to earn commissions as officers in the U.S. Air Force in conjunction with completing bachelor's degree requirements in academic fields of the students' choice. AFROTC provides education that develops abilities and attitudes vital to the career of a professional Air Force officer and gives an understanding of the mission and the global responsibilities of the U.S. Air Force.

The Department of Aerospace Studies offers academic preparation in interdisciplinary areas including communication skills, Air Force history, leadership and management principles and practices, decision-making theory and policy formulation, ethics and values, socialization process within the armed services, national and international relations, national defense structure, national security policy, and military law. Entry into the General Military Course (GMC) during the first two years of AFROTC is open to all students. Entry into the Professional Officer Course (POC) during the final two years is selective and is normally initiated during the student's sophomore year. Potential candidate should contact the faculty for the most current information.

Undergraduate Program

General Requirements. Enrollment is open to men and women who:

1. Are U.S. citizens or applicants for naturalization. (Non-U.S. citizens may participate in the General Military Course for academic credit only.)
2. Are at least 14 years of age.
3. Are enrolled as full-time students in a program leading to an academic degree (bachelor's degree or higher).

Additional qualifications for admittance to the Professional Officer Course include:

4. Complete 1 through 3, above, plus the following:
 - The General Military Course (four-year program) and a four-week field training course, or a six-week field training course (two-year program).
5. Complete all commissioning requirements prior to the following:
 - Age 29 if a pilot or navigator candidate, or
 - Age 35 for all other categories. Waivers to extend the maximum age may be granted on a case-by-case basis.
6. Meet the physical standards for general military service.
7. Attain the current minimum scores on the Air Force Officer Qualifying Test.
8. Have a recommendation from a board of Air Force officers.
9. Are at least 17 years old and enlist in the Air Force Reserve prior to entering the POC.

Commissioning Requirements. The requirements for commissioning include successful completion of the Professional Officer Course and field training, completion of a bachelor's or higher degree, and acceptance of a commission in the U.S. Air Force.

Service Obligation. There is no military service commitment for students in the General Military Course unless the student has an AFROTC scholarship. Those entering the Professional Officer Course incur an active-duty service commitment of not less than four (4) years after receiving a commission. POC graduates who are navigator candidates agree to serve six (6) years of active duty after graduation from navigator training. POC graduates who are pilot candidates accept ten (10) years of active duty service after graduation from pilot training.

Financial Aid. All AFROTC contracted cadets receive a monthly tax free allowance depending on their student status (Freshman, Sophomore, Junior, or Senior).

Uniforms and Texts. All Air Force texts and uniforms are furnished at no expense to the student.

Scholarships. AFROTC scholarships are available to qualified applicants in two, three and four-year programs. Each scholarship provides full tuition*, laboratory and incidental fees, and limited reimbursement for curriculum-

required textbooks. In addition, scholarship cadets receive a nontaxable cash allowance each month during the academic year while on scholarship status. Scholarships are available on a competitive basis for two, two and one-half, three, or three and one-half years. Applications for scholarships should be made directly to the Professor of Aerospace Studies, 1901 E. South Campus Drive, Room 2009.

**to \$9,000*

AFROTC Programs

Two basic routes to an Air Force Commission are available to college students in the AFROTC. Entering students may enroll in the AFROTC four-year program, and those with at least two academic years remaining may apply for the two-year program. Students having an intermediate amount of school remaining (e.g., three years) may enroll in an adjusted four-year program.

Four-Year Program. Matriculated students may pursue the four-year program. Enrollment procedures for the first two years of AFROTC, known as the General Military Course, are the same as for any other college course. The GMC consists of one hour of course work and two hours of leadership laboratory each week.

During the sophomore year, cadets may apply for the last two years of the program, the Professional Officer Course. Requirements for entry into the POC are listed earlier under General Requirements. If selected for the POC, GMC cadets are scheduled to attend a four-week field training course at an Air Force base during the summer months.

Students enrolled in AFROTC may major in any field.

Two-Year Program. For entry into the two-year program, two academic years must remain at the undergraduate or graduate level, or a combination of the two. Two-year program applicants must qualify by meeting the same criteria as students in the General Military Course who are applying for POC entry. (See General Requirements.)

Each applicant must successfully complete a six-week field training course at an Air Force base during the summer months. This course provides academic and military preparation for entry into the POC. Those fulfilling all requirements, including the successful completion of field training, complete enrollment procedures upon return to campus. Application for the two-year program should be made early in the academic year (normally sophomore year) so that requirements may be completed in time for assignment to summer field training.

Note: Classes are held at the University of Utah.

Minor

Aerospace Studies (Air Force ROTC) Minor

- **Grade Requirements:** The cumulative grade-point average (GPA) for all courses used toward the minor must be 2.0 or greater, with no course grade lower than a C-.
- **Credit Hour Requirements:** A minimum of 16 hours credit hours in departmental classes, 12 of which must be upper division.
- **Program Code:** 7022
- **CIPC:** 280101

Advisement

All Aerospace Studies students are required to meet with a faculty advisor at least semi-annually for course and program advisement. Call (801) 581-6236 for more information or to schedule an appointment.

Admission Requirements

Enrollment in any of the upper division, directed studies, or leadership lab classes requires approval of the department. Contact (801) 581-6236 for more information.

Course Requirements for Minor

Basic Courses: (C- or better)

- AERO 1010 - Foundations of USAF I **Credits: (1)**
- AERO 1011 - Foundations of USAF II **Credits: (1)**
- AERO 2010 - Airpower History I **Credits: (1)**
- AERO 2011 - Airpower History II **Credits: (1)**

Upper division courses: (C- or better)

- AERO 3010 - Leadership Studies I **Credits: (3)**
- AERO 3011 - Leadership Studies II **Credits: (3)**
- AERO 4010 - National Security Affairs I **Credits: (3)**
- AERO 4011 - National Security Affairs II **Credits: (3)**

Note:

Completion of 6-week Field Training (AERO 3000) or two or more years active duty as an enlisted member in the United States Air Force may result in exemption from the basic courses.

Department of Criminal Justice

Department Chair: Molly Sween

Location: Social Science Building, Room 218

Telephone Contact: Shellie Weeks 801-626-6146

Professors: Bruce Bayley, Brent Horn, Bradford Reyns, Molly Sween; **Associate Professors:** Mark Denniston, Heeuk "Dennis" Lee; **Assistant Professors:** Michelle Jeffs, Mckenzie Wood; **Instructors:** Jean Kapenda;

Visiting Assistant Professor: Mitchell Pilkington

The Criminal Justice program provides students with a liberal education, while offering academic preparation through an expanded emphasis on criminal justice education. The program also offers a basis for graduate study and seeks to contribute significantly to the improvement of the quality of justice administration.

Criminal justice agencies in the recent past have established advanced academic standards. Education is becoming a more meaningful factor in selection of law enforcement, corrections, and security personnel for initial employment, promotion, and administrative roles.

Associate of Science

Criminal Justice (AS)

- **Grade Requirements:** A grade of "C" or better in courses required for an Associate's Degree in Criminal Justice in addition to an overall GPA for these courses of 2.50 or higher. Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** 60 total hours are required, including at least 21 Criminal Justice credits (CJ prefix).
- **Program Code:** 7004AS
- **CIPC:** 430104

Advisement

All Criminal Justice students are encouraged to meet with a faculty advisor at least annually for course and program advisement. Visit the Criminal Justice Department web page or call 801-626-6146 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Program of Study (Major/Minor) Declaration). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Associate's Degree requirements.

Program Learning Outcomes

- Recognize the key historical, theoretical, and practical components of contemporary corrections.
- Identify the fundamental concepts of criminal law as they are applied in the courts.
- Recognize the key historical, theoretical, and practical components of contemporary policing.

Major Course Requirements for AS Degree

Criminal Justice Required Courses (12 credit hours)

- CJ 1010 SS - Introduction to Criminal Justice **Credits: (3)**
- CJ 1300 - Corrections: History, Theory and Practice **Credits: (3)**
- CJ 1330 - Criminal Law and Courts **Credits: (3)**
- CJ 2300 - Policing: History, Theory and Practice **Credits: (3)**

Criminal Justice Elective Courses (9 credit hours)

Select 9 additional credit hours from Criminal Justice (CJ prefix) courses. Students may not use CJ 4830 Directed Readings or CJ 4950 Field Trips/Travel Study to fill this requirement.

Institutional Certificate

Forensic Science Fundamentals Certificate of Proficiency

This program has been suspended pending formal discontinuance and is no longer accepting new students.

The Certificate of Proficiency in Forensic Science Fundamentals provides a foundational basis to understand the interface between natural science and justice systems. This program is designed to augment physical, life and health science programs of study by providing theory and skills for graduates seeking employment in the governmental or commercial forensic science sector.

- **Program Admission and Prerequisites:** There are no special admission requirements. Students entering the certificate program must have fundamental college level math and science preparation completed prior to registering for CHEM 1210/1215.
- **Grade Requirements:** A minimum grade of "C" in all courses counted toward completion of the certificate (no "C-" grades allowed).
- **Credit Hour Requirements:** A total of 29 credit hours is required for completion of the certificate program. CJ 1010, COMM 1020, CHEM 1210/1215, MICR 2054, and ZOOL 1610 satisfy WSU General Education Requirements. A minimum of 14 credit hours in the program must be completed at Weber State University.
- **Program Code:** 7050CP
- **CIPC:** 430107

Advisement

All declared Forensic Science Fundamental students are assigned to the Director of Forensic Science Programs in the Department of Criminal Justice for advising. Courses should be completed in conjunction with your major program of study. Your science major advisor and the Director of Forensic Science Programs can assist you in planning completion of the certificate program. Questions about the program can be directed to the Director of Forensic Science Programs (Dr. Brent Horn, 801-626-8843) or the Department of Criminal Justice (801-626-6146).

Program Learning Outcomes

- Recognize the key elements of the criminal justice system
- Describe the interface between the forensic scientist, physical evidence, and the criminal justice system
- Orally communicate comfortably in front of an audience
- Understand fundamental concepts of chemistry and biology

Required Program Courses

- CJ 1010 SS - Introduction to Criminal Justice **Credits: (3)**
- CJ 1350 - Introduction to Forensic Science **Credits: (3)**
- CJ 2350 - Laws of Evidence **Credits: (3)**
- CJ 3120 - Professional Practice for the Forensic Expert **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**

- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

Either:

- MICR 2054 LS - Principles of Microbiology **Credits: (4)** ;or
- ZOOL 1610 LS - Principles of Zoology **Credits: (4)**

Juvenile Justice Certificate of Proficiency

The Certificate of Proficiency in Juvenile Justice provides a strong theoretical and applied foundation for those interested in the American juvenile justice system. This interdisciplinary program builds upon the basic elements of the American criminal justice system by incorporating coursework from allied social sciences disciplines relevant to juvenile delinquency, juvenile courts, and human dynamics.

- **Program Admission and Prerequisites:** The program is open to all majors and has no special admissions prerequisites or requirements.
- **Grade Requirements:** A minimum grade of "C" in all courses counted towards the completion of the certificate (no "C-" or lower grades allowed).
- **Credit Hour Requirements:** A total of 20-21 credit hours is required for completion of the certificate program.
- **Program Code:** 7052CP
- **CIPC:** 430110

Advisement

All advising for the Certificate of Proficiency in Juvenile Justice will be conducted by Criminal Justice Advisors working through the Department of Criminal Justice (801-626-6146).

Program Learning Outcomes

- Recognize the elements of juvenile criminal behavior
- Identify the differences in criminal procedures and proceedings between adult and juvenile court
- Demonstrate how other criminal justice and liberal arts fields intersect with the juvenile justice system

Required Program Courses (12 hours)

- CJ 1010 SS - Introduction to Criminal Justice **Credits: (3)**
- CJ 2330 - Juvenile Justice **Credits: (3)**
- CJ 2360 - Juvenile Law and Procedure **Credits: (3)**
- CJ 4860 INT - Criminal Justice Internship **Credits: (3)**

Elective Courses (8-9 hours)

Select three of the classes listed below:

- CJ 3620 - Essential Skills for Criminal Justice Professionals **Credits: (3)**
- CHF 2400 SS/CC - Family Relations **Credits: (3)**
- FAM 3350 GLB - Diverse Families **Credits: (3)**

- FAM 4400 - The Family in Stress **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- PSY 3020 - Child and Adolescent Psychopathology **Credits: (3)**
- PSY 3140 - Adolescent Psychology **Credits: (3)**
- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- SOC 2600 - Families in Society **Credits: (3)**
- SW 1010 SS CEL - Introduction to Generalist Social Work **Credits: (3)**
- SW 2100 SS - Human Behavior and the Social Environment I **Credits: (3)**
- SW 3200 - Child and Family Welfare **Credits: (2)**

Victim Advocacy Certificate of Proficiency

The Certificate of Proficiency in Victim Advocacy provides a strong theoretical and applied foundation for those interested in assisting victims of crime. This interdisciplinary program builds upon the basic elements of the American criminal justice system by incorporating coursework from allied social sciences disciplines relevant to crime, courts, and human dynamics.

- **Program Admission and Prerequisites:** The program is open to all majors and has no special admissions prerequisites or requirements.
- **Grade Requirements:** A minimum grade of "C" in all courses counted towards the completion of the certificate (no "C-" or lower grades allowed).
- **Credit Hour Requirements:** A total of 21 credit hours is required for completion of the certificate program.
- **Program Code:** 7053CP
- **CIPC:** 430199

Advisement

All advising for the Certificate of Proficiency in Victim Advocacy will be conducted by Criminal Justice Advisors working through the Department of Criminal Justice (801-626-6146).

Program Learning Outcomes

- Identify the stages of a case through the criminal court process
- Describe the factors that influence, and the resulting consequences of, criminal victimization
- Demonstrate how the principles of criminal justice and social science apply to the assistance of crime victims

Required Program Courses (12 credits)

- CJ 1010 SS - Introduction to Criminal Justice **Credits: (3)**
- CJ 2400 - Criminal Court Process **Credits: (3)**
- CJ 3300 - Victimology **Credits: (3)**
- CJ 4860 INT - Criminal Justice Internship **Credits: (3)**

Elective Courses (9 credits)

Select nine credit hours from the following:

- CJ 1340 - Criminal Investigation **Credits: (3)**
- CJ 1350 - Introduction to Forensic Science **Credits: (3)**
- CJ 2350 - Laws of Evidence **Credits: (3)**
- CJ 3620 - Essential Skills for Criminal Justice Professionals **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- FAM 4400 - The Family in Stress **Credits: (3)**
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- PSY 2020 - Mental Health Awareness **Credits: (3)**
- PSY 3850 - Forensic Psychology **Credits: (3)**
- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- SOC 3000 - Self and Society **Credits: (3)**
- SW 1010 SS CEL - Introduction to Generalist Social Work **Credits: (3)**
- SW 2100 SS - Human Behavior and the Social Environment I **Credits: (3)**
- SW 2200 SS/CC - Issues in Diversity **Credits: (3)**
- SW 4265 - Crisis Intervention and Trauma **Credits: (3)**

Bachelor of Science

Criminal Justice (BS)

- **Program Prerequisite:** Not required.
- **Minor:** Not required. Students are encouraged to complete a minor that compliments their career goals.
- **Grade Requirements:** A grade of "C" or better in courses required for a Bachelor's Degree in addition to an overall GPA for these courses of 2.50 or higher. Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; of which 40 hours must be upper division credit hours (courses numbered 3000 and above). A minimum of 49 Criminal Justice credit hours are required for the Criminal Justice Concentration. A minimum of 79-82 credit hours (including 49 Criminal Justice credit hours) are required for the Crime Scene Investigation Concentration.
- **Program Code:** 7004BS with Concentration code Criminal Justice (7045), Crime Scene Investigation (7046).
- **CIPC:** 430104 with Concentration code Criminal Justice (430104), Crime Scene Investigation (430111).

Advisement

All Criminal Justice students are encouraged to meet with a faculty advisor at least annually for course and program advisement. Students are encouraged to take CJ 4860-Criminal Justice Internship, and complete a minor as a way to complete their upper division course requirement. Visit the Criminal Justice Department web page or call 801-626-6146 for more information or to find an advisor. (Also refer to the Department Advisor Referral List).

Students with an interest in forensic science lab work should consider the Forensic Science Fundamentals Certificate of Proficiency and meet with the Director of the Forensic Science Programs.

Admission Requirements

Declare your program of study . No special admission or application requirements are needed for this program. Students with a criminal history may be precluded from participating in certain forensic science courses and should see the Director of Forensic Science Programs for advisement prior to selecting this program of study.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following course required for the Criminal Justice major will also satisfy general education requirements: CJ 1010 SS. Students selecting the Crime Scene Investigation Concentration should complete general education requirements by taking the following support courses: CHEM 1110 PS, CHEM 1210 PS, PHYS 1010 PS, PHYS 2010 PS, PHYS 2210 PS, MATH 1040 , ZOOL 1020 LS, ANTH 1020 LS/SUS, HTHS 2110 LS, ART 2450 CA and/or COMM 1020 HU.

Program Learning Outcomes

- Describe key concepts, theories, or ideas related to the discipline of criminal justice.
- Explain the experiences, perspectives, or contributions of multiple groups in the criminal justice system.
- Apply theories and research findings to the operation of criminal justice systems.
- Effectively communicate.
- Analyze problems in criminal justice using critical thinking or problem-solving skills.
- Develop a personal framework for ethical decision-making.

Major Course Requirements for BS Degree

Criminal Justice Foundation (9 credit hours)

- CJ 1010 SS - Introduction to Criminal Justice **Credits: (3)**
- CJ 1330 - Criminal Law and Courts **Credits: (3)**
- CJ 4200 - Ethical Issues in Criminal Justice **Credits: (3)**

Select a Concentration:

Criminal Justice Concentration

Criminal Justice Depth (22 credit hours)

- CJ 1300 - Corrections: History, Theory and Practice **Credits: (3)**
- CJ 2300 - Policing: History, Theory and Practice **Credits: (3)**
- CJ 3270 - Theories of Crime and Delinquency **Credits: (3)**
- CJ 3300 - Victimology **Credits: (3)**
- CJ 3610 - Research Methods in Criminal Justice **Credits: (3)**
- CJ 4165 - Constitutional Rights **Credits: (3)** (to be taken after completion of foundation and depth courses)
Pick one of the following:
- CJ 3000 - Graduate School Prep **Credits: (1)**
- CJ 3005 - Law School Prep **Credits: (1)**
- CJ 3010 - CJ Careers Exploration **Credits: (1)**

Pick one of the following:

- CJ 4080 - Criminal Justice Senior Thesis **Credits: (3)**
- CJ 4860 INT - Criminal Justice Internship **Credits: (3)**

Criminal Justice Electives (18 credit hours)

- Select 18 credit hours from courses with a CJ prefix. Students may not use CJ 1070 or CJ 1080 to complete the elective requirements. Additionally, students may not use more than 6 credit hours of internship courses (CJ 2860, CJ 2861, CJ 2862, CJ 4860, or CJ 4861) for the CJ electives.

Crime Science Investigation Concentration

Graduation approval from the forensic science program director after completion of a program portfolio is required of students selecting this program of study.

Core Crime Scene Investigation (40 credit hours)

- CJ 1340 - Criminal Investigation **Credits: (3)**
- CJ 1350 - Introduction to Forensic Science **Credits: (3)**
- CJ 2340 - Crime Scene Investigation **Credits: (3)**
- CJ 2350 - Laws of Evidence **Credits: (3)**
- CJ 3120 - Professional Practice for the Forensic Expert **Credits: (3)**
- CJ 3340 - Crime Scene Photography **Credits: (3)**
- CJ 3344 - Advanced Forensic Photography **Credits: (3)**
- CJ 4110 - Physical Methods in Forensic Science **Credits: (4)**
- CJ 4115 - Friction Ridge Analysis **Credits: (4)**
- CJ 4116 - Friction Ridge Development **Credits: (4)**
- CJ 4125 - Research Methods in Forensic Science **Credits: (4)**
- CJ 4165 - Constitutional Rights **Credits: (3)**

CSI Support (30-33 credit hours)

- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**

Either

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**

or

- ZOOL 1020 LS - Human Biology **Credits: (3)** and
ZOOL 2320 - Human Anatomy Credits: (4)
- or***
- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3)** and
ZOOL 2320 - Human Anatomy Credits: (4)

Either

- CHEM 1110 PS - Elementary Chemistry **Credits: (4)**
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- CHEM 1120 - Elementary Organic Bio-Chemistry **Credits: (4)**

- CHEM 1125 - Elementary Organic Bio-Chemistry Lab **Credits: (1)**
or
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

One of

- PHYS 1010 PS - Elementary Physics **Credits: (3)** or
- PHYS 2010 PS - College Physics I **Credits: (5)** or
- PHYS 2210 PS - Physics for Scientists and Engineers I **Credits: (5)**

One of

- BTNY 2600 - Laboratory Safety **Credits: (1)** or
- CHEM 2600 - Laboratory Safety **Credits: (1)** or
- GEO 2600 - Laboratory Safety **Credits: (1)** or
- MICR 2600 - Laboratory Safety **Credits: (1)** or
- PHYS 2600 - Laboratory Safety **Credits: (1)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Criminal Justice (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Refer to Interdisciplinary Studies (BS).
- **Credit Hour Requirements:** 18 hours of Criminal Justice courses (CJ prefix) selected in consultation with an advisor and approved by the department chair. Thesis completion pursuant to BIS requirements.
- **Program Code:** 7004
- **CIPC:** 430104

Minor

Criminal Justice Minor

- **Grade Requirements:** A grade of "C" or better in courses required for a Criminal Justice minor in addition to an overall GPA for these courses of 2.50 or higher. Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** Minimum of 18 credit hours in Criminal Justice courses (CJ prefix).
- **Program Code:** 7004
- **CIPC:** 430104

Course Requirements for Minor

Criminal Justice Required Courses (6 credit hours)

- CJ 1010 SS - Introduction to Criminal Justice **Credits: (3)**
- CJ 3270 - Theories of Crime and Delinquency **Credits: (3)**

Criminal Justice Breadth Courses (6 credit hours)

Select two of the following

- CJ 1300 - Corrections: History, Theory and Practice **Credits: (3)**
- CJ 1330 - Criminal Law and Courts **Credits: (3)**
- CJ 2300 - Policing: History, Theory and Practice **Credits: (3)**
- CJ 4200 - Ethical Issues in Criminal Justice **Credits: (3)**

Criminal Justice Elective Courses (6 credit hours)

Select 6 additional credit hours from Criminal Justice (CJ prefix) courses. An overall total of at least 9 credit hours must be upper division (numbered 3000 or higher). Any course of CJ 1300, 1330, 2300, or 4200 that was taken to fulfill the Breadth requirement may not be used again to fulfill the Elective requirement. Students may not use CJ 4830 Directed Readings or CJ 4950 Field Trips/Travel Study to fill this requirement.

Department of Geography, Environment and Sustainability

Department Chair: Dr. Eric C. Ewert

Location: Lindquist Hall, LH 350

Telephone Contact: Sarah Rivkind, 801-626-6207

Professors: Daniel Bedford, Bryan Dorsey, Eric C. Ewert, Julie Rich; **Associate Professors:** Jeremy Bryson, Alice Mulder; **Assistant Professors:** Ryan Frazier, Maria Groves

Geography is the study of the spatial organization, arrangement, function, movement, and interrelationships of phenomena on the surface of the earth. It is a science concerned with both physical and cultural phenomena and routinely interfaces with other disciplines in the natural sciences, social & behavioral sciences, humanities, business, and economics. With a global perspective and a robust geospatial toolkit (GIS, Satellite Imagery, Computer Mapping, GPS, and other Technologies.), the department prepares students to engage in the processes that create more sustainable environments and communities throughout the world.

Dr. Julie Rich with Geography students

Interdisciplinary Minors

The Department of Geography, Environment and Sustainability participates in the Asian Studies, Environmental Studies, Ethnic Studies, European Studies and Latin American Studies Minor Programs and the Urban and Regional Planning Emphasis Program. Students who wish to enroll in one of these programs should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Institutional Certificate

Geospatial Technology Certificate of Proficiency

Advisor: Dr. Eric C. Ewert, 801-626-6197, eewert@weber.edu

- **Grade Requirements:** A grade of "C" or better in all courses used toward the certificate (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 6 credit hours from the Department of Geography, and 12 credit hours from the Department of Earth and Environmental Sciences. The remaining 1-3 credit hours earned from completing either the Geospatial Internship (GEO/GEOG 2840) or the Geospatial Capstone (GEO/GEOG 2850) courses which will be taken in the department offering the course that particular year (alternates yearly).
- **Program Code:** 7060CP
- **CIPC:** 450702

Program Learning Outcomes

- Students will develop an understanding of and appreciation for the role of geography and geospatial technologies as well as acquire the basic technical skills used to address environmental and human spatial problem solving.
- Students will demonstrate how to effectively create and communicate geospatial data/results to others through cartographically accurate maps/dynamic products, technical reports, and multimedia presentations.
- Students will demonstrate understanding of basic geospatial concepts, such as data models, spatial databases, data projections and coordinate systems, topology, digitizing spatial data, metadata, and quality control.
- Students will demonstrate understanding of geospatial analysis that can be performed on vector and raster data collected from various platforms such as satellites / drones (Remote Sensing), GPS instruments, field maps. They will demonstrate the ability to perform multiple types of analysis, including spatial overlay, raster processing, statistics, terrain and hydrologic analysis, transportation networks, and modeling.
- Students will demonstrate the ability to work in a team environment to complete a set of geospatial tasks or a geospatial project that includes project objectives, methods, data collection, analysis and reporting results in a professional format through completion of a geospatial internship or capstone course.

Course Requirements for Certificate of Proficiency

Geography Courses Required (6 credit hours)

- GEOG 1790 - Exploring Our World Through Geospatial Technology **Credits: (3)**
- GEOG 2400 - Cartography and Map Design **Credits: (3)**

Earth and Environmental Science Courses Required (12 credit hours)

- GEO 1710 - Introduction to Geographic Information Systems (GIS) **Credits: (4)**
- GEO 1720 - Geospatial Analysis **Credits: (4)**
- GEO 2200 - Geospatial Data Acquisition **Credits: (4)**

Select at least 1 hour from the following:

GEO 2840/ GEOG 2840 INT - Geospatial Internship **(1-3)**

GEO 2850/ GEOG 2850 - Geospatial Capstone **(3)**

Additional information pertaining to the Northern Utah Geospatial Technology Education Program (NUGeoTec) may be found at: <https://www.weber.edu/nugeotec> or <http://weber.edu/geography>.

Sustainable Land Use Planning Certificate of Proficiency

The Certificate in Sustainable Land Use Planning (CSLUP) is a 19-credit hour upper division program designed to prepare students to enter the workforce immediately with solid skills and experience required for a wide variety of entry-level land use planning positions.

- **Certificate requirements:** Students must complete the requirements similar to those for the Planning track in Sustainable Land Use Planning (see Appendix), with the main difference being that students must take a course in GIS and complete an internship. The 19-credit hour course completion requirement will include four required courses and two elective courses.
- **Grade Requirements:** A grade of "C" or better in all courses used toward the certificate (a grade of "C-" is not acceptable). An overall GPA of 2.75 is required for the four core courses in the Certificate Program
- **Program Code:** 7057CP
- **CIPC:** 030206

Upon completion of the requirements, students who may or may not be pursuing a major or minor in Geography, will receive a certificate showing completion of the program requirements.

Required Courses

- GEOG 4410 SUS - Sustainable Land Use Planning **Credits: (3)**
- GEOG 4420 - Advanced Urban and Regional Planning **Credits: (3)**
- GEO 3710 - Introduction to Geographic Information Systems **Credits: (4)**
- GEOG 4890 INT - Cooperative Work Experience **Credits: (1-6)**

Select Two Elective Courses (6 credit hours)

- CM 2360 - Commercial Design and Codes **Credits: (3)**
- ECON 1100 SS - Environmental Issues and Economic Policy **Credits: (3)**
- ECON 3300 - Environmental Economics **Credits: (3)**
- GEOG 3210 - Urban Geography: The How and Why of Cities **Credits: (3)**
- GEOG 3360 - Economic Geography: Globalization, Development and Conflict **Credits: (3)**
- GEOG 2400 - Cartography and Map Design **Credits: (3)** *Recommended*
- GEOG 4400 - Cartography and Map Design **Credits: (3)** *Recommended*
- GEOG 4600 - Geospatial Programming and Online Methods **Credits: (3)**
- GEOG 3500 - Geography of Utah and the American West **Credits: (3)**
- GEO 1710 - Introduction to Geographic Information Systems (GIS) **Credits: (4)**
- GEO 1720 - Geospatial Analysis **Credits: (4)**
- GEO 2840 INT - Geospatial Internship **Credits: (1-3)**

- GEO 4840 INT - Geospatial Internship **Credits: (1-3)**
 - GEO 2850 - Geospatial Capstone **Credits: (3)**
 - GEO 4850 - Geospatial Capstone **Credits: (3)**
 - GEO 3720 - Geospatial Analysis **Credits: (4)**
 - HIST 3130 - Cities in US History **Credits: (3)**
 - HIST 3500 - Historic Preservation **Credits: (3)**
 - MICR 1153 LS - Public Health: Sex, Travel, Food, & Drugs **Credits: (3)**
 - MICR 3012 GLB - Microbiology and Global Public Health **Credits: (2)**
 - MICR 3484 - Environmental Microbiology **Credits: (4)**
 - OCRE 3500 - Community Recreation and Park Planning **Credits: (3)**
 - POLS 2700 - Introduction to Public Administration **Credits: (3)** *Recommended*
 - POLS 3700 - Bureaucratic Politics **Credits: (3)**
 - POLS 3750 - Urban Government and Politics **Credits: (3)**
 - SOC 3300 SUS - Environment and Society **Credits: (3)**
 - SOC 3840 - Cities and Urban Life **Credits: (3)**
 - SOC 3850 - Race & Ethnicity **Credits: (3)**
- *Other elective courses related to planning issues may be accepted with approval from the program advisor.*

Bachelor of Arts

Geography (BA)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Not required.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major, and an overall GPA in the major of 2.00. Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 39 of these is required for the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 21 of these are required within the geography major.
- **Program Code:** 7031BA with one of the following cohort codes for tracks: GEOG_TEACH (General Geography), GEOG_EARTH (Earth Systems and Features), GEOG_CLIMS (Climate Science), GEOG_GLOBL (Global Studies, Development, and Diversity), GEOG_ENVIR (Environment and Sustainability), GEOG_PLANN (Sustainable Urban and Regional Planning), GEOG_GEOSP (Geospatial Technology)
- **CIPC:** 450701

Advisement

All Geography students are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6207 for more information or to schedule an appointment.

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (see Enrollment Services and Information). No special admission or application requirements are needed for this program. (Also refer to the Department Advisor Referral List.)

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. Two of the following courses are required for the Geography major or Geography Teaching major: GEOG 1000, GEOG 1300, GEOG 1500 or GEOG 1520 (these courses will also satisfy general education requirements).

Program Learning Outcomes

- To provide students with knowledge about the earth's natural environment and its relationship to society.
- To provide students with knowledge about the world's peoples, nations, cultural environments, and spatial organization.
- To provide students with a good grounding in the modern technical skills of the discipline, including computer cartography, spatial analysis, spatially-oriented quantitative methods and techniques, and geographic information systems.
- To provide (some) students with training emphasizing the understanding of the planning profession and issues related to that field.
- To instill within each student an appreciation for the great variety of cultural forms and ways of thinking throughout the world, and to help students formulate a world view that uses this appreciation to become responsible citizens in America.

Major Course Requirements for BA Degree

The Geography BA requires 39 credit hours.

Required Geography Courses (18 credit hours)

All Geography majors take these 18 core required hours. Select an additional 18 hours from one of seven tracks listed below. Among those 18 hours, students are encouraged to select a course with a SUS designation and one with a CEL designation.

- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)** or
- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)**
- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)** or
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**
- GEOG 1790 - Exploring Our World Through Geospatial Technology **Credits: (3)**
- GEOG 2790 - Pathways and Careers in Geography, Environment & Sustainability **Credits: (1)**
- GEOG 3790 CRE - Research Methods in Geography **Credits: (3)** (Spring semester only)
- GEOG 4990 CRE - Senior Seminar in Geography **Credits: (3)** (Fall semester only)

Select 2 credits from the following:

- GEOG 1002 - GPS, Map Reading and Navigation **Credits: (1)**
- GEOG 1005 - Planet Earth: Local Field Studies **Credits: (1)**
- GEOG 2950 - Regional Field Studies or Field Trips **Credits: (1-3)**
- GEOG 4950 - Advanced Regional Field Studies or Field Trips **Credits: (1-3)**

Required Language Arts Courses (12 credit hours)

Students make take any combination of Foreign Language or Language Arts Courses to reach 12 credit hours. At least half of these must be upper division.

Required Regional Courses (3-9 credit hours)

Select at least 1 of the following.

- GEOG 3540 - Geography of Latin America and the Caribbean **Credits: (3)**
- GEOG 3590 - Geography of Europe: the Land and People who Built a World Power **Credits: (3)**
- GEOG 3640 - Geography of Asia: Development, Geopolitics and Environment **Credits: (3)**
- GEOG 3740 - Geography of Africa: Culture, Colonialism, Crises and Change **Credits: (3)**
- GEOG 3780 - Geographic Area Studies **Credits: (1-3)**

Elective Courses (6 credit hours)

Select any 2 upper division geography courses.

Bachelor of Science

Geography (BS)

- **Program Prerequisite:** Not required.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major, and an overall GPA in the major of 2.00. Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 36 of these is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 27 of these are required within the major.
- **Program Code:** 7031BS with one of the following cohort codes for tracks: GEOG_TEACH (General Geography), GEOG_EARTH (Earth Systems and Features), GEOG_CLIMS (Climate Science), GEOG_GLOBL (Global Studies, Development, and Diversity), GEOG_ENVIR (Environment and Sustainability), GEOG_PLANN (Sustainable Urban and Regional Planning), GEOG_GEOSP (Geospatial Technology)
- **CIPC:** 450701

Advisement

All Geography students are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6207 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). No special admission or application requirements are needed for this program. (Also refer to the Department Advisor Referral List.)

General Education

Refer to Degree Requirements for Bachelor of Science requirements. One of the following courses is required for the Geography major or Geography Teaching major: GEOG 1000, GEOG 1300, GEOG 1500, or GEOG 1520 (these courses will also satisfy general education requirements).

Program Learning Outcomes

- To provide students with knowledge about the earth's natural environment and its relationship to society.
- To provide students with knowledge about the world's peoples, nations, cultural environments, and spatial organization.
- To provide students with a good grounding in the modern technical skills of the discipline, including computer cartography, spatial analysis, spatially-oriented quantitative methods and techniques, and geographic information systems.
- To provide (some) students with training emphasizing the understanding of the planning profession and issues related to that field.
- To instill within each student an appreciation for the great variety of cultural forms and ways of thinking throughout the world, and to help students formulate a world view that uses this appreciation to become responsible citizens in America.

Required Geography Courses (18 credit hours)

All Geography majors take these 18 core required hours. Select an additional 18 hours from one of seven tracks listed below. Among those 18 hours, students are encouraged to select a course with a SUS designation and one with a CEL designation.

- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)** or
- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)**
- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)** or
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**
- GEOG 1790 - Exploring Our World Through Geospatial Technology **Credits: (3)**
- GEOG 2790 - Pathways and Careers in Geography, Environment & Sustainability **Credits: (1)**
- GEOG 3790 CRE - Research Methods in Geography **Credits: (3)** (Spring semester only)
- GEOG 4990 CRE - Senior Seminar in Geography **Credits: (3)** (Fall semester only)

Select 2 credits from the following:

- GEOG 1002 - GPS, Map Reading and Navigation **Credits: (1)**
- GEOG 1005 - Planet Earth: Local Field Studies **Credits: (1)**
- GEOG 2950 - Regional Field Studies or Field Trips **Credits: (1-3)**
- GEOG 4950 - Advanced Regional Field Studies or Field Trips **Credits: (1-3)**

Select a Track (18 credit hours)

- Track A: General Geography and Teaching (18 credit hours)
- Track B: Earth Systems and Features (18 credit hours)
- Track C: Climate Science (18 credit hours)
- Track D: Global Studies, Development, and Diversity (18 credit hours)

- Track E: Environment and Sustainability (18 credit hours)
- Track F: Sustainable Urban and Regional Planning (18 credit hours)
- Track G: Geospatial Technology (18 credit hours)

Geography Teaching (BS)

- **Program Prerequisite:** Must satisfy Teacher Education admission and licensure requirements (see Department of Teacher Education).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major and an overall GPA within the major of 2.00.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 36 of these is required for the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 21 of these are required within the Geography major.
- **Program Code:** 7032BS
- **CIPC:** 131332

Advisement

Teaching majors are encouraged to consult with advisors in both the College of Social and Behavioral Sciences (call 801-626-6207) and the College of Education (call 801-626-6269).

Admissions Requirements

Declare your program of study (see Enrollment Services and Information). Geography Teaching majors must satisfy Teacher Education admission and licensure requirements. (See Teacher Education Department.)

General Education

Refer to Degree Requirements of this catalog for Bachelor of Science requirements. The following general education course options for the Geography Teaching major also will satisfy general education requirements: GEOG 1000, GEOG 1300, GEOG 1500, and GEOG 1520.

Program Learning Outcomes

- To provide students with knowledge about the earth's natural environment and its relationship to society.
- To provide students with knowledge about the world's peoples, nations, cultural environments, and spatial organization.
- To provide students with a good grounding in the modern technical skills of the discipline, including computer cartography, spatial analysis, spatially-oriented quantitative methods and techniques, and geographic information systems.
- To provide (some) students with training emphasizing the understanding of the planning profession and issues related to that field.
- To instill within each student an appreciation for the great variety of cultural forms and ways of thinking throughout the world, and to help students formulate a world view that uses this appreciation to become responsible citizens in America.

Major Course Requirements for Geography Teaching BS Degree

Students completing the department's Track A (see Geography (BS)), GEOG 3500, and HIST 4500, in addition to the courses required by the Teacher Education program, will be recognized as having completed a program of study that is equivalent of the Geography Teaching major.

Required Geography Courses (18 credit hours)

All Geography majors take these 18 core required hours. Select an additional 18 hours from one of seven tracks listed below. Among those 18 hours, students are encouraged to select a course with a SUS designation and one with a CEL designation.

- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)** or
- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)**
- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)** or
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**
- GEOG 1790 - Exploring Our World Through Geospatial Technology **Credits: (3)**
- GEOG 2790 - Pathways and Careers in Geography, Environment & Sustainability **Credits: (1)**
- GEOG 3790 CRE - Research Methods in Geography **Credits: (3)** (Spring semester only)
- GEOG 4990 CRE - Senior Seminar in Geography **Credits: (3)** (Fall semester only)

Select 2 credits from the following:

- GEOG 1002 - GPS, Map Reading and Navigation **Credits: (1)**
- GEOG 1005 - Planet Earth: Local Field Studies **Credits: (1)**
- GEOG 2950 - Regional Field Studies or Field Trips **Credits: (1-3)**
- GEOG 4950 - Advanced Regional Field Studies or Field Trips **Credits: (1-3)**

Required Teaching Courses (6-9 credit hours)

GEOG 1500 is not required, but strongly suggested for teachers.

- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)**
- GEOG 3500 - Geography of Utah and the American West **Credits: (3)**
- HIST 4500 - Teaching Social Studies in Grades 5-12 **Credits: (3)**

Elective Courses (9-12 credit hours)

Students must take 9-12 additional hours. These may be physical, cultural, regional, or technique courses in Geography, support courses in related majors, or courses in the Teacher Education program to reach 36 credit hours.

Emphasis Option for Bachelor of Interdisciplinary Studies

Geography (BIS)

Geography Minor, Teaching Minor, and BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor programs is still accepting students.

- **Grade Requirements:** A grade of "C" or better in courses used toward the minor in addition to an overall GPA for these courses of 2.00 or higher.
- **Credit Hour Requirements:** Minimum of 21 credit hours in Geography courses for Geography and Teaching Minors. 18 credit hours for the Geography BIS.
- **Program Code:** Geography(7031), Geography Teaching(7032), Geography BIS (7031)
- **CIPC:** Geography(450701), Geography Teaching(131332), Geography BIS

Students who select the Geography Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department).

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for Minor or BIS

Geography Courses Required (12 credit hours)

- GEOG 1790 - Exploring Our World Through Geospatial Technology **Credits: (3)**
- GEOG 2790 - Pathways and Careers in Geography, Environment & Sustainability **Credits: (1)**

Choose one of the following courses

- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)**

Choose one of the following courses

- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)**
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**

Choose from the following courses to equal at least two credit hours

- GEOG 1002 - GPS, Map Reading and Navigation **Credits: (1)**
- GEOG 2950 - Regional Field Studies or Field Trips **Credits: (1-3)**
- GEOG 4950 - Advanced Regional Field Studies or Field Trips **Credits: (1-3)**

Elective Geography Courses (6 credit hours)

Select 6 additional credit hours of upper division Geography courses.

Minor

Environmental Studies Minor

Coordinator: Dr. Alice Mulder

Location: SS 302

Telephone: 801-626-6198

The Environmental Studies Minor is an interdisciplinary degree that focuses on the work of science in human activity. The curriculum is rooted in science to ground factual knowledge. However, its trunk is solidly comprised of social science and humanities courses because they teach the application of science in policy-making, business decisions and historical precedent even as they call upon the arts for their expression and upon ethics in consideration of health and social justice issues. The minor reaches across campus because all disciplines play an essential role in shaping environmental thought.

Students will gain an appreciation for local, national and international environmental issues and problems as well as their potential solutions. They will develop a personal philosophy about the environment's role in their lives and their own ability to affect nature and their physical environment by making ethical choices.

- **Grade Requirements:** A grade of "C" or better is required for all courses.
- **Credit Hour Requirements:** A minimum of 25 credit hours is required, at least 15 of these must be upper division (numbered 3000 or higher).
- **Program Code:** 3063
- **CIPC:** 030104

Students must select courses from outside their major academic department whenever a choice is offered. Students are encouraged to consider diversity in curriculum selection.

Course Requirements for Minor

Core Courses (19 credit hours)

Select a minimum of 19 hours from the following list

- PHYS 2090 PS SUS - Energy and the Environment **Credits: (3)**
- GEOG 3060 SUS - Environmental Issues: Local to Global Impacts and Solutions **Credits: (3) ***

- BTNY 1403 LS SUS - Principles of Environmental Science **Credits: (4)** (4 credit hours required)
or
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)** and
- GEOG 1005 - Planet Earth: Local Field Studies **Credits: (1)**
or
- GEO 1060 PS - Environmental Geosciences **Credits: (3)** and
- GEO 1065 - Environmental Geosciences Lab **Credits: (1)**

- ECON 1100 SS - Environmental Issues and Economic Policy **Credits: (3)** or
- ENGL 3520 HU - Literature of the Natural World **Credits: (3)** or
- HIST 3270 SUS - American Environmental History **Credits: (3)**

- ARTH 3030 - Native American Art of the Southwest: From the Anasazi to the Present **Credits: (4)** * or
- HNRS 3900 - Honors Colloquium **Credits: (3)**

Elective Courses (6 credit hours)

Select a minimum of 6 hours from the following list with no more than one class from each department

- BTNY 1303 LS - Plants and People **Credits: (3)**
- BTNY 2413 - Introduction to Natural Resource Management **Credits: (3)**
- BTNY 3454 - Plant Ecology **Credits: (4)** *
- CS 4830 - Advanced Topics in Computer Science **Credits: (1-4)** Social (and Environmental) Implications of Computing (1 credit hour required) *
- ENGL 3750 HU - Topics and Ideas in Literature **Credits: (3)**
- ENGL 4530 - American Literature: Realism and Naturalism **Credits: (3)**
- ENGL 4710 - Eminent Authors **Credits: (3)**
as approved by the Environmental Studies Advisor
- MENG 6030 - Studies in Literary Theory and Criticism **Credits: (3)**
- GEO 1130 PS - Introduction to Meteorology **Credits: (3)**
- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)**
- GEO 3010 SUS - Oceans and Climate **Credits: (3)** *
- GEOG 3050 - Weather and Climate: from daily storms to decades of drought **Credits: (3)** *
- GEOG 3070 - Wetland Environments **Credits: (3)** *
- GEOG 3080 - Arid Lands: Resources, Landforms, and the Quest for Water **Credits: (3)** *
- GEOG 3090 - Arctic and Alpine Environments **Credits: (3)** *
- PHIL 3700 - Environmental Philosophy **Credits: (3)**
- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)** *
- HNRS 1540 HU - Perspectives in the Humanities **Credits: (3)**
- HNRS 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
as approved by the Environmental Studies Advisor
- MICR 3484 - Environmental Microbiology **Credits: (4)** *
- MICR 3502 SUS - Environmental Health **Credits: (2)** *
- PHYS 3570 - Foundations of Science Education **Credits: (3)**
- OCRE 4550 - Outdoor Education Philosophies & Principles **Credits: (3)**
- SOC 3300 SUS - Environment and Society **Credits: (3)**
- ZOOL 1010 LS - Animal Biology **Credits: (3)**
- ZOOL 3450 CRE - Ecology **Credits: (4)** *
- ZOOL 3500 - Conservation Biology **Credits: (3)** *

Note:

** A prerequisite or consent of the instructor is required. Most prerequisites are in the core curriculum.*

Geography Minor

Geography Minor, Teaching Minor, and BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor programs is still accepting students.

- **Grade Requirements:** A grade of "C" or better in courses used toward the minor in addition to an overall GPA for these courses of 2.00 or higher.
- **Credit Hour Requirements:** Minimum of 21 credit hours in Geography courses for Geography and Teaching Minors. 18 credit hours for the Geography BIS.
- **Program Code:** Geography(7031), Geography Teaching(7032), Geography BIS (7031)
- **CIPC:** Geography(450701), Geography Teaching(131332), Geography BIS

Students who select the Geography Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department).

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for Minor or BIS

Geography Courses Required (12 credit hours)

- GEOG 1790 - Exploring Our World Through Geospatial Technology **Credits: (3)**
- GEOG 2790 - Pathways and Careers in Geography, Environment & Sustainability **Credits: (1)**

Choose one of the following courses

- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)**

Choose one of the following courses

- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)**
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**

Choose from the following courses to equal at least two credit hours

- GEOG 1002 - GPS, Map Reading and Navigation **Credits: (1)**
- GEOG 2950 - Regional Field Studies or Field Trips **Credits: (1-3)**
- GEOG 4950 - Advanced Regional Field Studies or Field Trips **Credits: (1-3)**

Elective Geography Courses (9 credit hours)

Select 9 additional credit hours of upper division Geography courses.

Geography Teaching minors must also take HIST 4500 - Teaching Social Studies in Grades 5-12 **(3)** and GEOG 3500 - Geography of Utah and the American West **(3)** in addition to the courses required by the Teacher Education program. GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **(3)** is recommended for teachers.

Teaching Minor

Geography Teaching Minor

Geography Minor, Teaching Minor, and BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor programs is still accepting students.

- **Grade Requirements:** A grade of "C" or better in courses used toward the minor in addition to an overall GPA for these courses of 2.00 or higher.
- **Credit Hour Requirements:** Minimum of 21 credit hours in Geography courses for Geography and Teaching Minors. 18 credit hours for the Geography BIS.
- **Program Code:** Geography(7031), Geography Teaching(7032), Geography BIS (7031)
- **CIPC:** Geography(450701), Geography Teaching(131332), Geography BIS

Students who select the Geography Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department).

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for Minor or BIS

Geography Courses Required (12 credit hours)

- GEOG 1790 - Exploring Our World Through Geospatial Technology **Credits: (3)**
- GEOG 2790 - Pathways and Careers in Geography, Environment & Sustainability **Credits: (1)**

Choose one of the following courses

- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)**

Choose one of the following courses

- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)**
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**

Choose from the following courses to equal at least two credit hours

- GEOG 1002 - GPS, Map Reading and Navigation **Credits: (1)**
- GEOG 2950 - Regional Field Studies or Field Trips **Credits: (1-3)**
- GEOG 4950 - Advanced Regional Field Studies or Field Trips **Credits: (1-3)**

Elective Geography Courses (9 credit hours)

Select 9 additional credit hours of upper division Geography courses.

Geography Teaching minors must also take HIST 4500 - Teaching Social Studies in Grades 5-12 **(3)** and GEOG 3500 - Geography of Utah and the American West **(3)** in addition to the courses required by the Teacher Education program. GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **(3)** is recommended for teachers.

Department of Child and Family Studies

Department Chair: Ryan Dunn, 385-244-0141

Location: McKay Education Building

Telephone Contact: Danielle Orozco 801-626-7151

Advisor: Darcy Gregg, 801-626-6411

Professors: Carrie Ota, Wei Qiu, Paul Schvaneveldt; **Associate Professors:** Mark Adams, Sheila Anderson, Teri Henke, Daniel Hubler; **Assistant Professors:** Charles Dunn, Keith Osai

The Department of Child and Family Studies offers a broad personal and professional education by providing majors in the following areas: Early Childhood (Bachelor's and Associate of Applied Science), Early Childhood Education, and Family Studies. The AAS Early Childhood and BS Family Studies are also fully online. Minors in Child Development and Family Studies are also offered. Child and Family Studies is also an area available for a Bachelor of Interdisciplinary Studies (BIS).

Learning is enhanced by the Melba S. Lehner Children's School where preschool laboratory experience is provided for practical application. Practical experience is built into all areas of study. Honors credit is available for students who desire greater depth. Preparation for graduate study can be pursued in any area represented in the department.

Child and Family Studies Department Policies

All Child and Family Studies courses must have been taken within the last 10 years to count towards major/minor requirements.

The Child and Family Studies Department will only accept two non-articulated transfer courses for the major/minor.

If a grade in a Child and Family Studies major/minor course does not meet the minimum requirement for graduation, the student may retake the course once. In special circumstances, by the judgment of the department chair, the student may petition the Family Studies or Early Childhood Committee, as appropriate, to graduate with the lower grade. The Retention & Referral Policy can be found at https://www.weber.edu/wsuiimages/chfam/CHF_Retention18.pdf.

All students with a major/minor in Child & Family Studies are strongly encouraged to contact the department academic advisor in McKay Education Building (801-626-6411) early in their academic career for advisement and declaration of a major and/or minor.

Students must undergo a background check and be fingerprinted for major and course requirements.

Early Childhood Laboratory

The Melba S. Lehner Children's School serves as an early childhood laboratory to give students practical experience in early childhood environments. Students must complete Child and Family Studies prerequisite major courses at a B-level or better and apply to the Director of the Melba S. Lehner Children's School one semester prior to student teaching. Other practical experience can be arranged with a faculty advisor.

Associate of Applied Science

Early Childhood (AAS)

The Department of Child and Family Studies offers an Associate of Applied Science (AAS) degree in Early Childhood (EC) that prepares students to support the development and learning of young children (birth to 8 years) in a variety of programs such as public schools, Head Start, child care, and early intervention. Graduates can become prekindergarten teachers or program administrators, classroom assistants, home visitors or program specialists in state agencies. This is an asynchronous online program with 150 hours of applied in-person field experiences. This degree is recommended as a foundation for our bachelor's degrees in Early Childhood Education to teach kindergarten to third grade, or Early Childhood for community services work with young children and families.

- **Program Prerequisite:** Before beginning this program, a student must see the department advisor in McKay Education Building (801-626-6411).
- **Grade Requirements:** A cumulative GPA of 2.50 and a grade at least a "C" in CHF 1500 and B- or better in ECED major courses. If a grade in a major course does not meet the minimum requirement for graduation, the student may retake the course. In special circumstances, by the judgment of the department chair, the student may petition to the Early Childhood Education Program, to graduate with the lower grade.
- **Credit Hour Requirements:** A total of 60 credit hours is required for graduation; 26 of these are required within the major.
- **Program Code:** 5000AAS
- **CIPC:** 190706

Advisement

Students must follow the Department of Child and Family Studies Advisement procedures. Contact the department advisor located in the McKay Education Building (801-626-6411). (Also refer to the Department Advisor Referral List.)

Admission Requirements

Completed the program application. Meet with the department and faculty advisor. Declare your program of study (see Program of Study (Major/Minor) Declaration). With the Department of Child and Family Studies Academic Advisor. Contact the department advisor, 801-626-6411.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. CHF 1500 will fulfill both a major and general education requirement and is prerequisite to most Child and Family Studies Department major courses. To fulfill the Math requirement, any Quantitative Literacy approved course will complete the requirement.

Program Learning Outcomes

Successful candidates demonstrate the National Association for the Education of Young Children Professional Standards and Competencies for an Early Childhood Education II designation.

- 1. Child Development and Learning in Context
 - 1a. Understanding of the development period of early childhood from birth through age 8 across developmental domains.
 - 1b. Understand each child as an individual with unique developmental variations.
 - 1c. Understand that children learn and develop within relationships and within multiple contexts, including families, cultures, languages, communities, and society.
 - 1d. Use this multidimensional knowledge to make evidence-based decisions about how to carry out their responsibilities.
- 2. Family-Teacher Partnerships and Community Connections.
 - 2a. Know about, understand, and value the diversity of families.
 - 2b. Collaborate as partners in families in young children's development and learning through respectful, reciprocal relationships and engagement.
 - 2c. Use community resources to support young children's learning and development and to support families, and build partnerships between early learning settings, schools, and community organizations and agencies.
- 3. Child Observation, Documentation, and Assessment.
 - 3a. Understand that assessments (formal and informal, formative and summative) are conducted to make informed choices about instruction and for planning in early learning settings.
 - 3b. Use screening and assessment tools in ways that are ethically grounded and developmentally, culturally, and linguistically appropriate in order to document developmental progress and promote positive outcomes for each child.
 - 3c. Build assessment partnerships with families and professional colleagues.
- 4. Developmentally, Culturally, and Linguistically Appropriate Teaching Practices.
 - 4a. Understand and demonstrate positive, caring, supportive relationships and interactions as the foundation of early childhood educators' work with young children.
 - 4b. Understand use teaching skills that are responsive to the learning trajectories of young children and to the needs of each child, recognizing that differentiating instruction, incorporating play as a core teaching practice, and supporting the development of executive function skills are critical for young children.
 - 4c. Use of a broad repertoire of developmentally appropriate, culturally and linguistically relevant, anti-bias, evidence-based teaching skills and strategies that reflect the principles of universal design for learning.
- 5. Integration of Academic Content in the Early Childhood Curriculum
 - 5a. Understand content knowledge - the central concepts, methods and tools of inquiry, structure, and resources for the academic disciplines.
 - 5b. Understand pedagogical content knowledge - how young children learn in each discipline - and how to use the teacher knowledge and practices described in standards 1 through 4 to support young children's learning in each content area.
- 6. Professionalism as an Early Childhood Educator
 - 6a. Identify and involve themselves with the early childhood field and serve as informed advocates for young children, families, and the profession.
 - 6b. Know about and uphold ethical and other early childhood professional guidelines.
 - 6c. Use professional communication skills, including technology-mediated strategies, to effectively support young children's learning and development and to work with families and colleagues.
 - 6d. Engage in continuous, collaborative learning to inform practice.
 - 6e. Develop and sustain the habit of reflective and intentional practice in their daily work with young children and as members of the early childhood profession.

Major Course Requirements for AAS Degree

Child & Family Studies Courses Required (minimum of 26 credit hours)

- CHF 1500 SS/CC - Human Development **Credits: (3)**
- ECED 2110 - Self-Compassion for Sustaining Work with Children **Credits: (2)**
- ECED 2500 - Development of the Child **Credits: (3)**
- ECED 2600 - Introduction to Early Childhood Education & Care **Credits: (3)**
- ECED 2620 - Planning Creative Experiences for Young Children **Credits: (3)**
- ECED 2640 - Collaborating with Families of Young Children. **Credits: (3)**
- ECED 2670 - Early Childhood Integrated Curriculum and Assessment **Credits: (3)**
- ECED 2610 - Child Guidance **Credits: (3)**
- ECED 2860 INT - Practicum in Early Childhood **Credits: (1-6)**
- ECED 2990 - Seminar in Early Childhood Education **Credits: (1)**

Institutional Certificate

Early Childhood Educator I Certificate of Proficiency

The Early Childhood Educator I Certificate of Proficiency at Weber State University offers specialized training for teaching assistants to sustain high-quality environments for young children birth- 8 years in public and private schools, child care, and community service programs such as public schools, Head Start, home visiting, or early intervention. This is an online asynchronous program with 60 hours of applied in-person field experience. This certificate is the first step in becoming a lead teacher, obtaining a Kindergarten-3rd grade educator license, and program leadership through an AAS or BS in Early Childhood or the BS in Early Childhood Education.

- **Program Prerequisite:** Before beginning this program, a student must see the department advisor (801-626-6411).
- **Grade Requirements:** A grade of at least a "C" in CHF 1500 and 2400, and B- or better in ECED courses.
- **Credit Hour Requirements:** A total of 18 credit hours is required for completion of the certificate program.
- **Program Code:** 7066CP
- **CIPC:** 131501

Advisement

All advising for the Early Childhood Educator I Certificate of Proficiency will be conducted by the Department of Child and Family Studies Advisor (801-626-6411).

Admission Requirements

The program is open to all students and has no special admissions prerequisites or requirements.

Program Learning Outcomes

Successful candidates demonstrate the National Association for the Education of Young Children Early Childhood Education I competencies for the national professional standards.

- 1. Child Development and Learning in Context
 - 1a. Understanding of the developmental period of early childhood from birth through age 8 across developmental domains.
 - 1b. Understand each child as an individual with unique developmental variations.
 - 1c. understand that children learn and develop within relationships and within multiple contexts, including families, cultures, languages, communities, and society.
 - 1d. use this multidimensional knowledge to make evidence-based decisions about how to carry out their responsibilities
- 2. Family-Teacher Partnerships and Community Connections.
 - 2a. Know about, understand, and value the diversity of families.
 - 2b. Collaborate as partners with families in young children's development and learning through respectful, reciprocal relationships and engagement.
 - 2c. Use community resources to support young children's learning and development and to support families, and build partnerships between early learning settings, schools, and community organizations and agencies.
- 3. Child Observation, Documentation, and Assessment.
 - 3a. Understand that assessments (formal and informal, formative and summative) are conducted to make informed choices about instruction and for planning in early learning settings.
 - 3b. Know a wide range of types of assessments, their purposes, and their associated methods and tools.
 - 3c. Use screening and assessment tools in ways that are ethically grounded and developmentally, ability, culturally, and linguistically appropriate in order to document developmental progress and promote positive outcomes for each child. 3d: Build assessment partnerships with families and professional colleagues.
- 4. Developmentally, Culturally, and Linguistically Appropriate Teaching Practices
 - 4a. Understand and demonstrate positive, caring, supportive relationships and interactions as the foundation of early childhood educators' work with young children.
 - 4b. Understand and use teaching skills that are responsive to the learning trajectories of young children and to the needs of each child, recognizing that differentiating instruction, incorporating play as a core teaching practice, and supporting the development of executive function skills are critical for young children.
 - 4c. Use a broad repertoire of developmentally appropriate, culturally and linguistically relevant, anti-bias, evidence-based teaching skills and strategies that reflect the principles of universal design for learning.
- 5. Knowledge, Application, and Integration of Academic Content in the Early Childhood Curriculum
 - 5a. Understand content knowledge- the central concepts, methods and tools of inquiry, and structure-and resources for the academic disciplines in an early childhood curriculum.
 - 5b. Understand pedagogical content knowledge-how young children learn in each discipline-and how to use the teacher knowledge and practices described in Standards 1 through 4 to support young children's learning in each content area.
 - 5c. Modify teaching practices by applying, expanding, integrating, and updating their content knowledge in the disciplines, their knowledge of curriculum content resources, and their pedagogical content knowledge.
- 6. Professionalism as an Early Childhood Educator
 - 6a. Identify and involve themselves with the early childhood field and serve as informed advocates for young children, families, and the profession.
 - 6b. Know about and uphold ethical and other early childhood professional guidelines.
 - 6c. Use professional communication skills, including technology-mediated strategies, to effectively support young children's learning and development and to work with families and colleagues.
 - 6d. Engage in continuous, collaborative learning to inform practice.
 - 6e. Develop and sustain the habit of reflective and intentional practice in their daily work with young children and as members of the early childhood profession.

Major Course Requirements

Required Course (18 credit hours)

Semester 1

- ECED 2600 - Introduction to Early Childhood Education & Care **Credits: (3)**
- ECED 2610 - Child Guidance **Credits: (3)**
- CHF 1500 SS/CC - Human Development **Credits: (3)**

Semester 2

- ECED 2500 - Development of the Child **Credits: (3)**
- ECED 2620 - Planning Creative Experiences for Young Children **Credits: (3)**
- CHF 2400 SS/CC - Family Relations **Credits: (3)** or an advisor approved substitution (EDUC 1010, NUTR 1020, PSY 1010, MUSC 1010, GEOG 1000, ENTR 1002, COMM 2110, ART 1010)

Bachelor of Science

Early Childhood (BS)

The Department of Child and Family Studies offers a Bachelor of Science (B.S) major in Early Childhood (EC) for preparation to teach in prekindergarten classrooms, early childhood program administration, and work in community agencies providing services for young children and families such as Head Start, home visiting, and early intervention. Students gain a strong foundation in child development and guidance, curriculum design for inclusion, partnering with families, and leadership. This is an online asynchronous program and 460 hours of applied in-person field experience.

Students who wish to obtain certification to teach in kindergarten through 3rd grade graduate with a major in Early Childhood Education.

- **Program Prerequisite:** Not required.
- **Minor:** Required. In lieu of a minor, a specialization of 15 credit hours may be substituted as approved by the advisor. Six of these hours must be upper division (courses numbered 3000 or above).
- **Grade Requirements:** Early Childhood students must meet minimum major course grade requirements and maintain a cumulative GPA of 2.50 or higher for all college courses. Students must receive at least a "C" in CHF 1500 & 2400, and a B- or better in each major course. If a grade in a major course does not meet the minimum requirement for graduation, the student may retake the course. In special circumstances, by the judgment of the department chair, the student may petition to the Early Childhood/Early Childhood Education Program to graduate with the lower grade.
- **Credit Hour Requirements:** A minimum of 120 credit hours is required for graduation. The program requires the following: Early Childhood Major required and elective courses: 75 credits; Specialization or minor: 15-18 credits. A minimum of 40 credit hours must be upper division (courses numbered 3000 and above); 37-43 are required within the major core courses.
- **Program Code:** 5000BS
- **CIPC:** 190706

Advisement

Students must follow the Department of Child and Family Studies Advisement procedures. Contact the department advisor located in the McKay Education Building (801-626-6411). Every student is assigned a Faculty Advisor. Also refer to the Child and Families Studies Advising.

Admission Requirements

Contact the Child and Family Studies Department Academic Advisor located in the McKay Education Building (801-626-6411). Every student is assigned a Faculty Advisor. Also refer to the Child and Family Studies Advising.

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (see Declaring Your Major or Minor under Child and Family Studies Admissions) with the Department of Child and Family Studies Academic Advisor. Contact the department advisor, 801-626-6411, Child and Family Studies Advising.

To complete ECED 4720 Early Childhood Education Student Teaching Pre-K in the Melba S. Lehner Children's School, students must submit an Early Childhood Student Teaching Application and obtain paperwork including clearance of criminal background and CPR/First Aid and Food Handling certifications. Look for more information on Early Childhood On-Campus Field Experience.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. CHF 1500 will satisfy a general education requirement and is prerequisite to most major courses.

Program Learning Outcomes

Successful candidates demonstrate the National Association for the Education of Young Children Professional Standards and Competencies for an Early Childhood Education III designation.

- 1. Child Development and Learning in Context
 - 1a. Understanding of the developmental period of early childhood from birth through age 8 across developmental domains.
 - 1b. Understand each child as an individual with unique developmental variations.
 - 1c. understand that children learn and develop within relationships and within multiple contexts, including families, cultures, languages, communities, and society.
 - 1d. use this multidimensional knowledge to make evidence-based decisions about how to carry out their responsibilities
- 2. Family-Teacher Partnerships and Community Connections.
 - 2a. Know about, understand, and value the diversity of families.
 - 2b. Collaborate as partners with families in young children's development and learning through respectful, reciprocal relationships and engagement.
 - 2c. Use community resources to support young children's learning and development and to support families, and build partnerships between early learning settings, schools, and community organizations and agencies.
- 3. Child Observation, Documentation, and Assessment.
 - 3a. Understand that assessments (formal and informal, formative and summative) are conducted to make informed choices about instruction and for planning in early learning settings.
 - 3b. Know a wide range of types of assessments, their purposes, and their associated methods and tools.

- 3c. Use screening and assessment tools in ways that are ethically grounded and developmentally, ability, culturally, and linguistically appropriate in order to document developmental progress and promote positive outcomes for each child. 3d: Build assessment partnerships with families and professional colleagues.
- 4. Developmentally, Culturally, and Linguistically Appropriate Teaching Practices
 - 4a. Understand and demonstrate positive, caring, supportive relationships and interactions as the foundation of early childhood educators' work with young children.
 - 4b. Understand and use teaching skills that are responsive to the learning trajectories of young children and to the needs of each child, recognizing that differentiating instruction, incorporating play as a core teaching practice, and supporting the development of executive function skills are critical for young children.
 - 4c. Use a broad repertoire of developmentally appropriate, culturally and linguistically relevant, anti-bias, evidence-based teaching skills and strategies that reflect the principles of universal design for learning.
- 5. Knowledge, Application, and Integration of Academic Content in the Early Childhood Curriculum
 - 5a. Understand content knowledge- the central concepts, methods and tools of inquiry, and structure-and resources for the academic disciplines in an early childhood curriculum.
 - 5b. Understand pedagogical content knowledge-how young children learn in each discipline-and how to use the teacher knowledge and practices described in Standards 1 through 4 to support young children's learning in each content area.
 - 5c. Modify teaching practices by applying, expanding, integrating, and updating their content knowledge in the disciplines, their knowledge of curriculum content resources, and their pedagogical content knowledge.
- 6. Professionalism as an Early Childhood Educator
 - 6a. Identify and involve themselves with the early childhood field and serve as informed advocates for young children, families, and the profession.
 - 6b. Know about and uphold ethical and other early childhood professional guidelines.
 - 6c. Use professional communication skills, including technology-mediated strategies, to effectively support young children's learning and development and to work with families and colleagues.
 - 6d. Engage in continuous, collaborative learning to inform practice.
 - 6e. Develop and sustain the habit of reflective and intentional practice in their daily work with young children and as members of the early childhood profession.

Major Course Requirements for BS Degree

Pre Core Course Required (6 credits)

Students must receive at least a "C" in CHF 1500& 2400.

- CHF 1500 SS/CC - Human Development **Credits: (3)** (*Satisfies General Education Requirement.*)
- CHF 2400 SS/CC - Family Relations **Credits: (3)**

Core Courses Required (63 credits/37-43 upper division)

- ECED 2110 - Self-Compassion for Sustaining Work with Children **Credits: (2)** or
- ECED 4110 - Self-Compassion for Sustaining Work with Children **Credits: (2)**
- ECED 2500 - Development of the Child **Credits: (3)**
- ECED 2600 - Introduction to Early Childhood Education & Care **Credits: (3)**
- ECED 2610 - Child Guidance **Credits: (3)**
- ECED 2620 - Planning Creative Experiences for Young Children **Credits: (3)**

- ECED 2670 - Early Childhood Integrated Curriculum and Assessment **Credits: (3)**
 - ECED 2860 INT - Practicum in Early Childhood **Credits: (1-6)**
 - ECED 2990 - Seminar in Early Childhood Education **Credits: (1)**
 - ECED 3500 - Young Children: Adversity and Resilience **Credits: (3)**
 - ECED 3570 - Infants and Toddlers: Development and Practice **Credits: (3)**
 - ECED 3640 - Collaborating with Families of Young Children **Credits: (3)**
- OR**
- ECED 2640 - Collaborating with Families of Young Children. **Credits: (3)**
 - ECED 4130 - Language Development and Emergent Literacy in Early Childhood **Credits: (3)**
 - ECED 4230 - Observing and Assessing Children in Context **Credits: (3)**
 - ECED 4250 - Inclusive Early Childhood Intervention and Special Education **Credits: (3)**
 - ECED 4260 - Inclusive Early Childhood Curriculum **Credits: (3)**
 - ECED 4670 - STEM in Early Childhood **Credits: (3)**
 - ECED 4710 - Advanced Guidance and Planning for Early Childhood Education **Credits: (1-3) ***
 - ECED 4720 INT - Student Teaching Birth-5 **Credits: (6)** (6 credit hours required) *
 - ECED 4730 - Early Childhood/Early Childhood Education Program Development **Credits: (3)**
 - ECED 4820 - Child Observation Seminar **Credits: (1)**
 - ECED 4890 INT - Internship in Early Childhood **Credits: (1-6)**
 - ECED 4990 - Seminar in Early Childhood Education **Credits: (3)**
- * ECED 4710 and ECED 4720 are taken concurrently in fall or spring semester. Check for more information on Early Childhood On-Campus Field Experience.**

Major Elective Courses (6 credits)

You may take the following courses for a total of 6 credit hours required for this major degree.

- ECED 2910 - Children & Families: Variable Titles **Credits: (1-3)**
- ECED 4910 - Children & Families: Variable Titles **Credits: (1-3)**
- ECED 4220 - Understanding Children Beyond Behavior **Credits: (3)**
- FAM 4300 - Latino Child and Family Development **Credits: (3)**
- FAM 4450 - Children and Families in the Medical Setting **Credits: (3)**
- ECED 4260 - Inclusive Early Childhood Curriculum **Credits: (3)**
- ECED 4270 - Young Children's Play **Credits: (3)**
- ECED 4860 INT - Practicum in Early Childhood **Credits: (1-6)** (2 credits with ECED 4720)
- ECED 4861 INT - Practicum in K-3 **Credits: (1-3)**
- EDUC 3430 - Creative Processes in the Elementary School **Credits: (3)**
- DANC 3640 INT - Elementary Dance Pedagogy **Credits: (3)**
- MUSC 3824 - Music for Elementary Teachers **Credits: (3)**
- THEA 4603 - Creative Drama **Credits: (3)**

Early Childhood Education (BS)

The Department of Child and Family Studies offers a Bachelor of Science (B.S.) major in Early Childhood Education (ECE) teach Pre-Kindergarten through 3rd Grade. Students prepare to teach in a Pre-K-3rd grade public or private school classroom and Head Start. This is an online asynchronous program with over 500 hours of applied in-person field experience that includes 60 days of student teaching in public schools.

- **Program Prerequisite:** Provisional admission to the ECE Program (see the admission requirements described under Child and Family Studies Admissions).
- **Area of Specialization:** Required. ECE majors meet all requirements for a specialization area in "Early Childhood Education Birth-5 Teaching" upon completing the program.
- **Grade Requirements:** Early Childhood Education majors must maintain a cumulative GPA of 3.00 or higher in all college/university work and at least a "B-" grade in each ECE major required course to continue in the program. If a grade in a major course does not meet the minimum requirement for graduation, the student may retake the course once. If the student retakes a course, the student will receive the grade earned in the second course attempt. In special circumstances, by the judgment of the department chair, the student may petition to the Early Childhood Education Program, as appropriate, to graduate with the lower grade. Early Childhood Education majors must also achieve at least a "C" grade in CHF 1500 SS/CC, MATH 2010, MATH 2015, and MATH 2020 QL.
- **Credit Hour Requirements:** A minimum of 120 credit hours is required for a bachelor's degree; 60 of these are required within the major.
- **Program Code:** 5002BS
- **CIPC:** 131210

Program Learning Outcomes

Successful candidates demonstrate competencies for the Utah Effective Teaching Standards and National Association for the Education of Young Children Early Childhood Education III professional designation.

- 1. Child Development and Learning in Context
 - 1a. Understanding of the developmental period of early childhood from birth through age 8 across developmental domains.
 - 1b. Understand each child as an individual with unique developmental variations.
 - 1c. understand that children learn and develop within relationships and within multiple contexts, including families, cultures, languages, communities, and society.
 - 1d. use this multidimensional knowledge to make evidence-based decisions about how to carry out their responsibilities
- 2. Family-Teacher Partnerships and Community Connections.
 - 2a. Know about, understand, and value the diversity of families.
 - 2b. Collaborate as partners with families in young children's development and learning through respectful, reciprocal relationships and engagement.
 - 2c. Use community resources to support young children's learning and development and to support families, and build partnerships between early learning settings, schools, and community organizations and agencies.
- 3. Child Observation, Documentation, and Assessment.
 - 3a. Understand that assessments (formal and informal, formative and summative) are conducted to make informed choices about instruction and for planning in early learning settings.
 - 3b. Know a wide range of types of assessments, their purposes, and their associated methods and tools.
 - 3c. Use screening and assessment tools in ways that are ethically grounded and developmentally, ability, culturally, and linguistically appropriate in order to document developmental progress and promote positive outcomes for each child. 3d: Build assessment partnerships with families and professional colleagues.
- 4. Developmentally, Culturally, and Linguistically Appropriate Teaching Practices
 - 4a. Understand and demonstrate positive, caring, supportive relationships and interactions as the foundation of early childhood educators' work with young children.
 - 4b. Understand and use teaching skills that are responsive to the learning trajectories of young children and to the needs of each child, recognizing that differentiating instruction, incorporating play as a core teaching practice, and supporting the development of executive function skills are critical for young children.

- 4c. Use a broad repertoire of developmentally appropriate, culturally and linguistically relevant, anti-bias, evidence-based teaching skills and strategies that reflect the principles of universal design for learning.
- 5. Knowledge, Application, and Integration of Academic Content in the Early Childhood Curriculum
 - 5a. Understand content knowledge- the central concepts, methods and tools of inquiry, and structure-and resources for the academic disciplines in an early childhood curriculum.
 - 5b. Understand pedagogical content knowledge-how young children learn in each discipline-and how to use the teacher knowledge and practices described in Standards 1 through 4 to support young children's learning in each content area.
 - 5c. Modify teaching practices by applying, expanding, integrating, and updating their content knowledge in the disciplines, their knowledge of curriculum content resources, and their pedagogical content knowledge.
- 6. Professionalism as an Early Childhood Educator
 - 6a. Identify and involve themselves with the early childhood field and serve as informed advocates for young children, families, and the profession.
 - 6b. Know about and uphold ethical and other early childhood professional guidelines.
 - 6c. Use professional communication skills, including technology-mediated strategies, to effectively support young children's learning and development and to work with families and colleagues.
 - 6d. Engage in continuous, collaborative learning to inform practice.
 - 6e. Develop and sustain the habit of reflective and intentional practice in their daily work with young children and as members of the early childhood profession.

Admission Requirements

Declare your program of study (see Program of Study (Major/Minor) Declaration). Early Childhood Education majors must meet the Early Childhood Education admission and licensure requirements (see the admission requirements under Child and Family Studies Admissions). The minimum GPA requirement is 2.75 or 3.0 in the last 30 credit hours (see Teacher Education Application).

General Education

I. University and General Education Requirements

Refer to Degree Requirements for Bachelor of Science requirements. Following the suggested guidelines below will ensure both University and General Education Requirements are met.

The following courses required for the Early Childhood Education major will also satisfy general education requirements: COMM 1020 HU or COMM 2110 HU CEL, MATH 2020 QL, and CHF 1500 SS/CC. Meeting the general education science requirements may not meet education science requirements.

Major Course Requirements for BS Degree resulting in a PreK-3 Utah Educator License

II. Support Courses Required (38-39 credit hours)

- CHF 1500 SS/CC - Human Development **Credits: (3) ***
- ECED 2600 - Introduction to Early Childhood Education & Care **Credits: (3)**
- ECED 2110 - Self-Compassion for Sustaining Work with Children **Credits: (2)**
- or**
- ECED 4110 - Self-Compassion for Sustaining Work with Children **Credits: (2)**

- ECED 2500 - Development of the Child **Credits: (3)**
- ECED 2610 - Child Guidance **Credits: (3)**
- ECED 2620 - Planning Creative Experiences for Young Children **Credits: (3)**
- ECED 2670 - Early Childhood Integrated Curriculum and Assessment **Credits: (3)**
- ECED 2860 INT - Practicum in Early Childhood **Credits: (1-6)**
- ECED 2990 - Seminar in Early Childhood Education **Credits: (1)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or *
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)** *
- MATH 2010 - Arithmetic for Elementary Teachers **Credits: (3)**
- MATH 2015 - Algebra for Elementary Teachers **Credits: (3)**
- MATH 2020 QL - Geometry for Elementary Teachers **Credits: (3)** *

** Also fulfills the General Education requirements.*

At least one course from the following:

- ART 1030 CA - Studio Art for the Non-Art Major **Credits: (3)**
- EDUC 3430 - Creative Processes in the Elementary School **Credits: (3)**
- DANC 3640 INT - Elementary Dance Pedagogy **Credits: (3)**
- MUSC 3824 - Music for Elementary Teachers **Credits: (3)**
- THEA 4603 - Creative Drama **Credits: (3)**

III. Major Core Courses Required (60 credit hours)

The course blocks suggested below are designed to include all ECED and Teacher Education levels courses required for the Early Childhood Education BS major without conflicting class schedules. Taking classes outside of the stated sequence might delay graduation.

Note: Apply to the WSU Teacher Education Program. Admission to the TED Program is required prior to enrollment in Teacher Education levels courses.

ECE Block 1 (15 credits)

- ECED 4250 - Inclusive Early Childhood Intervention and Special Education **Credits: (3)**
- ECED 4260 - Inclusive Early Childhood Curriculum **Credits: (3)**
- ECED 3500 - Young Children: Adversity and Resilience **Credits: (3)**
- EDUC 3270 - Addressing Differentiation, Collaboration and IEPs for Inclusive Teaching **Credits: (3)**
- EDUC 3565 - Elementary English Language Arts: Evaluation, Remediation and Supports **Credits: (2)**
- ECED 4861 INT - Practicum in K-3 **Credits: (1-3)**

ECE Block 2 (14 credits)

- ECED 4130 - Language Development and Emergent Literacy in Early Childhood **Credits: (3)**
- ECED 4670 - STEM in Early Childhood **Credits: (3)**
- PEP 3620 - Methods of Teaching Physical Education and Health for Elementary Teachers **Credits: (3)**
- EDUC 3120 - Reading Instruction in the Primary Grades **Credits: (3)**
- ECED 4861 INT - Practicum in K-3 **Credits: (1-3)**

Note: Apply for Early Childhood Pre-K Student Teaching the semester prior to enrollment in ECED 4710 and ECED 4720.

ECE Block 3 (15 credits)

- ECED 4230 - Observing and Assessing Children in Context **Credits: (3)**
- ECED 3640 - Collaborating with Families of Young Children **Credits: (3)**
or
- ECED 2640 - Collaborating with Families of Young Children. **Credits: (3)**
- ECED 4260 - Inclusive Early Childhood Curriculum **Credits: (3)**
- ECED 4710 - Advanced Guidance and Planning for Early Childhood Education **Credits: (1-3)**
- ECED 4720 INT - Student Teaching Birth-5 **Credits: (6)**

**** Taken concurrently with ECED 4710.***

Note: Apply for K-3 Student Teaching the semester prior to enrollment in ECED 4721.

ECE Block 4 (16 credits)

- EDUC 4345 - Elementary Integrated Arts Methods **Credits: (3)**
- EDUC 4350 - Elementary Mathematics Pedagogy **Credits: (2)**
- ECED 4721 INT - Student Teaching K-3 **Credits: (3-6)**
- ECED 4990 - Seminar in Early Childhood Education **Credits: (3)**
- EDUC 3115 - Media Integration in Elementary Education Settings **Credits: (2)**

Family Studies (BS)

The Department of Child and Family Studies offers a Bachelor of Science (BS) degree in Family Studies. Students will learn to address the holistic needs of children and their families as a family life educator. The BS degree in family studies also qualifies you to apply to be a Certified Family Life Educator through the National Council on Family Relations, a national certification recognized in all 50 states. Students can earn the BS degree in person or *fully online (*in-person practicum experience required).

- **Program Prerequisite:** (1) Complete the Pre-professional Core courses (2) Declare your Family Studies major with the department academic advisor;(see Program of Study Major/minor Declaration); (3) Complete a background check and clearance (see Policy Notes).
- **Minor:** A minor is required.* **Optional:** In lieu of a minor, a specialization of 12-18 semester hours may be substituted as approved by the faculty advisor. Six of these hours must be upper division (courses numbered 3000 and above).
- **Grade Requirements:** A grade of C or better in courses required for this major (a grade of C- is not acceptable). Students will receive the final grade they have earned in each course. If a grade in a major course does not meet the minimum requirement for graduation, the student may retake the course once. In special circumstances, by the judgment of the department chair, the student may petition to the Family Studies or Early Childhood Committee, as appropriate, to graduate with the lower grade. Also refer to the grade requirements for graduation under General Requirements.
- **Credit Hour Requirements:** A total of at least 120 credit hours is required for graduation; a minimum of 48 of these must be within the major. A total of 40 upper division credit hours is required by the University (courses numbered 3000 and above); 33 of these are required within the major.
- **Program Code:** 5003BS
- **CIPC:** 190704

Advisement

Students must follow the Department of Child and Family Studies Advisement procedures. Contact the department advisor located in McKay Education Building (801-626-6411). (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Program of Study (Major/Minor) Declaration). To be eligible for acceptance into and graduation from the Family Studies Program a candidate must:

1. Complete all of the Pre-professional Core courses listed under Course Requirements.
2. Declare the Family Studies major and a minor or specialization.
3. Complete a background check and clearance (see Policy Notes).

Policy Notes

Since students majoring in Family Studies will be working with families and children, the State of Utah requires a background check and clearance. Applicants must be fingerprinted and complete a background check before being fully accepted into the program. (see Family Studies Fingerprinting Process). Background checks require up to eight weeks and should be completed, or in progress, at the time Family Studies Program courses are begun. Contact the department administrative specialist for further details.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

** Family Studies students may combine their major with either a minor or a dual major. Consult with an advisor when designing a dual major. Minors may be selected from department minor offerings across campus. Typical minors include Psychology, Sociology, Gerontology, Social Work, Communications, and/or Business. A minor should be designed to best support personal goals or career directions.*

The Family Studies program fulfills the requirements for provisional certification as a Family Life Educator, available by application and paid fee to the National Council on Family Relations. Full certification requires two years of paid professional experience in addition to the Family Studies degree. Provisional certification allows five years to complete the two-year requirement.

Program Learning Outcomes

- Families and Individuals in Societal Contexts: An understanding of families and their relationships to other institutions, such as the educational, governmental, religious, health care, and occupational institutions in society.
- Internal Dynamics of Families: An understanding of family strengths and weaknesses and how family members relate to and interact with each other.
- Human Growth and Development Across Lifespan: An understanding of the development changes (both typical and atypical) of individuals in families across the lifespan. Based in knowledge of physical, emotional, cognitive, social, moral, and personality aspects.
- Human Sexuality Across the Lifespan: An understanding of the physiological, psychological, and social aspects of sexual development across the lifespan, to achieve healthy sexual adjustment.
- Interpersonal Relationships: An understanding of the development, maintenance, and dissolution of interpersonal relationship among friends, roommates, coworkers, neighbors, as well as family members.

- Family Resource Management: An understanding of the decisions individuals and families make about developing and allocating resources including money, time, energy, space, material, and health assets, and networks of support to meet their goals.
- Parenting Education and Guidance: An understanding of how parents teach, guide, and influence children and adolescents, as well as the changing nature, dynamics and needs of the parent-child relationship across the lifespan.
- Family Law and Public Policy: An understanding of legal issues, policies, and laws influencing the well-being of families.
- Professional Ethics and Practice: An understanding of the character and quality of human social conduct, and the ability to critically examine ethical questions and issues as they relate to professional practice.
- Family Life Education Methodology: An understanding of the general philosophy and broad principles of Family Life Education in conjunction with the ability to plan, implement, assess, and evaluate such educational programs.

Major Course Requirements for BS Degree

Pre-professional Core Course Requirements (12 credit hours)

- FAM 1400 - Marriage and Romantic Relationships **Credits: (3)**
- CHF 1500 SS/CC - Human Development **Credits: (3)**
- FAM 2100 - Family Resource Management **Credits: (3)**
- CHF 2400 SS/CC - Family Relations **Credits: (3)**

Family Studies Professional Core Block Courses Required (36 semester hours)

The course sequence is designed to allow a Family Studies major to meet all program prerequisites and complete the program in three full-time semesters without conflicting class schedules. Taking classes outside of the stated semesters will delay graduation.

Block Courses Semester 1

- FAM 2990B - Seminar in Family Studies **Credits: (3)**
- FAM 3850 CRE - Current Research Methods in Child and Family Studies **Credits: (3)**
- HLTH 3500 - Human Sexuality **Credits: (3)**
- FAM Elective Course 1--(Choose one of the electives listed below.) **Credits: (3)**

Block Courses Semester 2

- FAM 3350 GLB - Diverse Families **Credits: (3)**
- FAM 3550 - Parenting Education **Credits: (3)**
- FAM Elective Course 2--(Choose one of the electives listed below.) **Credits: (3)**
- FAM Elective Course 3--(Choose one of the electives listed below.) **Credits: (3)**

Block Courses Semester 3

- FAM 4650 - Family Life Education Methods **Credits: (3)**
- FAM 4860 INT - Practicum **Credits: (1-6)** (3 credit hours required)
- FAM 4990B - Senior Seminar in Family Studies **Credits: (3)**

- FAM Elective Course 4--(Choose one of the electives listed below.) **Credits: (3)**

Elective Courses (You may choose four of the following courses for a total of 12 credit hours required for this major degree)

- FAM 3150 - Consumer Rights and Responsibilities **Credits: (3)**
- FAM 3400 - Development in Middle Adulthood **Credits: (3)**
- FAM 3450 - Development in Late Adulthood **Credits: (3)**
- FAM 3650 - Introduction to Marriage and Family Therapy **Credits: (3)**
- FAM 3660 - LGBTQ Families **Credits: (3)**
- FAM 3700 - Family Life Education and Sexuality **Credits: (3)**
- FAM 3820 - Organization and Leadership of Non-profit Family Services **Credits: (3)**
- FAM 4275 - Family Life Education Coaching **Credits: (3)**
- FAM 4300 - Latino Child and Family Development **Credits: (3)**
- FAM 4310 - Understanding the Modern United States Military Family **Credits: (3)**
- FAM 4350 - Religiosity and Family Life Education **Credits: (3)**
- FAM 4400 - The Family in Stress **Credits: (3)**
- FAM 4450 - Children and Families in the Medical Setting **Credits: (3)**
- FAM 4500 - Comparative Study of Childhood and Adolescent Development **Credits: (3)**
- FAM 4660 - Advanced Skills for Family Life Educators **Credits: (3)**

Note:

Students who are planning to apply to a graduate program are strongly encouraged to take a statistics course. See the Department of Child and Family Studies academic advisor for a list of appropriate classes.

Emphasis Option for Bachelor of Interdisciplinary Studies

Child and Family Studies (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

The Bachelor of Interdisciplinary Studies (BIS) is an interdisciplinary degree that allows students to combine three areas of study to create a unique major that matches their interests. An emphasis in child and family studies provides you with knowledge of family relations and child growth and development.

- **Grade Requirements:** An overall GPA of 2.00 or C in courses used toward the emphasis. Students will receive the final grade they have earned in each course. If a grade in a Child & Family Studies major course does not meet the minimum requirement for graduation, the student may retake the course once. In special circumstances, by the judgment of the department chair, the student may petition to the Family Studies or Early Childhood Committee, as appropriate, to graduate with the lower grade.
- **Credit Hour Requirements:** A minimum of 18 credit hours from Child and Family Studies to include 6 hours of required courses and 12 hours of electives. Two courses (6 credits) must be upper division (3000 level or above).
- **Program Code:** 5054
- **CIPC:** 190704

All Child and Family Studies courses must have been taken within the last 10 years to count towards major/minor requirements.

Advisement

BIS students are encouraged to first meet with the BIS program and then seek advisement with the CHF Academic Advisor.

Required Courses (6 credit hours)

- CHF 1500 SS/CC - Human Development **Credits: (3)** *
- CHF 2400 SS/CC - Family Relations **Credits: (3)**

Note:

** If taken for Social Science general education credit, CHF course (3 credits) must be added.*

Electives (minimum 12 credit hours)

Elective courses to be determined in conference with a department advisor.

- *At least six credit hours must be upper-division (courses numbered 3000 and higher).*

Minor

Child Development Minor

- **Grade Requirements:** A grade of C or better in courses used toward the minor.
- **Credit Hour Requirements:** A minimum of 18 credit hours, of which at least 6 must be upper division courses (courses numbered 3000 and above). Students will receive the final grade they have earned in each course. If a grade in a minor course does not meet the minimum requirement for graduation, the student may retake the course once. In special circumstances, by the judgment of the department chair, the student may petition to the Family Studies Program or the Early Childhood/Early Childhood Education Programs, as appropriate, to graduate with the lower grade.
- **Program Code:** 5001
- **CIPC:** 190706

Advisement

Child development minors are encouraged to meet with the CHF Academic Advisor.

Course Requirements for Minor

Required Courses (12 credit hours)

- ECED 2500 - Development of the Child **Credits: (3)**

- ECED 2610 - Child Guidance **Credits: (3)** *(lab required)*
- ECED 3570 - Infants and Toddlers: Development and Practice **Credits: (3)**
- ECED 3500 - Young Children: Adversity and Resilience **Credits: (3)**

Electives (6 credit hours)

Select at least two courses from the following

- CHF 2400 SS/CC - Family Relations **Credits: (3)**
- ECED 2110 - Self-Compassion for Sustaining Work with Children **Credits: (2)**
- ECED 4110 - Self-Compassion for Sustaining Work with Children **Credits: (2)**
- ECED 2600 - Introduction to Early Childhood Education & Care **Credits: (3)**
- ECED 2620 - Planning Creative Experiences for Young Children **Credits: (3)** *(lab required)*
- ECED 3640 - Collaborating with Families of Young Children **Credits: (3)**
- ECED 2640 - Collaborating with Families of Young Children. **Credits: (3)**
- ECED 2670 - Early Childhood Integrated Curriculum and Assessment **Credits: (3)**
- ECED 4670 - STEM in Early Childhood **Credits: (3)**
- ECED 4130 - Language Development and Emergent Literacy in Early Childhood **Credits: (3)**
- ECED 4250 - Inclusive Early Childhood Intervention and Special Education **Credits: (3)**
- ECED 4260 - Inclusive Early Childhood Curriculum **Credits: (3)**
- ECED 4270 - Young Children's Play **Credits: (3)**
- ECED 4820 - Child Observation Seminar **Credits: (1)**
- FAM 3350 GLB - Diverse Families **Credits: (3)**
- FAM 3550 - Parenting Education **Credits: (3)**
- FAM 4300 - Latino Child and Family Development **Credits: (3)**
- FAM 4500 - Comparative Study of Childhood and Adolescent Development **Credits: (3)**

Family Studies Minor

- **Grade Requirements:** An overall GPA of 2.00 or C in courses used toward the minor.
- **Credit Hour Requirements:** Minimum of 18 credit hours, of which at least 6 must be upper division (courses numbered 3000 and above). Students will receive the final grade they have earned in each course. If a grade in a minor course does not meet the minimum requirement for graduation, the student may retake the course once. In special circumstances, by the judgment of the department chair, the student may petition to the Family Studies or Early Childhood Committee, as appropriate, to graduate with the lower grade.
- **Program Code:** 5003
- **CIPC:** 190704

Advisement

Family studies minors are encouraged to meet with the CHF Academic Advisor.

Course Requirements for Minor

Required Courses (9 credit hours)

- FAM 1400 - Marriage and Romantic Relationships **Credits: (3)**

- CHF 1500 SS/CC - Human Development **Credits: (3)**
- CHF 2400 SS/CC - Family Relations **Credits: (3)**

Faculty Advisor Approved Elective Courses (9 credit hours)

Select 9 credit hours from the following with at least 6 credit hours of upper-division (courses numbered 3000 and higher)

- FAM 2100 - Family Resource Management **Credits: (3)**
- ECED 2500 - Development of the Child **Credits: (3)**
- ECED 2610 - Child Guidance **Credits: (3)**
- FAM 3150 - Consumer Rights and Responsibilities **Credits: (3)**
- FAM 3350 GLB - Diverse Families **Credits: (3)**
- FAM 3450 - Development in Late Adulthood **Credits: (3)**
- ECED 3500 - Young Children: Adversity and Resilience **Credits: (3)**
- FAM 3550 - Parenting Education **Credits: (3)**
- ECED 3640 - Collaborating with Families of Young Children **Credits: (3)**
- FAM 3650 - Introduction to Marriage and Family Therapy **Credits: (3)**
- FAM 3850 CRE - Current Research Methods in Child and Family Studies **Credits: (3)**
- FAM 4300 - Latino Child and Family Development **Credits: (3)**
- FAM 4400 - The Family in Stress **Credits: (3)**
- FAM 4500 - Comparative Study of Childhood and Adolescent Development **Credits: (3)**
- FAM 4650 - Family Life Education Methods **Credits: (3)**

Department of History

Department Chair: Sara Dant

Location: Lindquist Hall, Room 232

Telephone Contact: Jenna Daniels, 801-626-6706

Professors: Brady Brower, Sara Dant, Vikki Deakin, Gregory Lewis, Branden Little, Susan Matt, Eric Swedin, Stephen Francis; **Associate Professors:** Matthew Romaniello; **Assistant Professors:** Leah LaGrone;

Instructors: Eric Fenrich, Nathan Rives; **International Visiting Professor:** Abdalnaser Kaadan

History is a record of political, social and cultural events and achievements of humankind. Historians analyze and evaluate this record in an attempt to understand and interpret the present.

The history offerings are designed to: provide adequate programs to prepare teachers; prepare students who plan to do graduate work; and provide courses which contribute to the general education of all students.

Interdisciplinary Minors

The History Department participates in the Asian Studies, Environmental Studies, Ethnic Studies, European Studies and Latin American Studies Minor Programs. Students who wish to enroll in one of these programs should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Bachelor of Arts

History (BA)

- **Program Prerequisite:** Not required.
- **Minor:** Required. The Public History and Asian Studies minors also eligible with a History Major.
- **Grade Requirements:** A grade of "C" or better in courses applied toward this major (a grade of "C-" is not acceptable) in addition to a GPA for these courses of 2.50 or higher. Also refer to the general grade requirements for graduation..
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 37 of these is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 24 of these are required within the major.
- **Program Code:** 7007BA
- **CIPC:** 540101

Advisement

History majors are required to meet with their faculty advisor at least annually for course and program advisement. They must also meet with their advisor or the department chair before registration for HIST 4990. Call 801-626-6706 for additional information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for the History major.

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

Program Learning Outcomes

- Historical Knowledge
- Pastness of Past
- International Perspectives
- Historical Complexity
- Critical Thinking
- Research Skills
- Historical Argumentation

Major Course Requirements for BA Degree

History Core Courses Required (13 credit hours)

- HIST 1000 - Introduction to the Craft of History **Credits: (1)**
- HIST 2700 - History of the United States to 1877 **Credits: (3)**
- HIST 2710 - History of the United States since 1877 **Credits: (3)**
Take one of the following early world courses:

- HIST 1100 - European History to 1500 **Credits: (3)**
- HIST 1300 - Latin American History to the 1820s **Credits: (3)**
- HIST 1500 SS/CC/GLB - World History to 1500 C.E. **Credits: (3)**
Take one of the following modern world courses:
- HIST 1110 - European History from 1500 **Credits: (3)**
- HIST 1310 - Latin American History since the 1820s **Credits: (3)**
- HIST 1510 SS/CC/GLB - World History from 1500 C.E. to the Present **Credits: (3)**

Note:

All the above should be taken before upper-division course work (courses numbered 3000 and above).

Language Courses Required to fulfill the BA (12 credit hours)

6 credit hours of foreign language

and the following language arts courses

- HIST 4985 - Historical Research and Methods **Credits: (3)**
- HIST 4990 - Senior Seminar **Credits: (3)** *

Note:

** Should be taken during senior year. HIST 4985 is a prerequisite to HIST 4990.*

Upper Division Elective Courses (18 credit hours)

Select at least one course in each area.

North American History

- HIST 3010 - History of Indigenous America **Credits: (3)**
- HIST 3030 - African-American History **Credits: (3)**
- HIST 3050 - History of U.S. Latinos **Credits: (3)**
- HIST 3070 - Women in American History: 1600 to Present **Credits: (3)**
- HIST 3090 - American Social History **Credits: (3)**
- HIST 3110 - American Ideas and Culture **Credits: (3)**
- HIST 3130 - Cities in US History **Credits: (3)**
- HIST 3120 - American Society through Film **Credits: (3)**
- HIST 3210 - U.S. Constitutional History **Credits: (3)**
- HIST 3220 - History of the Bill of Rights **Credits: (3)**
- HIST 3230 GLB - American Foreign Relations **Credits: (3)**
- HIST 3250 - Religion in American History **Credits: (3)**
- HIST 3270 SUS - American Environmental History **Credits: (3)**
- HIST 3280 GLB - American Military History from 1500 to 1890 **Credits: (3)**
- HIST 3290 GLB - American Military History from 1890 to the Present **Credits: (3)**
- HIST 4010 - Early North America to 1763 **Credits: (3)**
- HIST 4020 - Era of the American Revolution: 1763-1800 **Credits: (3)**

- HIST 4030 - New Nation: 1800-1840 **Credits: (3)**
- HIST 4040 - Era of the Civil War and Reconstruction: 1840-1877 **Credits: (3)**
- HIST 4050 - U.S. in the Gilded Age and Progressive Era: 1877-1919 **Credits: (3)**
- HIST 4060 - United States: 1919-1945 **Credits: (3)**
- HIST 4065 GLB - The United States in the Second World War **Credits: (3)**
- HIST 4070 - United States since 1945 **Credits: (3)**
- HIST 4110 - History of the American West to 1900 **Credits: (3)**
- HIST 4120 - The American West since 1900 **Credits: (3)**
- HIST 4130 - History of Utah **Credits: (3)**
- HIST 4710 - Special Issues and Topics in American History **Credits: (3)**

European History

- HIST 4210 - Ancient History **Credits: (3)**
- HIST 4220 - History of the Middle Ages 300-1300 **Credits: (3)**
- HIST 4230 - Renaissance and Reformation - Europe: 1300-1660 **Credits: (3)**
- HIST 4240 - Absolutism, Enlightenment and Revolution - Europe: 1660-1815 **Credits: (3)**
- HIST 4250 - Nineteenth-Century Europe **Credits: (3)**
- HIST 4260 - Europe in the Age of Total War **Credits: (3)**
- HIST 4280 - History of Christianity in Europe **Credits: (3)**
- HIST 4310 - Tsarist Russia **Credits: (3)**
- HIST 4320 CRE - Stalin and the Soviet Experiment **Credits: (3)**
- HIST 4330 - Medieval England **Credits: (3)**
- HIST 4335 - Tudor and Stuart England **Credits: (3)**
- HIST 4340 - The British Empire **Credits: (3)**
- HIST 4350 - Germany and the Third Reich **Credits: (3)**
- HIST 4370 - History of Modern France 1789-present **Credits: (3)**
- HIST 4410 - History of Spain and Portugal **Credits: (3)**
- HIST 4440 SUS - East European Empires **Credits: (3)**
- HIST 4450 - Cold War Europe **Credits: (3)**
- HIST 4720 - Special Issues and Topics in European History **Credits: (3)**

Global, Comparative, and General

- HIST 3350 - History and Philosophy of Science **Credits: (3)**
- HIST 4015 - History of the Atlantic World, 1400-1815 **Credits: (3)**
- HIST 4510 GLB - Twentieth Century World **Credits: (3)**
- HIST 4520 - History of Medicine **Credits: (3)**
- HIST 4530 - Far Eastern History **Credits: (3)**
- HIST 4550 - Southeast Asian History **Credits: (3)**
- HIST 4570 - Islamic Civilization **Credits: (3)**
- HIST 4590 GLB - Middle Eastern History **Credits: (3)**
- HIST 4630 - Latin American History: Pre-Columbian to Independence **Credits: (3)**
- HIST 4650 - Latin American History Since Independence **Credits: (3)**
- HIST 4670 - History of Mexico **Credits: (3)**
- HIST 4700 GLB - The U.S. and East Asia: War, Revolution, and Modernization **Credits: (3)**
- HIST 4730 - Special Issues and Topics in Global and Comparative History **Credits: (3)**

Other Electives

May be taken to meet credit hour requirements.

- HIST 3400 - Principles of Public History **Credits: (3)**
- HIST 3500 - Historic Preservation **Credits: (3)**
- HIST 3530 INT - History Editing **Credits: (3)**
- HIST 3550 - Archives: Principles, Practices & Preservation **Credits: (3)**
- HIST 3560 - Oral History: Connecting the Past to the Present **Credits: (3)**
- HIST 3570 - Digital History **Credits: (3)**
- HIST 4975 - Historiography **Credits: (3)**
- HIST 4810 - Experimental Course **Credits: (3)**
- HIST 4830 - Directed Readings **Credits: (1-3)** (*max 3 cr towards major/minor*)
- HIST 4860 INT - Internships in Historical Studies **Credits: (1-6)** (*max 6 cr towards major/minor*)
- HIST 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)** (*max 6 cr towards major/minor*)

History Teaching (BA)

- **Program Prerequisite:** Not required. However, History Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).
- **Minor:** Required. Does not need to be in the teaching field.
- **Grade Requirements:** A grade of "C" or better in courses applied toward this major (a grade of "C-" is not acceptable) in addition to a GPA for these courses of 3.0 or higher. Also refer to the general grade requirements for graduation on Degree Requirements.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 40 of these is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 27 of these are required within the major.
- **Program Code:** 7008BA
- **CIPC:** 131328

Advisement

History Teaching majors are required to meet with their faculty advisor at least annually for course and program advisement. They must also meet with their advisor or the department chair before registration for HIST 4990. Call 801-626-6706 for additional information or to schedule an appointment. Teaching majors are also encouraged to consult with advisors in the Jerry and Vickie Moyes College of Education.

Grad Map icon2Active-Hidden2022-05-27 16:48:022022-05-27 16:48:02 Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for the History Teaching major. However, Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department). (Also refer to the Department Advisor Referral List.)

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

Program Learning Outcomes

- Historical Knowledge
- Pastness of Past
- International Perspectives
- Historical Complexity
- Critical Thinking
- Research Skills
- Historical Argumentation

Major Course Requirements for BA Degree

History Core Courses Required (22 credit hours)

- HIST 1000 - Introduction to the Craft of History **Credits: (1)**
- HIST 1500 SS/CC/GLB - World History to 1500 C.E. **Credits: (3)**
- HIST 1510 SS/CC/GLB - World History from 1500 C.E. to the Present **Credits: (3)**
- HIST 2700 - History of the United States to 1877 **Credits: (3)**
- HIST 2710 - History of the United States since 1877 **Credits: (3)**
- HIST 4130 - History of Utah **Credits: (3)**
- HIST 4975 - Historiography **Credits: (3)**
- HIST 4500 - Teaching Social Studies in Grades 5-12 **Credits: (3)**

Note:

It is preferable for students to take the above-listed lower-division courses before taking upper-division course work (courses numbered 3000 and above). HIST 4975 and HIST 4500 should be taken the year prior to entering the teacher education program.

Traditionally Underrepresented Communities (3 Credit Hours)

Select one of the following:

- HIST 3010 - History of Indigenous America **Credits: (3)**
- HIST 3030 - African-American History **Credits: (3)**
- HIST 3050 - History of U.S. Latinos **Credits: (3)**
- HIST 3070 - Women in American History: 1600 to Present **Credits: (3)**
- HIST 3090 - American Social History **Credits: (3)**
- HIST 3110 - American Ideas and Culture **Credits: (3)**

Language Courses Required to fulfill the BA (12 credit hours)

- 6 credit hours of foreign language

and the following language arts courses

- HIST 4985 - Historical Research and Methods **Credits: (3)**
- HIST 4990 - Senior Seminar **Credits: (3)** *

Note:

** Should be taken during senior year. HIST 4985 is a prerequisite to HIST 4990.*

Upper Division Elective Courses (9 credit hours)

Select at least one course in the European section and one in the Global, Comparative, and General section.

North American History

- HIST 3010 - History of Indigenous America **Credits: (3)**
- HIST 3030 - African-American History **Credits: (3)**
- HIST 3050 - History of U.S. Latinos **Credits: (3)**
- HIST 3070 - Women in American History: 1600 to Present **Credits: (3)**
- HIST 3090 - American Social History **Credits: (3)**
- HIST 3110 - American Ideas and Culture **Credits: (3)**
- HIST 3130 - Cities in US History **Credits: (3)**
- HIST 3210 - U.S. Constitutional History **Credits: (3)**
- HIST 3220 - History of the Bill of Rights **Credits: (3)**
- HIST 3230 GLB - American Foreign Relations **Credits: (3)**
- HIST 3250 - Religion in American History **Credits: (3)**
- HIST 3270 SUS - American Environmental History **Credits: (3)**
- HIST 3280 GLB - American Military History from 1500 to 1890 **Credits: (3)**
- HIST 3290 GLB - American Military History from 1890 to the Present **Credits: (3)**
- HIST 4010 - Early North America to 1763 **Credits: (3)**
- HIST 4020 - Era of the American Revolution: 1763-1800 **Credits: (3)**
- HIST 4030 - New Nation: 1800-1840 **Credits: (3)**
- HIST 4040 - Era of the Civil War and Reconstruction: 1840-1877 **Credits: (3)**
- HIST 4050 - U.S. in the Gilded Age and Progressive Era: 1877-1919 **Credits: (3)**
- HIST 4060 - United States: 1919-1945 **Credits: (3)**
- HIST 4065 GLB - The United States in the Second World War **Credits: (3)**
- HIST 4070 - United States since 1945 **Credits: (3)**
- HIST 4110 - History of the American West to 1900 **Credits: (3)**
- HIST 4120 - The American West since 1900 **Credits: (3)**
- HIST 4130 - History of Utah **Credits: (3)**
- HIST 4710 - Special Issues and Topics in American History **Credits: (3)**

European History

- HIST 4210 - Ancient History **Credits: (3)**
- HIST 4220 - History of the Middle Ages 300-1300 **Credits: (3)**
- HIST 4230 - Renaissance and Reformation - Europe: 1300-1660 **Credits: (3)**

- HIST 4240 - Absolutism, Enlightenment and Revolution - Europe: 1660-1815 **Credits: (3)**
- HIST 4250 - Nineteenth-Century Europe **Credits: (3)**
- HIST 4260 - Europe in the Age of Total War **Credits: (3)**
- HIST 4280 - History of Christianity in Europe **Credits: (3)**
- HIST 4310 - Tsarist Russia **Credits: (3)**
- HIST 4320 CRE - Stalin and the Soviet Experiment **Credits: (3)**
- HIST 4330 - Medieval England **Credits: (3)**
- HIST 4335 - Tudor and Stuart England **Credits: (3)**
- HIST 4340 - The British Empire **Credits: (3)**
- HIST 4350 - Germany and the Third Reich **Credits: (3)**
- HIST 4370 - History of Modern France 1789-present **Credits: (3)**
- HIST 4410 - History of Spain and Portugal **Credits: (3)**
- HIST 4440 SUS - East European Empires **Credits: (3)**
- HIST 4450 - Cold War Europe **Credits: (3)**
- HIST 4720 - Special Issues and Topics in European History **Credits: (3)**

Global, Comparative, and General

- HIST 3350 - History and Philosophy of Science **Credits: (3)**
- HIST 4015 - History of the Atlantic World, 1400-1815 **Credits: (3)**
- HIST 4510 GLB - Twentieth Century World **Credits: (3)**
- HIST 4520 - History of Medicine **Credits: (3)**
- HIST 4530 - Far Eastern History **Credits: (3)**
- HIST 4550 - Southeast Asian History **Credits: (3)**
- HIST 4570 - Islamic Civilization **Credits: (3)**
- HIST 4590 GLB - Middle Eastern History **Credits: (3)**
- HIST 4630 - Latin American History: Pre-Columbian to Independence **Credits: (3)**
- HIST 4650 - Latin American History Since Independence **Credits: (3)**
- HIST 4670 - History of Mexico **Credits: (3)**
- HIST 4700 GLB - The U.S. and East Asia: War, Revolution, and Modernization **Credits: (3)**
- HIST 4730 - Special Issues and Topics in Global and Comparative History **Credits: (3)**

Social Science Composite Teaching (BA)

- **Program Prerequisite:** Must satisfy Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses applied toward this major (a grade of "C-" is not acceptable) and a 3.0 GPA within the major. Also refer to the requirements of the Teacher Education Program.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation--a minimum of 70 of these is required within the Social Science Composite Teaching Major. A total of 40 upper-division credit hours is required (courses numbered 3000 and above).
- **Program Code:** 7000BA
- **CIPC:** 131318

Advisement

Social Science Composite Teaching majors are required to meet with their faculty advisor at least annually for course and program advisement. They must also meet with their advisor or the department chair before registration for HIST 4990. Call 801-626-6706 for additional information or to schedule an appointment. Teaching majors are also encouraged to consult with advisors in the Jerry and Vickie Moyes College of Education.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). Social Science Composite Teaching majors must satisfy Teacher Education admission and licensure requirements (see Teacher Education Department).

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

Program Learning Outcomes

- Historical Knowledge
- Pastness of Past
- International Perspectives
- Historical Complexity
- Critical Thinking
- Research Skills
- Historical Argumentation

Major Course Requirements for BA

Required Major Courses (19 credit hours)

- HIST 1000 - Introduction to the Craft of History **Credits: (1)**
- HIST 1500 SS/CC/GLB - World History to 1500 C.E. **Credits: (3)**
- HIST 1510 SS/CC/GLB - World History from 1500 C.E. to the Present **Credits: (3)**
- HIST 2700 - History of the United States to 1877 **Credits: (3)**
- HIST 2710 - History of the United States since 1877 **Credits: (3)**
- HIST 4975 - Historiography **Credits: (3)**
- HIST 4500 - Teaching Social Studies in Grades 5-12 **Credits: (3)**

Note: HIST 4975 and HIST 4500 should be taken either junior or senior year prior to taking the Teacher Education core courses.

Language Courses Required to fulfill the BA (12 credit hours)

- 6 credit hours of foreign language
- HIST 4985 - Historical Research and Methods **Credits: (3)**
- HIST 4990 - Senior Seminar **Credits: (3)**

Note: HIST 4985 and HIST 4990 should be taken senior year prior to taking Teacher Education core courses. HIST 4985 is a prerequisite to HIST 4990.

Utah History (3 credit hours)

- HIST 4130 - History of Utah **Credits: (3)**

Traditionally Underrepresented Communities (3 credit hours)

Select one of the following courses.

- HIST 3010 - History of Indigenous America **Credits: (3)**
- HIST 3030 - African-American History **Credits: (3)**
- HIST 3050 - History of U.S. Latinos **Credits: (3)**
- HIST 3070 - Women in American History: 1600 to Present **Credits: (3)**
- HIST 3090 - American Social History **Credits: (3)**
- HIST 3110 - American Ideas and Culture **Credits: (3)**

European History (3 credit hours)

Select one of the following courses.

- HIST 4210 - Ancient History **Credits: (3)**
- HIST 4220 - History of the Middle Ages 300-1300 **Credits: (3)**
- HIST 4230 - Renaissance and Reformation - Europe: 1300-1660 **Credits: (3)**
- HIST 4240 - Absolutism, Enlightenment and Revolution - Europe: 1660-1815 **Credits: (3)**
- HIST 4250 - Nineteenth-Century Europe **Credits: (3)**
- HIST 4260 - Europe in the Age of Total War **Credits: (3)**

World History (3 credit hours)

Select one of the following courses.

- HIST 4015 - History of the Atlantic World, 1400-1815 **Credits: (3)**
- HIST 4510 GLB - Twentieth Century World **Credits: (3)**
- HIST 4530 - Far Eastern History **Credits: (3)**
- HIST 4630 - Latin American History: Pre-Columbian to Independence **Credits: (3)**
- HIST 4650 - Latin American History Since Independence **Credits: (3)**

Geography Courses (9 credit hours)

- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)**
- GEOG 3500 - Geography of Utah and the American West **Credits: (3)**

Political Science Courses (6 credit hours)

- POLS 1010 SS/CC - Politics, Power, and the State **Credits: (3)**
- POLS 1100 AI - American National Government **Credits: (3)**

Economics Courses (6 credit hours)

- ECON 1010 SS - Economics as a Social Science **Credits: (3)**
- ECON 1740 AI - Economic History of the United States **Credits: (3)**

Psychology Courses (6 credit hours)

- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- PSY 2400 - Positive Psychology **Credits: (3)**

Students should take PSY 3140 to fulfill the required Teacher Education support course.

Sociology and Anthropology Courses (6 credit hours)

- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)**
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)**

Minor

History Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** A grade of "C" or better in courses applied toward the minor (a grade of "C-" is not acceptable) in addition to a GPA for these courses of 2.50 or higher.
- **Credit Hour Requirements:** Minimum of 18 credit hours in History courses. Transferring students with History minors must take at least one approved History course at Weber State.
- **Program Code:** 7007
- **CIPC:** 540101

Course Requirements for Minor

History Courses Required (6 credit hours)

- HIST 1500 SS/CC/GLB - World History to 1500 C.E. **Credits: (3)**
- HIST 1510 SS/CC/GLB - World History from 1500 C.E. to the Present **Credits: (3)**

Upper-division History Electives (12 credit hours)

Select at least 12 credit hours from the upper-division History courses. These courses are listed under the History Program.

Public History Minor

Coordinator: Dr. Leah LaGrone
Location: Lindquist Hall, Room 261
Email: leahlagrone@weber.edu

- **Grade Requirements:** A grade of "C" or better in courses used toward this minor (a grade of "C-" is not acceptable) in addition to a GPA for these courses of 2.50 or higher.
- **Credit Hour Requirements:** A minimum of 18 credit hours is required.
- **Program Code:** 7009
- **CIPC:** 540101

This minor may be taken by all majors, including those majoring in History. Courses may not be counted for both the History major and this minor. This minor may be taken as a component of the Bachelor of Integrated Studies.

Course Requirements for Minor

Required Core Courses (9 credit hours)

- HIST 3400 - Principles of Public History **Credits: (3)**
- HIST 4860 INT - Internships in Historical Studies **Credits: (1-6)** (6 credit hours required)

Three of the following (9 credit hours)

- HIST 3500 - Historic Preservation **Credits: (3)**
 - HIST 3530 INT - History Editing **Credits: (3)**
 - HIST 3550 - Archives: Principles, Practices & Preservation **Credits: (3)**
 - HIST 3560 - Oral History: Connecting the Past to the Present **Credits: (3)**
 - HIST 3570 - Digital History **Credits: (3)**
- Other History or interdisciplinary courses may be substituted for the above courses, if approved by the advisor.***

Religious Studies Minor

The Religious Studies minor guides students in developing interdisciplinary skills to understand diverse religious traditions, interrogate personal and communal religious experience, and explain the intersections of religion with other fields of study and interest.

- **Grade Requirements:** A grade of "C" or better is required for all courses used toward the minor (a grade of "C-" is not acceptable) in addition to a GPA for these courses of 2.50 or higher.
- **Credit Hour Requirements:** A minimum of 18 credit hours.
- **Program Code:** 7063
- **CIPC:** 380201

Courses taken as part of a student's major will not count as fulfillment of the minor requirements.

Core Course (3 credit hours)

- SBS 1550 HU/CC - Introduction to World Religions **Credits: (3)**

Elective Courses (15 credit hours)

Students must take 15 additional hours with at least 9 hours coming from three different disciplines. No more than 1 class (excluding the core requirement) may be lower division.

- ANTH 3900 - Anthropology of Religion **Credits: (3)**
- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 **Credits: (4)**
- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4)**
- FAM 4350 - Religiosity and Family Life Education **Credits: (3)**
- HIST 1500 SS/CC/GLB - World History to 1500 C.E. **Credits: (3)**
- HIST 1510 SS/CC/GLB - World History from 1500 C.E. to the Present **Credits: (3)**
- HIST 3110 - American Ideas and Culture **Credits: (3)**
- HIST 3250 - Religion in American History **Credits: (3)**
- HIST 4220 - History of the Middle Ages 300-1300 **Credits: (3)**
- HIST 4230 - Renaissance and Reformation - Europe: 1300-1660 **Credits: (3)**
- HIST 4280 - History of Christianity in Europe **Credits: (3)**
- HIST 4335 - Tudor and Stuart England **Credits: (3)**
- HIST 4570 - Islamic Civilization **Credits: (3)**
- HIST 4590 GLB - Middle Eastern History **Credits: (3)**
- MUSC 1063 CA - Music in Religion **Credits: (3)**
- PHIL 3500 - Philosophy of Western Religion **Credits: (3)**
- PHIL 3550 - Philosophy of Eastern Religion **Credits: (3)**
- SOC 3410 - Sociology of Religion **Credits: (3)**

Note

Other experimental or variable title courses, whose content relates to the minor, may be approved by the program director to fulfill elective course requirements.

Teaching Minor

History Teaching Minor

History Teaching minors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department). You cannot declare a teaching minor without also having a Teaching major.

- **Grade Requirements:** A grade of "C" or better in courses applied toward the minor (a grade of "C-" is not acceptable) in addition to a GPA for these courses of 3.0 or higher.
- **Credit Hour Requirements:** Minimum of 27 credit hours in History courses.
- **Program Code:** 7008
- **CIPC:** 131328

Course Requirements for Teaching Minor

History Core Courses Required (18 credit hours)

- HIST 1500 SS/CC/GLB - World History to 1500 C.E. **Credits: (3)**
- HIST 1510 SS/CC/GLB - World History from 1500 C.E. to the Present **Credits: (3)**
- HIST 2700 - History of the United States to 1877 **Credits: (3)**

- HIST 2710 - History of the United States since 1877 **Credits: (3)**
- HIST 4130 - History of Utah **Credits: (3)**
- HIST 4500 - Teaching Social Studies in Grades 5-12 **Credits: (3)**

Traditionally Underrepresented Communities (3 credit hours)

Select one of the following.

- HIST 3010 - History of Indigenous America **Credits: (3)**
- HIST 3030 - African-American History **Credits: (3)**
- HIST 3050 - History of U.S. Latinos **Credits: (3)**
- HIST 3070 - Women in American History: 1600 to Present **Credits: (3)**
- HIST 3090 - American Social History **Credits: (3)**
- HIST 3110 - American Ideas and Culture **Credits: (3)**

Upper-Division Electives (3 credit hours)

Select one of the following upper-division History courses.

- HIST 3350 - History and Philosophy of Science **Credits: (3)**
- HIST 4015 - History of the Atlantic World, 1400-1815 **Credits: (3)**
- HIST 4210 - Ancient History **Credits: (3)**
- HIST 4220 - History of the Middle Ages 300-1300 **Credits: (3)**
- HIST 4230 - Renaissance and Reformation - Europe: 1300-1660 **Credits: (3)**
- HIST 4240 - Absolutism, Enlightenment and Revolution - Europe: 1660-1815 **Credits: (3)**
- HIST 4250 - Nineteenth-Century Europe **Credits: (3)**
- HIST 4260 - Europe in the Age of Total War **Credits: (3)**
- HIST 4280 - History of Christianity in Europe **Credits: (3)**
- HIST 4310 - Tsarist Russia **Credits: (3)**
- HIST 4320 CRE - Stalin and the Soviet Experiment **Credits: (3)**
- HIST 4330 - Medieval England **Credits: (3)**
- HIST 4335 - Tudor and Stuart England **Credits: (3)**
- HIST 4340 - The British Empire **Credits: (3)**
- HIST 4350 - Germany and the Third Reich **Credits: (3)**
- HIST 4370 - History of Modern France 1789-present **Credits: (3)**
- HIST 4410 - History of Spain and Portugal **Credits: (3)**
- HIST 4440 SUS - East European Empires **Credits: (3)**
- HIST 4450 - Cold War Europe **Credits: (3)**
- HIST 4510 GLB - Twentieth Century World **Credits: (3)**
- HIST 4520 - History of Medicine **Credits: (3)**
- HIST 4530 - Far Eastern History **Credits: (3)**
- HIST 4550 - Southeast Asian History **Credits: (3)**
- HIST 4570 - Islamic Civilization **Credits: (3)**
- HIST 4590 GLB - Middle Eastern History **Credits: (3)**
- HIST 4630 - Latin American History: Pre-Columbian to Independence **Credits: (3)**
- HIST 4650 - Latin American History Since Independence **Credits: (3)**
- HIST 4670 - History of Mexico **Credits: (3)**
- HIST 4700 GLB - The U.S. and East Asia: War, Revolution, and Modernization **Credits: (3)**

- HIST 4720 - Special Issues and Topics in European History **Credits: (3)**
- HIST 4730 - Special Issues and Topics in Global and Comparative History **Credits: (3)**

Methodology Requirement (3 credit hours)

Select one of the following.

- HIST 4975 - Historiography **Credits: (3)**
- HIST 4985 - Historical Research and Methods **Credits: (3)**

Note:

HIST 4975 or HIST 4985 should be taken in the year prior to entering the Teacher Education program.

Department of Political Science and Philosophy

Department Chair: Mary Beth Willard

Location: Social Science Building, Room 280

Telephone Contact: Brieanna Spoo 801-626-6694

Professors: Robert Fudge, Richard Greene, Gary Johnson, Thomas Kuehls, Leah Murray, Mary Beth Willard;

Associate Professors: Richard Price, Stephanie Wolfe; **Assistant Professors:** Paul Neiman, Janicke Stramer-Smith

Political Science

Political Science, in the broadest sense, is the study of politics particularly as it relates to governments and people. Political scientists study governments: The origins and preconditions for governments, the growth and evolution of governments, and the decline and conflict among governments. Political scientists also are interested in how governments are structured, how governments make decisions, the policies that result from political decisions and the consequences of these policies, and how governments manage societal and international conflicts. Political scientists also study people: Their values and positions on issues, their preferences among candidates, their support for public officials, and their appraisals of their government. True to their oldest academic traditions, political scientists retain their concern with the fundamental questions of how governments ought to be constituted, and how they can best serve their citizens.

The study of political science has value in several different ways. First, it contributes to a solid liberal arts education and preparation for citizenship. The Greek word "idiot" was used to refer to one who took no interest in the affairs of state. Today, no less than twenty centuries later, it is incumbent upon all useful citizens to learn something about the political system in which they will spend their lives. Educated people ought to know something of the nature of government even if they have no professional interest in political science.

Second, a degree in political science furnishes an excellent background for graduate study in political science, law, administration, business, and international relations. Political science helps students develop reasoning and analytical skills and build competence in oral and written expression. In addition, the department of political science requires students to acquire basic skills in statistical analysis and computer competency.

Third, there are some careers for which an extensive training in political science can be most useful. This is true especially for those planning to seek careers in higher education, the legal profession, state and local government, urban planning, the federal bureaucracy, journalism, the military, law enforcement, teaching, the civil service, or in any of the proliferating organizations that seek to monitor the political processes to influence content of public policy. Further, the training students receive in political science will be useful to students no matter what their ultimate

career choices. The comprehensive career guide, *Careers and the study of Political Science*, is available from the department chair.

Internships

Internships are offered through the Political Science program and the Walker Institute of Politics and Public Service to provide students practical understanding of political processes in governmental organizations. Many students have received practical training and gained valuable knowledge by working with United States senators, members of Congress, and Utah State senators and representatives. Moreover, some students work as interns in City and County administrations and in the Utah Legal Services office in Ogden.

Pre-Law

The pre-law advisement program is designed to assist students in scheduling courses, in preparing for the law school admissions test, and in obtaining admission at one of the nationally recognized law schools. Data on the placement of graduates in law schools show the success and the immense value of the program to students. (Dr. Richard Price acts as the Pre-Law Advisor.)

Interdisciplinary Minors

The Political Science Department participates in the Asian Studies, Environmental Studies, European Studies, International Politics, Latin American Studies, Legal Studies, and Public Administration Minor Programs and the Urban and Regional Planning Emphasis Program. Students who wish to enroll in one of these programs should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Philosophy

The philosophy program offers courses that fall under three general categories: 1) Liberal Education: teaches the ideas of influential past and contemporary thinkers who have sought to understand the world and our experience of it. These ideas concern such topics as the nature of truth and reality, the limits of knowledge, standards of right and wrong, the experience of beauty, and world religions. 2) Methodology: emphasizes methods of sound practical reasoning, deductive logic, and language analysis. 3) Application: critically analyzes non-philosophical disciplines. For example, the philosophy of democracy analyzes the value assumptions behind democratic forms of government, while medical ethics seeks to identify and resolve dilemmas arising from conflicts between medical technology and the quality of life.

Institutional Certificate

Ethics Certificate of Proficiency

This program has been suspended pending formal discontinuance and is no longer accepting new students.

The WSU Ethics Certificate of Proficiency is designed to prepare students and working professionals to succeed in such careers and professional roles as consultant, ombudsperson, and compliance officer. More generally, it will also prepare them to think critically about and be able to address ethical problems that arise in their professional and personal lives.

Requirements

- **Grade Requirements:** A grade of "C" or better in courses used toward the certificate (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program:** 7061CP
- **CIPC:** 380103

Philosophy Required Course (6 credits)

- PHIL 2050 HU - Practical Ethics **Credits: (3)**
- PHIL 4600 - Ethical Theory **Credits: (3)**

Electives (12 credits)

Select a minimum of 12 credits from the following, at least 3 of which must be chosen from among PHIL 3250, PHIL 3800, PHIL 3350, and PHIL 3700.

- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)** *
- CJ 4200 - Ethical Issues in Criminal Justice **Credits: (3)** *
- HAS 4400 - Legal and Ethical Aspects of Health Administration **Credits: (3)** *
- CYBR 2510 - Cyberethics **Credits: (1)** *
- CYBR 3730 - Survey of Information Security Policies **Credits: (3)** *
- OCRE 4300 - Trends and Ethical Issues in Recreation Services **Credits: (3)** *
- PHIL 3250 - Philosophy of Law **Credits: (3)**
- PHIL 3800 - Philosophy of Race, Gender, and Justice **Credits: (3)**
- PHIL 3350 - Medical Ethics **Credits: (3)**
- PHIL 3700 - Environmental Philosophy **Credits: (3)**
- PHIL 4400 - Great Issues in Philosophy **Credits: (3)** (with approval of the philosophy program director)
- PHIL 4830 - Directed Readings **Credits: (1-2)** (with approval of the philosophy program director)
- POLS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)**
- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**
- POLS 3340 - Environmental Political Theory **Credits: (3)**
- POLS 4210 GLB - Violence and Contestation **Credits: (3)**
- PS 4203 - Ethical Sales and Service **Credits: (3)** *
- RADT 3043 - Medical Ethics and Law **Credits: (3)**
- SW 3900 - Social Work Methods, Values, and Ethics **Credits: (3)** **

** Has prerequisites that the home department will waive for students enrolled in the certificate program.*

*** Has prerequisites that cannot be waived. Please consult the university catalog for details.*

Bachelor of Arts

Philosophy (BA)

- **Program Prerequisite:** Not required.
- **Minor:** Required
- **Grade Requirements:** A grade of "C" or better in courses counted toward fulfilling the major (a grade of "C-" is not acceptable) and an overall GPA of 2.00.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 40 upper division credit hours are required (courses numbered 3000 and above). Philosophy majors are required to take 36 credit hours within the major, of which at least 27 must be upper division.
- **Program Code:** 7011BA
- **CIPC:** 380101

Advisement

All Philosophy students are required to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6694 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements.

Core and General Education

Refer to Degree Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements. One of the following courses may be used to fulfill both general education (humanities) and program requirements: PHIL 1000, PHIL 1250, PHIL 2050.

Students majoring or minoring in Philosophy who transfer from another institution and who intend to graduate from WSU will be required to take, in the case of the minor, at least one class in PHIL, and in the case of the major, at least two classes in PHIL, including Senior Capstone Seminar.

Program Learning Outcomes

- Historical Knowledge
- Topical Knowledge
- Critical Thinking
- Reading Comprehension
- Writing Skills

Major Course Requirements for BA Degree

Core Courses Required (6 credit hours)

- PHIL 1000 HU/CC - Introduction to Philosophy **Credits: (3)**
- PHIL 4900 - Senior Capstone Seminar **Credits: (3)**

Electives (30 credit hours minimum)

Select a minimum of 30 credit hours from the following list, including one of either PHIL 1250 or PHIL 2200, one of either PHIL 3010 or PHIL 3020, one of either PHIL 3650 or PHIL 4600, and one of either PHIL 4510 or PHIL 4520. At least 24 elective credits must be upper division.

- PHIL 2050 HU - Practical Ethics **Credits: (3)**
- PHIL 1250 HU - Critical Thinking **Credits: (3)**
- PHIL 2200 - Deductive Logic **Credits: (3)**
- PHIL 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- PHIL 3010 - History of Philosophy: Classical & Medieval **Credits: (3)**
- PHIL 3020 - History of Philosophy: Modern **Credits: (3)**
- PHIL 3150 - Existentialism **Credits: (3)**
- PHIL 3200 - Philosophy of Democracy **Credits: (3)**
- PHIL 3250 - Philosophy of Law **Credits: (3)**
- PHIL 3800 - Philosophy of Race, Gender, and Justice **Credits: (3)**
- PHIL 3350 - Medical Ethics **Credits: (3)**
- PHIL 3500 - Philosophy of Western Religion **Credits: (3)**
- PHIL 3550 - Philosophy of Eastern Religion **Credits: (3)**
- PHIL 3650 - Aesthetics **Credits: (3)**
- PHIL 3700 - Environmental Philosophy **Credits: (3)**
- PHIL 4400 - Great Issues in Philosophy **Credits: (3)**
- PHIL 4450 - Great Thinkers of Philosophy **Credits: (3)**
- PHIL 4510 - Metaphysics **Credits: (3)**
- PHIL 4520 - Epistemology **Credits: (3)**
- PHIL 4530 - Philosophy of Mind **Credits: (3)**
- PHIL 4540 - Philosophy of Language **Credits: (3)**
- PHIL 4600 - Ethical Theory **Credits: (3)**
- PHIL 4810 - Experimental Course **Credits: (1-6)**
- PHIL 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- PHIL 4830 - Directed Readings **Credits: (1-2)**

Language Courses Required to fulfill the BA

Students completing a BA in philosophy must complete 6 hours of foreign language courses (these can be taken in more than one language) or demonstrate equivalent competency. Students must also complete 6 hours of language arts, which are automatically satisfied by completing the philosophy course requirements.

Political Science (BA)

- **Program Prerequisite:** Not required for Political Science major. Political Science Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education). Teaching Majors are also required to take HIST 4500 - Teaching Social Studies in Grades 5-12, for a total of 42 semester hours including HIST 4500.
- **Minor:** A minor or a double major is required.
- **Grade Requirements:** Political Science majors must have an overall GPA of 2.00 and a "C" or better grade in courses used toward the major (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 40 upper division credit hours are required (courses numbered 3000 and above). Political Science majors are required to take

39 credit hours within the major; teaching majors must also take HIST 4500 - Teaching Social Studies in Grades 5-12, for a total of 42 credit hours.

- **Program Code:** 7012BA
- **CIPC:** 451001

Advisement

All Political Science students should meet with a Political Science faculty advisor once they have declared their major or minor to receive program advisement. Please get in touch with the department admin at 801-626-6694 to schedule an appointment.

Admission Requirements

There are no special admission or application requirements for the Political Science major. Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. See specific requirements for the BA and BS under the major course requirements. Five Political Science courses can fulfill both general education and Political Science major or minor requirements: POLS 1100 fulfills the American Institutions requirement; POLS 2100, POLS 2200, POLS 2300, and POLS 2400 are all Social Science General Education courses, but students may only count one of these three courses towards the Social Science General Education requirement. Consult with a department advisor for specific general education guidelines. Political Science majors are encouraged to take MATH 1040 (Statistics) to fulfill their Quantitative Literacy Requirement and LIBS 2804 to fulfill of their Information Literacy requirement.

Students who transfer from another institution and who intend to graduate from WSU with a minor in Political Science or a Political Science Teaching minor will be required to take at least two classes in Political Science at WSU. Students who transfer from another institution and who intend to graduate from WSU with a major in Political Science or a Political Science Teaching major will be required to take at least three classes in POLS, plus POLS 4990 Senior Seminar at WSU. These classes must be taken during the calendar year immediately preceding graduation.

AP credit for high school American Government courses will be accepted for Political Science POLS 1100 and POLS 2200. It will count toward the total hours required for graduation and count toward the total of 39 credit hours required for a Political Science major. A score of 3 or higher on the AP U.S. Government and Politics course will count in place of POLS 1100. A score of 3 or higher on the AP Comparative Politics course will count in place of POLS 2200.

Program Learning Outcomes

- Political Science students will understand and model civic dispositions conducive to democratic involvement. Specifically, we recommend attention to fostering the civic attitudes of political efficacy, empathy, civic duty, civic confidence, and civic reflection, and an inclination to engage in dialogue across difference.
- Political Science students will demonstrate an ability to analyze political phenomena and critique arguments in a theoretically and empirically informed manner.
- Political Science students will demonstrate an ability to engage as global citizens through problem solving, collective action, and collaborative decision making.
- Political Science students will demonstrate an ability to identify, evaluate, properly use, and cite verifiable sources of evidence.

- Political Science students will demonstrate an ability to engage thoughtfully with competing values and perspectives.
- Political Science students will demonstrate an ability to use qualitative and quantitative methods effectively and appropriately.
- Political Science students will demonstrate an ability to communicate effectively in written and verbal modes to a variety of audiences.
- Political science students will be able to understand and apply key concepts used to study political institutions, processes, and actors in a variety of settings.
- Political science students will be able to understand and evaluate diverse theoretical and disciplinary approaches to the nature, ethical distribution, and uses of power.
- Political science students will be able to understand, apply, and evaluate approaches and theories that address political phenomena.
- Political science students will be able to understand the different ways individuals and groups engage in politics at the local, regional, national, and global levels, and evaluate the effectiveness and effects of different strategies of civic engagement.

Political Science Major Course Requirements for BA

Language Courses Required to fulfill the BA (12 credit hours)

Majors obtaining a Bachelor of Arts in Political Science must take either a minimum of twelve hours of foreign language, or six hours of foreign language and six hours of language arts coursework that are primarily intended to develop a student's ability to communicate ideas and concepts with others. The six hours of language arts coursework shall be met by taking any two of the following courses:

- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**
- POLS 4020 - Constitutional Law: Powers **Credits: (3)**
- POLS 4030 - Constitutional Law: Rights **Credits: (3)**
- POLS 4190 GLB - Theories of International Politics **Credits: (3)**
- POLS 4380 - Modern Political Thought **Credits: (3)**
- WGS 3050 - Introduction to Feminist Theories 1700 -- Present **Credits: (3)**
- ENGL 3210 - Advanced College Writing **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- PHIL 3020 - History of Philosophy: Modern **Credits: (3)**
- PHIL 3200 - Philosophy of Democracy **Credits: (3)**

Note:

Any of the Political Science courses taken to meet the BA requirements may also be used to meet the appropriate Political Science requirements listed below. Also, any of the above courses may have pre-requisites not listed here that will need to be met.

Core Courses Required for BA (15 credit hours)

- POLS 1010 SS/CC - Politics, Power, and the State **Credits: (3)**
- POLS 4990 - Senior Seminar/Senior Thesis **Credits: (3)** *Fall Only. POLS 1010 is a prerequisite for POLS 4990.*

And three of the following lower division area courses:

- POLS 1100 AI - American National Government **Credits: (3)**
- POLS 2100 SS SUS GLB - International Politics, Organizations, and Society **Credits: (3)**
- POLS 2200 SS GLB - Global Governments, Politics, and Societies **Credits: (3)**
- POLS 2300 SS - Introduction to Political Theory **Credits: (3)**
- POLS 2400 SS - Introduction to Law and Courts **Credits: (3)**
- POLS 2700 - Introduction to Public Administration **Credits: (3)**

Political Science Additional Upper Division Major Course Requirements for BA (18 Credits)

Take at least three courses in one of the following areas, at least two courses in a second area, and at least one course in the final area.

Area 1: American Government

- POLS 3400 - LGBTQ Politics **Credits: (3)**
- POLS 3600 - Political Parties **Credits: (3)**
- POLS 3610 - Campaigns and Elections **Credits: (3)**
- POLS 3620 - Political Behavior **Credits: (3)**
- POLS 3640 - Media and Politics **Credits: (3)**
- POLS 3700 - Bureaucratic Politics **Credits: (3)**
- POLS 3750 - Urban Government and Politics **Credits: (3)**
- POLS 3760 - State Government and Politics **Credits: (3)**
- POLS 3780 - Lobbying: Theory and Practice **Credits: (3)**
- POLS 4020 - Constitutional Law: Powers **Credits: (3)**
- POLS 4030 - Constitutional Law: Rights **Credits: (3)**
- CJ 4065 - Law and Society **Credits: (3)** or
- SOC 4270 - Law and Society **Credits: (3)**
- POLS 4100 - Free Speech **Credits: (3)**
- POLS 4600 - American Congress **Credits: (3)**
- POLS 4620 - The U.S. Supreme Court **Credits: (3)**
- POLS 4640 - American Presidency **Credits: (3)**
- POLS 4050 - Institutional Presidency **Credits: (3)**
- POLS 4750 - Public Policy Analysis **Credits: (3)**

Area 2: Global Politics

- POLS 3140 GLB - Foreign Policy of the United States **Credits: (3)** or
- HIST 3230 GLB - American Foreign Relations **Credits: (3)**
- POLS 3200 GLB - Middle East and North Africa **Credits: (3)**
- POLS 3210 GLB - Politics in the European Union **Credits: (3)**
- POLS 3290 GLB - Democratization and Political Transitions **Credits: (3)**
- POLS 4160 - Topics in Global Politics **Credits: (3)**
- POLS 4170 GLB - Gender, Power, and Global Politics **Credits: (3)**

- POLS 4180 GLB - International Law and Organization **Credits: (3)**
- POLS 4190 GLB - Theories of International Politics **Credits: (3)**
- POLS 4210 GLB - Violence and Contestation **Credits: (3)**
- POLS 4200 GLB - Dictatorships **Credits: (3)**
- POLS 4760 - Rwanda: Genocide and Aftermath **Credits: (3)**
- POLS 4770 GLB - Genocide, War, and Human Rights **Credits: (3)**

Area 3: Political Theory

- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**
- POLS 3340 - Environmental Political Theory **Credits: (3)**
- POLS 4380 - Modern Political Thought **Credits: (3)**
- PHIL 3200 - Philosophy of Democracy **Credits: (3)**
- WGS 3050 - Introduction to Feminist Theories 1700 -- Present **Credits: (3)**

****Counts in this area when the topic is in Political Theory***

Other Elective Courses

An additional 6 credit hours will be needed to reach the required 39. You may get those additional 3 hours from any of the following classes or any of the courses in the above three areas which you have not already taken.

- POLS 1520 SS - Leadership and Political Life **Credits: (3)**
- POLS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)**
- POLS 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)** or
- POLS 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- POLS 2930 - Peacebuilding in Rwanda **Credits: (3)**
- POLS 3150 GLB - Model United Nations **Credits: (3)**
- POLS 3990 - Political Analysis **Credits: (3)**
- POLS 4800 - Individual Projects and Research **Credits: (1-2)**
- POLS 4860 INT - Internships **Credits: (1-6)**
- POLS 4861 INT - International Internships **Credits: (1-6)**
- POLS 4865 INT - Utah State Legislature Internship **Credits: (1-6)**
- POLS 4870 INT - Internship in Perspective **Credits: (3)**
- POLS 4880 INT - Internship Research **Credits: (3)**
- POLS 4830 - Directed Readings **Credits: (3)**
- POLS 3070 - Moot Court **Credits: (3)**

Note:

All Political Science courses- as well as HIST 3230, PHIL 3200, CJ 4065, and WGS 3050-count toward the total hours required for the political science major and minor. However, none of these courses, if they are being counted for the political science major or minor, may count toward another major or minor. Similarly, if any of these courses are being counted for a major or minor that is not political science, they cannot be counted for the major or minor requirements of political science.

Bachelor of Science

Political Science (BS)

- **Program Prerequisite:** Not required for Political Science major. Political Science Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education). Teaching Majors are also required to take HIST 4500 - Teaching Social Studies in Grades 5-12, for a total of 42 semester hours including HIST 4500.
- **Minor:** A minor or a double major is required.
- **Grade Requirements:** Political Science majors must have an overall GPA of 2.00 and a "C" or better grade in courses used toward the major (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 40 upper division credit hours are required (courses numbered 3000 and above). Political Science majors are required to take 39 credit hours within the major; teaching majors must also take HIST 4500 - Teaching Social Studies in Grades 5-12, for a total of 42 credit hours.
- **Program Code:** 7012BS
- **CIPC:** 451001

Advisement

All Political Science students should meet with a Political Science faculty advisor once they have declared their major or minor to receive program advisement. Please get in touch with the department admin at 801-626-6694 to schedule an appointment.

Admission Requirements

There are no special admission or application requirements for the Political Science major. Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. See specific requirements for the BA and BS under the major course requirements. Four Political Science courses can fulfill both general education and Political Science major or minor requirements: POLS 1100 fulfills the American Institutions requirement; POLS 2100, POLS 2200, and POLS 2300 are all Social Science General Education courses, but students may only count one of these three courses towards the Social Science General Education requirement. Consult with a department advisor for specific general education guidelines. Political Science majors are encouraged to take MATH 1040 (Statistics) to fulfill their Quantitative Literacy Requirement and LIBS 2804 to fulfill of their Information Literacy requirement.

Students who transfer from another institution and who intend to graduate from WSU with a minor in Political Science or a Political Science Teaching minor will be required to take at least two classes in Political Science at WSU. Students who transfer from another institution and who intend to graduate from WSU with a major in Political Science or a Political Science Teaching major will be required to take at least three classes in POLS, plus POLS 4990 Senior Seminar at WSU. These classes must be taken during the calendar year immediately preceding graduation.

AP credit for high school American Government courses will be accepted for Political Science POLS 1100 and POLS 2200. It will count toward the total hours required for graduation and count toward the total of 39 credit hours required for a Political Science major. A score of 3 or higher on the AP U.S. Government and Politics course will

count in place of POLS 1100. A score of 3 or higher on the AP Comparative Politics course will count in place of POLS 2200.

Program Learning Outcomes

- Political Science students will understand and model civic dispositions conducive to democratic involvement. Specifically, we recommend attention to fostering the civic attitudes of political efficacy, empathy, civic duty, civic confidence, and civic reflection, and an inclination to engage in dialogue across difference.
- Political Science students will demonstrate an ability to analyze political phenomena and critique arguments in a theoretically and empirically informed manner.
- Political Science students will demonstrate an ability to engage as global citizens through problem solving, collective action, and collaborative decision making.
- Political Science students will demonstrate an ability to identify, evaluate, properly use, and cite verifiable sources of evidence.
- Political Science students will demonstrate an ability to engage thoughtfully with competing values and perspectives.
- Political Science students will demonstrate an ability to use qualitative and quantitative methods effectively and appropriately.
- Political Science students will demonstrate an ability to communicate effectively in written and verbal modes to a variety of audiences.
- Political science students will be able to understand and apply key concepts used to study political institutions, processes, and actors in a variety of settings.
- Political science students will be able to understand and evaluate diverse theoretical and disciplinary approaches to the nature, ethical distribution, and uses of power.
- Political science students will be able to understand, apply, and evaluate approaches and theories that address political phenomena.
- Political science students will be able to understand the different ways individuals and groups engage in politics at the local, regional, national, and global levels, and evaluate the effectiveness and effects of different strategies of civic engagement.

Political Science Major Course Requirements for BS

Majors obtaining a Bachelor of Science in Political Science must take a minimum of twelve hours of coursework that emphasizes analysis of data, application of evidence based investigation, formulation and testing of predictive models, or address quantitative methods at a level that requires quantitative literacy. These twelve hours must come from the following list of courses:

- POLS 3610 - Campaigns and Elections **Credits: (3)**
- POLS 3620 - Political Behavior **Credits: (3)**
- POLS 3990 - Political Analysis **Credits: (3)**
- POLS 4750 - Public Policy Analysis **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)**
- ANTH 4300 CRE - Anthropological Research Methods **Credits: (3)**
- GEOG 3060 SUS - Environmental Issues: Local to Global Impacts and Solutions **Credits: (3)**
- GEOG 4410 SUS - Sustainable Land Use Planning **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- ECON 4520 - Public Finance **Credits: (3)**
- PSY 3600 - Statistics in Psychology **Credits: (3)**

- PSY 4760 - Tests and Measurements **Credits: (3)**
- SW 3600 - Social Statistics **Credits: (3)**

Note:

Any of the Political Science courses taken to meet the BS requirements may also be used to meet the appropriate Political Science requirements listed below. Also, any of the above courses may have pre-requisites not listed here that will need to be met.

Core Courses Required for BS (15 credit hours)

- POLS 1010 SS/CC - Politics, Power, and the State **Credits: (3)**
- POLS 4990 - Senior Seminar/Senior Thesis **Credits: (3)** *Fall Only. POLS 1010 is a prerequisite for POLS 4990*

And three of the following lower division area courses:

- POLS 1100 AI - American National Government **Credits: (3)**
- POLS 2100 SS SUS GLB - International Politics, Organizations, and Society **Credits: (3)**
- POLS 2200 SS GLB - Global Governments, Politics, and Societies **Credits: (3)**
- POLS 2300 SS - Introduction to Political Theory **Credits: (3)**
- POLS 2400 SS - Introduction to Law and Courts **Credits: (3)**
- POLS 2700 - Introduction to Public Administration **Credits: (3)**

Additional Upper Division Major Course Requirements (18 credit hours)

See Additional Upper Division Major Course Requirements below

Political Science Additional Upper Division Major Course Requirements for BS

Take at least three courses in one of the following areas, at least two courses in a second area, and at least one course in the final area.

Area 1: American Government

- POLS 3400 - LGBTQ Politics **Credits: (3)**
- POLS 3600 - Political Parties **Credits: (3)**
- POLS 3610 - Campaigns and Elections **Credits: (3)**
- POLS 3620 - Political Behavior **Credits: (3)**
- POLS 3640 - Media and Politics **Credits: (3)**
- POLS 3700 - Bureaucratic Politics **Credits: (3)**
- POLS 3750 - Urban Government and Politics **Credits: (3)**
- POLS 3760 - State Government and Politics **Credits: (3)**
- POLS 3780 - Lobbying: Theory and Practice **Credits: (3)**
- POLS 4020 - Constitutional Law: Powers **Credits: (3)**
- POLS 4030 - Constitutional Law: Rights **Credits: (3)**

- CJ 4065 - Law and Society **Credits: (3)** or
- SOC 4270 - Law and Society **Credits: (3)**
- POLS 4100 - Free Speech **Credits: (3)**
- POLS 4600 - American Congress **Credits: (3)**
- POLS 4620 - The U.S. Supreme Court **Credits: (3)**
- POLS 4640 - American Presidency **Credits: (3)**
- POLS 4750 - Public Policy Analysis **Credits: (3)**
- POLS 4050 - Institutional Presidency **Credits: (3)**

Area 2: Global Politics

- POLS 3140 GLB - Foreign Policy of the United States **Credits: (3)** or
- HIST 3230 GLB - American Foreign Relations **Credits: (3)**
- POLS 3210 GLB - Politics in the European Union **Credits: (3)**
- POLS 3290 GLB - Democratization and Political Transitions **Credits: (3)**
- POLS 4160 - Topics in Global Politics **Credits: (3)**
- POLS 4170 GLB - Gender, Power, and Global Politics **Credits: (3)**
- POLS 4180 GLB - International Law and Organization **Credits: (3)**
- POLS 4190 GLB - Theories of International Politics **Credits: (3)**
- POLS 4760 - Rwanda: Genocide and Aftermath **Credits: (3)**
- POLS 4200 GLB - Dictatorships **Credits: (3)**
- POLS 4210 GLB - Violence and Contestation **Credits: (3)**
- POLS 3200 GLB - Middle East and North Africa **Credits: (3)**
- POLS 4770 GLB - Genocide, War, and Human Rights **Credits: (3)**

Area 3: Political Theory

- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**
- POLS 3340 - Environmental Political Theory **Credits: (3)**
- POLS 4380 - Modern Political Thought **Credits: (3)**
- PHIL 3200 - Philosophy of Democracy **Credits: (3)**
- WGS 3050 - Introduction to Feminist Theories 1700 -- Present **Credits: (3)**

****Counts in this area when the topic is in Political Theory***

Other Elective Courses

An additional 6 credit hours will be needed to reach the required 39. You may get those additional 6 hours from any of the following classes or any of the courses in the above three areas which you have not already taken.

- POLS 1520 SS - Leadership and Political Life **Credits: (3)**
- POLS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)**
- POLS 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)** or

- POLS 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- POLS 2930 - Peacebuilding in Rwanda **Credits: (3)**
- POLS 3150 GLB - Model United Nations **Credits: (3)**
- POLS 4800 - Individual Projects and Research **Credits: (1-2)**
- POLS 4860 INT - Internships **Credits: (1-6)**
- POLS 4861 INT - International Internships **Credits: (1-6)**
- POLS 4865 INT - Utah State Legislature Internship **Credits: (1-6)**
- POLS 4870 INT - Internship in Perspective **Credits: (3)**
- POLS 4880 INT - Internship Research **Credits: (3)**
- POLS 4830 - Directed Readings **Credits: (3)**
- POLS 3070 - Moot Court **Credits: (3)**

Note:

All Political Science courses- as well as HIST 3230, PHIL 3200, CJ 4065, and WGS 3050-count toward the total hours required for the political science major and minor. However, none of these courses, if they are being counted for the political science major or minor, may count toward another major or minor. Similarly, if any of these courses are being counted for a major or minor that is not political science, they cannot be counted for the major or minor requirements of political science.

Emphasis Option for Bachelor of Interdisciplinary Studies

Political Science (BIS)

Political Science Minor/ Teaching Minor/ BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor programs are still accepting students.

- **Grade Requirements:** An overall GPA of 2.00 or higher is required and a grade of "C" or better in all Political Science courses used toward the minor/BIS (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 21 credit hours for Political Science minor/BIS and a minimum of 24 credit hours for the teaching minor, which includes HIST 4500 - Teaching Social Studies in Grades 5-12, a required course for Political Science Teaching Minors.
- **Program Code:** Political Science (7012), Political Science Teaching (7013), Political Science BIS (7012)
- **CIPC:** Political Science (451001), Political Science Teaching (131317), Political Science BIS (451001)

Students who select the Political Science Teaching minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.

- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements

Political Science Courses Required (6 credit hours)

Select two of the following courses

- POLS 1100 AI - American National Government **Credits: (3)**
- POLS 2100 SS SUS GLB - International Politics, Organizations, and Society **Credits: (3)**
- POLS 2200 SS GLB - Global Governments, Politics, and Societies **Credits: (3)**
- POLS 2300 SS - Introduction to Political Theory **Credits: (3)**
- POLS 2400 SS - Introduction to Law and Courts **Credits: (3)**
- POLS 2700 - Introduction to Public Administration **Credits: (3)**

Elective Requirements (15 credit hours)

Select at least four courses from the following upper division electives.

- POLS 3140 GLB - Foreign Policy of the United States **Credits: (3)** or
- HIST 3230 GLB - American Foreign Relations **Credits: (3)**
- POLS 3200 GLB - Middle East and North Africa **Credits: (3)**
- POLS 3210 GLB - Politics in the European Union **Credits: (3)**
- POLS 3290 GLB - Democratization and Political Transitions **Credits: (3)**
- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**
- POLS 3340 - Environmental Political Theory **Credits: (3)**
- POLS 3400 - LGBTQ Politics **Credits: (3)**
- POLS 3600 - Political Parties **Credits: (3)**
- POLS 3610 - Campaigns and Elections **Credits: (3)**
- POLS 3620 - Political Behavior **Credits: (3)**
- POLS 3700 - Bureaucratic Politics **Credits: (3)**
- POLS 3750 - Urban Government and Politics **Credits: (3)**
- POLS 3760 - State Government and Politics **Credits: (3)**
- POLS 3780 - Lobbying: Theory and Practice **Credits: (3)**
- POLS 4020 - Constitutional Law: Powers **Credits: (3)**
- POLS 4030 - Constitutional Law: Rights **Credits: (3)**
- POLS 4050 - Institutional Presidency **Credits: (3)**
- CJ 4065 - Law and Society **Credits: (3)** or
- SOC 4270 - Law and Society **Credits: (3)**
- POLS 4100 - Free Speech **Credits: (3)**
- POLS 4160 - Topics in Global Politics **Credits: (3)**
- POLS 4170 GLB - Gender, Power, and Global Politics **Credits: (3)**

- POLS 4180 GLB - International Law and Organization **Credits: (3)**
- POLS 4190 GLB - Theories of International Politics **Credits: (3)**
- POLS 4200 GLB - Dictatorships **Credits: (3)**
- POLS 4210 GLB - Violence and Contestation **Credits: (3)**
- POLS 4380 - Modern Political Thought **Credits: (3)**
- POLS 4600 - American Congress **Credits: (3)**
- POLS 4620 - The U.S. Supreme Court **Credits: (3)**
- POLS 4640 - American Presidency **Credits: (3)**
- POLS 4750 - Public Policy Analysis **Credits: (3)**
- POLS 4760 - Rwanda: Genocide and Aftermath **Credits: (3)**
- POLS 4770 GLB - Genocide, War, and Human Rights **Credits: (3)**
- PHIL 3200 - Philosophy of Democracy **Credits: (3)**
- WGS 3050 - Introduction to Feminist Theories 1700 -- Present **Credits: (3)**
- POLS 3640 - Media and Politics **Credits: (3)**

Additional Electives

These courses may be used to complete the credit requirements.

- POLS 1010 SS/CC - Politics, Power, and the State **Credits: (3)**
- POLS 1520 SS - Leadership and Political Life **Credits: (3)**
- POLS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)**
- POLS 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)** or
- POLS 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- POLS 2930 - Peacebuilding in Rwanda **Credits: (3)**
- POLS 3070 - Moot Court **Credits: (3)**
- POLS 3150 GLB - Model United Nations **Credits: (3)**
- POLS 3990 - Political Analysis **Credits: (3)**
- POLS 4800 - Individual Projects and Research **Credits: (1-2)**
- POLS 4830 - Directed Readings **Credits: (3)**
- POLS 4860 INT - Internships **Credits: (1-6)**
- POLS 4861 INT - International Internships **Credits: (1-6)**
- POLS 4865 INT - Utah State Legislature Internship **Credits: (1-6)**
- POLS 4870 INT - Internship in Perspective **Credits: (3)**
- POLS 4880 INT - Internship Research **Credits: (3)**

Note:

Students may count up to 3 hours of POLS 4830, 3 hours of POLS 4800, and 3 hours of POLS 4860 toward the total of 21 hours required for the minor, if needed.

All Political Science courses- as well as HIST 3230, PHIL 3200, CJ 4065, and WGS 3050-count toward the total hours required for the political science major and minor. However, none of these courses, if they are being counted for the political science major or minor, may count toward another major or minor. Similarly, if any of these courses are being counted for a major or minor that is not political science, they cannot be counted for the major or minor requirements of political science.

Minor

International Studies Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

Contact: Dr. Stephanie Wolfe

Office: SS 296

Email: stephaniewolfe@weber.edu

Phone: 801-626-6696

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 21 credit hours required.
- **Program Code:** 7049
- **CIPC:** 450901

Course Requirements for Minor

Required Core Courses (3 credit hours)

- POLS 2100 SS SUS GLB - International Politics, Organizations, and Society **Credits: (3)**

Additional Course Required (18 credit hours)

Students must take 18 additional hours with two courses from each area. No more than 6 hours (excluding the core requirement) may be lower division or from the same discipline. Courses may not be counted for both a major and this minor.

Area I: Contextualizing the International

- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)**
- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)**
- GEOG 3060 SUS - Environmental Issues: Local to Global Impacts and Solutions **Credits: (3)**
- GEOG 3360 - Economic Geography: Globalization, Development and Conflict **Credits: (3)**
- GEOG 3540 - Geography of Latin America and the Caribbean **Credits: (3)**
- GEOG 3590 - Geography of Europe: the Land and People who Built a World Power **Credits: (3)**
- GEOG 3640 - Geography of Asia: Development, Geopolitics and Environment **Credits: (3)**
- GEOG 3740 - Geography of Africa: Culture, Colonialism, Crises and Change **Credits: (3)**
- HIST 1510 SS/CC/GLB - World History from 1500 C.E. to the Present **Credits: (3)**
- HIST 4260 - Europe in the Age of Total War **Credits: (3)**
- HIST 4320 CRE - Stalin and the Soviet Experiment **Credits: (3)**
- HIST 4450 - Cold War Europe **Credits: (3)**
- HIST 4510 GLB - Twentieth Century World **Credits: (3)**

- HIST 4530 - Far Eastern History **Credits: (3)**
- HIST 4550 - Southeast Asian History **Credits: (3)**
- HIST 4590 GLB - Middle Eastern History **Credits: (3)**
- HIST 4650 - Latin American History Since Independence **Credits: (3)**
- HIST 4720 - Special Issues and Topics in European History **Credits: (3)**
- HIST 4730 - Special Issues and Topics in Global and Comparative History **Credits: (3)**
- SOC 4410 SUS - Sociology of Globalization **Credits: (3)**
- POLS 4190 GLB - Theories of International Politics **Credits: (3)**

- SPAN 3550 GLB - Cultural Heritage of Spain **Credits: (3)** or
- JPNS 3550 - Cultural Heritage I **Credits: (3)** or
- PTGS 3550 - Cultural Heritage I **Credits: (3)** or
- CHNS 3550 - Cultural Heritage I **Credits: (3)** or
- FRCH 3550 - Cultural Heritage I **Credits: (3)** or
- GRMN 3550 - Cultural Heritage I **Credits: (3)**

- FRCH 3560 - Cultural Heritage II **Credits: (3)** or
- GRMN 3560 - Cultural Heritage II **Credits: (3)** or
- JPNS 3560 - Cultural Heritage II **Credits: (3)** or
- PTGS 3560 - Cultural Heritage II **Credits: (3)** or
- SPAN 3560 - Cultural Heritage of Latin America **Credits: (3)**

Area 2: Operationalizing the International

- CJ 4700 - International Criminal Justice **Credits: (3)** or
- POLS 4180 GLB - International Law and Organization **Credits: (3)**

- POLS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)** or
- WGS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)**

- HIST 3230 GLB - American Foreign Relations **Credits: (3)** or
- POLS 3140 GLB - Foreign Policy of the United States **Credits: (3)**

- POLS 4170 GLB - Gender, Power, and Global Politics **Credits: (3)** or
- WGS 4170 GLB - Gender, Power, and Global Politics **Credits: (3)**

- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- HIST 4720 - Special Issues and Topics in European History **Credits: (3)**
- HIST 4730 - Special Issues and Topics in Global and Comparative History **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- POLS 3200 GLB - Middle East and North Africa **Credits: (3)**
- POLS 3210 GLB - Politics in the European Union **Credits: (3)**
- POLS 3290 GLB - Democratization and Political Transitions **Credits: (3)**
- POLS 4160 - Topics in Global Politics **Credits: (3)**
- POLS 4210 GLB - Violence and Contestation **Credits: (3)**

- POLS 4200 GLB - Dictatorships **Credits: (3)**
- POLS 4760 - Rwanda: Genocide and Aftermath **Credits: (3)**
- POLS 4770 GLB - Genocide, War, and Human Rights **Credits: (3)**

Area 3: Applying the International

If the course is variable, or is allowed to be repeated, only 3 credits may apply to this minor. Field trips and/or study trips must have an international component to count for this area.

- FRCH 2020 HU - Fourth Semester French **Credits: (3)**
 - FRCH 3060 - Grammar & Composition **Credits: (3)**
 - FRCH 3160 - Introduction to Literature **Credits: (3)**
 - FRCH 3570 GLB - Special Topics in Culture **Credits: (3)**
 - FRCH 3610 - Literature Survey I **Credits: (3)**
 - FRCH 3620 - Literature Survey II **Credits: (3)**
 - FRCH 3630 - Literature Poetry **Credits: (3)**
 - FRCH 3631 - Literature: Prose **Credits: (3)**
 - FRCH 3680 - Literature: Film **Credits: (3)**
 - FRCH 3715 - Business Language II **Credits: (3)**
 - FRCH 3740 - Translation I **Credits: (3)**
 - FRCH 3850 - Study Abroad **Credits: (1-6)**
-
- GRMN 2020 HU - Fourth Semester German **Credits: (3)**
 - GRMN 3060 - Grammar & Composition **Credits: (3)**
 - GRMN 3160 - Introduction to Literature **Credits: (3)**
 - GRMN 3570 GLB - Special Topics in Culture **Credits: (3)**
 - GRMN 3610 - Literature Survey I **Credits: (3)**
 - GRMN 3620 - Literature Survey II **Credits: (3)**
 - GRMN 3630 - Literature Poetry **Credits: (3)**
 - GRMN 3631 - Literature: Prose **Credits: (3)**
 - GRMN 3680 - Literature: Film **Credits: (3)**
 - GRMN 3715 - Business Language II **Credits: (3)**
 - GRMN 3740 - Translation I **Credits: (3)**
 - GRMN 3850 - Study Abroad **Credits: (1-6)**
-
- JPNS 2020 HU - Fourth Semester Japanese **Credits: (3)**
 - JPNS 3060 - Grammar & Composition **Credits: (3)**
 - JPNS 3160 - Introduction to Literature **Credits: (3)**
 - JPNS 3570 - Special Topics in Culture **Credits: (3)**
 - JPNS 3610 - Literature Survey I **Credits: (3)**
 - JPNS 3620 - Literature Survey II **Credits: (3)**
 - JPNS 3630 - Literature Poetry **Credits: (3)**
 - JPNS 3631 - Literature: Prose **Credits: (3)**
 - JPNS 3680 - Literature: Film **Credits: (3)**
 - JPNS 3715 - Business Language II **Credits: (3)**
 - JPNS 3740 - Translation I **Credits: (3)**
 - JPNS 3850 - Study Abroad **Credits: (1-6)**

- PTGS 2020 HU - Fourth Semester Portuguese **Credits: (3)**
 - PTGS 3060 - Grammar & Composition **Credits: (3)**
 - PTGS 3160 - Introduction to Literature **Credits: (3)**
 - PTGS 3570 - Special Topics in Culture **Credits: (3)**
 - PTGS 3610 - Literature Survey I **Credits: (3)**
 - PTGS 3850 - Study Abroad **Credits: (1-6)**
-
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**
 - SPAN 3060 - Grammar & Composition **Credits: (3)**
 - SPAN 3160 - Introduction to Literature **Credits: (3)**
 - SPAN 3570 GLB - Special Topics in Culture **Credits: (3)**
 - SPAN 3610 - Peninsular Literature I **Credits: (3)**
 - SPAN 3620 - Peninsular Literature II **Credits: (3)**
 - SPAN 3630 - Literature Poetry **Credits: (3)**
 - SPAN 3631 - Literature: Prose **Credits: (3)**
 - SPAN 3680 - Literature: Film **Credits: (3)**
 - SPAN 4710 - Business Language II **Credits: (3)**
 - SPAN 3740 - Translation I **Credits: (3)**
 - SPAN 3750 - Healthcare Interpreting **Credits: (3)**
 - SPAN 3850 - Study Abroad **Credits: (1-6)**
-
- PTGS 3620 - Literature Survey II **Credits: (3)**
 - PTGS 3631 - Literature: Prose **Credits: (3)**
 - PTGS 3680 - Literature: Film **Credits: (3)**
 - PTGS 3715 - Business Language II **Credits: (3)**
 - PTGS 3740 - Translation I **Credits: (3)**
-
- GEOG 4950 - Advanced Regional Field Studies or Field Trips **Credits: (1-3)**
 - CJ 4950 - Field Trips/Travel Study **Credits: (1-6)**
 - HIST 4720 - Special Issues and Topics in European History **Credits: (3)**
 - MKTG 4850 - Marketing Study Abroad **Credits: (1-3)**
 - MGMT 4850 - Management Study Abroad **Credits: (1-3)**
 - HIST 4730 - Special Issues and Topics in Global and Comparative History **Credits: (3)**
 - POLS 2930 - Peacebuilding in Rwanda **Credits: (3)**
 - POLS 3150 GLB - Model United Nations **Credits: (3)**
 - POLS 4861 INT - International Internships **Credits: (1-6)**

See also:

Legal Studies Minor

Philosophy Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 21 credit hours.
- **Program Code:** 7011
- **CIPC:** 380101

Course Requirements for Minor

Philosophy Courses Required (3 credit hours)

- PHIL 1000 HU/CC - Introduction to Philosophy **Credits: (3)**

Philosophy Electives (18 credit hours minimum)

Select a minimum of 18 credit hours from the following, including one of either PHIL 1250 or PHIL 2200 and one of either PHIL 3010 or PHIL 3020. At least 12 elective credits must be upper division.

- PHIL 2050 HU - Practical Ethics **Credits: (3)**
- PHIL 1250 HU - Critical Thinking **Credits: (3)**
- PHIL 2200 - Deductive Logic **Credits: (3)**
- PHIL 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- PHIL 3010 - History of Philosophy: Classical & Medieval **Credits: (3)**
- PHIL 3020 - History of Philosophy: Modern **Credits: (3)**
- PHIL 3150 - Existentialism **Credits: (3)**
- PHIL 3200 - Philosophy of Democracy **Credits: (3)**
- PHIL 3250 - Philosophy of Law **Credits: (3)**
- PHIL 3800 - Philosophy of Race, Gender, and Justice **Credits: (3)**
- PHIL 3350 - Medical Ethics **Credits: (3)**
- PHIL 3500 - Philosophy of Western Religion **Credits: (3)**
- PHIL 3550 - Philosophy of Eastern Religion **Credits: (3)**
- PHIL 3650 - Aesthetics **Credits: (3)**
- PHIL 3700 - Environmental Philosophy **Credits: (3)**
- PHIL 4400 - Great Issues in Philosophy **Credits: (3)**
- PHIL 4450 - Great Thinkers of Philosophy **Credits: (3)**
- PHIL 4510 - Metaphysics **Credits: (3)**
- PHIL 4520 - Epistemology **Credits: (3)**
- PHIL 4530 - Philosophy of Mind **Credits: (3)**
- PHIL 4540 - Philosophy of Language **Credits: (3)**
- PHIL 4600 - Ethical Theory **Credits: (3)**
- PHIL 4810 - Experimental Course **Credits: (1-6)**
- PHIL 4830 - Directed Readings **Credits: (1-2)**
- PHIL 4900 - Senior Capstone Seminar **Credits: (3)**
- PHIL 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

Political Science Minor/BIS

Political Science Minor/ Teaching Minor/ BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor programs are still accepting students.

- **Grade Requirements:** An overall GPA of 2.00 or higher is required and a grade of "C" or better in all Political Science courses used toward the minor/BIS (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 21 credit hours for Political Science minor/BIS and a minimum of 24 credit hours for the teaching minor, which includes HIST 4500 - Teaching Social Studies in Grades 5-12, a required course for Political Science Teaching Minors.
- **Program Code:** Political Science (7012), Political Science Teaching (7013), Political Science BIS (7012)
- **CIPC:** Political Science (451001), Political Science Teaching (131317), Political Science BIS (451001)

Students who select the Political Science Teaching minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements

Political Science Courses Required (6 credit hours)

Select two of the following courses

- POLS 1100 AI - American National Government **Credits: (3)**
- POLS 2100 SS SUS GLB - International Politics, Organizations, and Society **Credits: (3)**
- POLS 2200 SS GLB - Global Governments, Politics, and Societies **Credits: (3)**
- POLS 2300 SS - Introduction to Political Theory **Credits: (3)**
- POLS 2400 SS - Introduction to Law and Courts **Credits: (3)**
- POLS 2700 - Introduction to Public Administration **Credits: (3)**

Elective Requirements (15 credit hours)

Select at least four courses from the following upper division electives.

- POLS 3140 GLB - Foreign Policy of the United States **Credits: (3)** or
- HIST 3230 GLB - American Foreign Relations **Credits: (3)**
- POLS 3200 GLB - Middle East and North Africa **Credits: (3)**
- POLS 3210 GLB - Politics in the European Union **Credits: (3)**
- POLS 3290 GLB - Democratization and Political Transitions **Credits: (3)**

- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**
- POLS 3340 - Environmental Political Theory **Credits: (3)**
- POLS 3400 - LGBTQ Politics **Credits: (3)**
- POLS 3600 - Political Parties **Credits: (3)**
- POLS 3610 - Campaigns and Elections **Credits: (3)**
- POLS 3620 - Political Behavior **Credits: (3)**
- POLS 3700 - Bureaucratic Politics **Credits: (3)**
- POLS 3750 - Urban Government and Politics **Credits: (3)**
- POLS 3760 - State Government and Politics **Credits: (3)**
- POLS 3780 - Lobbying: Theory and Practice **Credits: (3)**
- POLS 4020 - Constitutional Law: Powers **Credits: (3)**
- POLS 4030 - Constitutional Law: Rights **Credits: (3)**
- POLS 4050 - Institutional Presidency **Credits: (3)**
- CJ 4065 - Law and Society **Credits: (3)** or
- SOC 4270 - Law and Society **Credits: (3)**
- POLS 4100 - Free Speech **Credits: (3)**
- POLS 4160 - Topics in Global Politics **Credits: (3)**
- POLS 4170 GLB - Gender, Power, and Global Politics **Credits: (3)**
- POLS 4180 GLB - International Law and Organization **Credits: (3)**
- POLS 4190 GLB - Theories of International Politics **Credits: (3)**
- POLS 4200 GLB - Dictatorships **Credits: (3)**
- POLS 4210 GLB - Violence and Contestation **Credits: (3)**
- POLS 4380 - Modern Political Thought **Credits: (3)**
- POLS 4600 - American Congress **Credits: (3)**
- POLS 4620 - The U.S. Supreme Court **Credits: (3)**
- POLS 4640 - American Presidency **Credits: (3)**
- POLS 4750 - Public Policy Analysis **Credits: (3)**
- POLS 4760 - Rwanda: Genocide and Aftermath **Credits: (3)**
- POLS 4770 GLB - Genocide, War, and Human Rights **Credits: (3)**
- PHIL 3200 - Philosophy of Democracy **Credits: (3)**
- WGS 3050 - Introduction to Feminist Theories 1700 -- Present **Credits: (3)**
- POLS 3640 - Media and Politics **Credits: (3)**

Additional Electives

These courses may be used to complete the credit requirements.

- POLS 1010 SS/CC - Politics, Power, and the State **Credits: (3)**
- POLS 1520 SS - Leadership and Political Life **Credits: (3)**
- POLS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)**
- POLS 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)** or
- POLS 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- POLS 2930 - Peacebuilding in Rwanda **Credits: (3)**
- POLS 3070 - Moot Court **Credits: (3)**

- POLS 3150 GLB - Model United Nations **Credits: (3)**
- POLS 3990 - Political Analysis **Credits: (3)**
- POLS 4800 - Individual Projects and Research **Credits: (1-2)**
- POLS 4830 - Directed Readings **Credits: (3)**
- POLS 4860 INT - Internships **Credits: (1-6)**
- POLS 4861 INT - International Internships **Credits: (1-6)**
- POLS 4865 INT - Utah State Legislature Internship **Credits: (1-6)**
- POLS 4870 INT - Internship in Perspective **Credits: (3)**
- POLS 4880 INT - Internship Research **Credits: (3)**

Note:

Students may count up to 3 hours of POLS 4830, 3 hours of POLS 4800, and 3 hours of POLS 4860 toward the total of 21 hours required for the minor, if needed.

All Political Science courses- as well as HIST 3230, PHIL 3200, CJ 4065, and WGS 3050-count toward the total hours required for the political science major and minor. However, none of these courses, if they are being counted for the political science major or minor, may count toward another major or minor. Similarly, if any of these courses are being counted for a major or minor that is not political science, they cannot be counted for the major or minor requirements of political science.

Public Administration Minor/BIS

This program has been suspended pending formal discontinuance and is no longer accepting new students.

Contact: Dr. Gary Johnson

Office: LH 139

Website: garyjohnson@weber.edu

Phone: 801-626-6697

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 24 credit hours required.
- **Program Code:** 7043
- **CIPC:** 440401

Students may not major in Political Science and Minor in Public Administration.

Course Requirements for Minor

Required Core Courses (9 credit hours)

- POLS 3700 - Bureaucratic Politics **Credits: (3)**
- POLS 3750 - Urban Government and Politics **Credits: (3)**
- POLS 4750 - Public Policy Analysis **Credits: (3)**

Elective Courses (15 credit hours required)

- ECON 1010 SS - Economics as a Social Science **Credits: (3)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**

- ECON 4520 - Public Finance **Credits: (3)**
- ECON 4550 - Introduction to Econometrics **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- FIN 3500 - Capital Budgeting **Credits: (3)**
- GEOG 4410 SUS - Sustainable Land Use Planning **Credits: (3)**
- GEOG 4420 - Advanced Urban and Regional Planning **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- MGMT 4400 - Advanced Organizational Behavior **Credits: (3)**
- HIST 3130 - Cities in US History **Credits: (3)**
- PSY 3460 - Social Psychology **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**
- SOC 3840 - Cities and Urban Life **Credits: (3)**
- SOC 3850 - Race & Ethnicity **Credits: (3)**
- SOC 4270 - Law and Society **Credits: (3)**
- POLS 3760 - State Government and Politics **Credits: (3)**

See also:

Legal Studies Minor

Teaching Minor

Political Science Teaching Minor

Political Science Minor/ Teaching Minor/ BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor programs are still accepting students.

- **Grade Requirements:** An overall GPA of 2.00 or higher is required and a grade of "C" or better in all Political Science courses used toward the minor/BIS (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 21 credit hours for Political Science minor/BIS and a minimum of 24 credit hours for the teaching minor, which includes HIST 4500 - Teaching Social Studies in Grades 5-12, a required course for Political Science Teaching Minors.
- **Program Code:** Political Science (7012), Political Science Teaching (7013), Political Science BIS (7012)
- **CIPC:** Political Science (451001), Political Science Teaching (131317), Political Science BIS (451001)

Students who select the Political Science Teaching minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.

- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements

Political Science Courses Required (6 credit hours)

Select two of the following courses

- POLS 1100 AI - American National Government **Credits: (3)**
- POLS 2100 SS SUS GLB - International Politics, Organizations, and Society **Credits: (3)**
- POLS 2200 SS GLB - Global Governments, Politics, and Societies **Credits: (3)**
- POLS 2300 SS - Introduction to Political Theory **Credits: (3)**
- POLS 2400 SS - Introduction to Law and Courts **Credits: (3)**
- POLS 2700 - Introduction to Public Administration **Credits: (3)**

Elective Requirements (15 credit hours)

Select at least four courses from the following upper division electives.

- POLS 3140 GLB - Foreign Policy of the United States **Credits: (3)** or
- HIST 3230 GLB - American Foreign Relations **Credits: (3)**
- POLS 3200 GLB - Middle East and North Africa **Credits: (3)**
- POLS 3210 GLB - Politics in the European Union **Credits: (3)**
- POLS 3290 GLB - Democratization and Political Transitions **Credits: (3)**
- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**
- POLS 3340 - Environmental Political Theory **Credits: (3)**
- POLS 3400 - LGBTQ Politics **Credits: (3)**
- POLS 3600 - Political Parties **Credits: (3)**
- POLS 3610 - Campaigns and Elections **Credits: (3)**
- POLS 3620 - Political Behavior **Credits: (3)**
- POLS 3700 - Bureaucratic Politics **Credits: (3)**
- POLS 3750 - Urban Government and Politics **Credits: (3)**
- POLS 3760 - State Government and Politics **Credits: (3)**
- POLS 3780 - Lobbying: Theory and Practice **Credits: (3)**
- POLS 4020 - Constitutional Law: Powers **Credits: (3)**
- POLS 4030 - Constitutional Law: Rights **Credits: (3)**
- POLS 4050 - Institutional Presidency **Credits: (3)**
- CJ 4065 - Law and Society **Credits: (3)** or
- SOC 4270 - Law and Society **Credits: (3)**
- POLS 4100 - Free Speech **Credits: (3)**
- POLS 4160 - Topics in Global Politics **Credits: (3)**
- POLS 4170 GLB - Gender, Power, and Global Politics **Credits: (3)**
- POLS 4180 GLB - International Law and Organization **Credits: (3)**
- POLS 4190 GLB - Theories of International Politics **Credits: (3)**

- POLS 4200 GLB - Dictatorships **Credits: (3)**
- POLS 4210 GLB - Violence and Contestation **Credits: (3)**
- POLS 4380 - Modern Political Thought **Credits: (3)**
- POLS 4600 - American Congress **Credits: (3)**
- POLS 4620 - The U.S. Supreme Court **Credits: (3)**
- POLS 4640 - American Presidency **Credits: (3)**
- POLS 4750 - Public Policy Analysis **Credits: (3)**
- POLS 4760 - Rwanda: Genocide and Aftermath **Credits: (3)**
- POLS 4770 GLB - Genocide, War, and Human Rights **Credits: (3)**
- PHIL 3200 - Philosophy of Democracy **Credits: (3)**
- WGS 3050 - Introduction to Feminist Theories 1700 -- Present **Credits: (3)**
- POLS 3640 - Media and Politics **Credits: (3)**

Additional Electives

These courses may be used to complete the credit requirements.

- POLS 1010 SS/CC - Politics, Power, and the State **Credits: (3)**
- POLS 1520 SS - Leadership and Political Life **Credits: (3)**
- POLS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)**
- POLS 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)** or
- POLS 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- POLS 2930 - Peacebuilding in Rwanda **Credits: (3)**
- POLS 3070 - Moot Court **Credits: (3)**
- POLS 3150 GLB - Model United Nations **Credits: (3)**
- POLS 3990 - Political Analysis **Credits: (3)**
- POLS 4800 - Individual Projects and Research **Credits: (1-2)**
- POLS 4830 - Directed Readings **Credits: (3)**
- POLS 4860 INT - Internships **Credits: (1-6)**
- POLS 4861 INT - International Internships **Credits: (1-6)**
- POLS 4865 INT - Utah State Legislature Internship **Credits: (1-6)**
- POLS 4870 INT - Internship in Perspective **Credits: (3)**
- POLS 4880 INT - Internship Research **Credits: (3)**

Note:

Students may count up to 3 hours of POLS 4830, 3 hours of POLS 4800, and 3 hours of POLS 4860 toward the total of 21 hours required for the minor, if needed.

All Political Science courses- as well as HIST 3230, PHIL 3200, CJ 4065, and WGS 3050-count toward the total hours required for the political science major and minor. However, none of these courses, if they are being counted for the political science major or minor, may count toward another major or minor. Similarly, if any of these courses are being counted for a major or minor that is not political science, they cannot be counted for the major or minor requirements of political science.

Bachelor of Applied Studies

Applied Politics, Philosophy and Economics (BAP)

- Program Co-requisite: MATH 1050, 1080, or 1090.
- Minor: No minor is required.
- Grade Requirements: PPE majors must have an overall GPA of 2.00 and a "C" or better in courses used toward the major (a "C-" is not acceptable for major credit.)
- Credit Hour requirements: A total of 90 credit hours is required for graduation. Forty (40) upper-division credit hours are required (3000 and above)
- Program Code: 7067BAP with one of the following cohort codes for tracks: APPECLL (Campaigns, Legislative and Lobbying) or APPEPE (Political Economy)
- CIPC: 451002

Overview

All APPE students will take 75 credits of core courses, including PPE foundational courses and General Education Requirements. Students must declare either the Political Economy cohort or the Campaigns, Legislation, and Lobbying cohort, which will determine the requirements for the remaining 15 credits.

Program Learning Outcomes

1. Equip students with a robust understanding of political science, philosophy, and economics, and the ability to integrate these disciplines to analyze complex social, economic, and political issues.
2. Apply theoretical concepts to real-world challenges, particularly in areas like public policy, government, business, and community engagement.
3. Develop strong analytical and critical thinking skills, along with a deep commitment to ethical reasoning, to prepare graduates for responsible decision-making in their careers.
4. Prepare students with marketable skills (e.g., policy analysis, data interpretation, ethical decision-making) relevant to careers in government, public policy, business, and graduate studies.

Advisement

Students who are interested in APPE should meet with Dr. Mary Beth Willard, Dr. Leah Murray, or Dr. Gavin Roberts upon declaring the major. Students should meet with one of the above annually for course planning and to discuss progress toward graduation and professional goals.

Major Course Requirements for B.A.P.

- POLS 1100 AI - American National Government **Credits: (3)**
- APPE 1010 - Introduction to Applied Politics, Philosophy & Economics **Credits: (3)**
- PHIL 1000 HU/CC - Introduction to Philosophy **Credits: (3)**
- PHIL 1250 HU - Critical Thinking **Credits: (3)**
- POLS 3610 - Campaigns and Elections **Credits: (3)**
- POLS 3780 - Lobbying: Theory and Practice **Credits: (3)**
- POLS 3640 - Media and Politics **Credits: (3)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- ECON 3200 - Money and Banking **Credits: (3)**
- ECON 3090 - History of Economic Thought **Credits: (3)**
- ECON 4010 - Intermediate Microeconomic Theory **Credits: (3)**

- APPE 4900 - Capstone in Politics, Philosophy and Economics **Credits: (3)**

Political Philosophy Distribution Requirement (Choose two of the following):

- PHIL 3200 - Philosophy of Democracy **Credits: (3)**
- PHIL 3250 - Philosophy of Law **Credits: (3)**
- POLS 3320 - American Political Thought: The Founding **Credits: (3)**
- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**

Government Requirement

- POLS 3750 - Urban Government and Politics **Credits: (3)** or
- POLS 3760 - State Government and Politics **Credits: (3)**

Students will choose one of two cohorts:

Campaigns, Legislative & Lobbying Cohort

- POLS 3620 - Political Behavior **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)** or
- POLS 3990 - Political Analysis **Credits: (3)** or
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- COMM 1140 - Writing for Workplace Communication **Credits: (3)** or
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- POLS 4600 - American Congress **Credits: (3)** or
- POLS 4020 - Constitutional Law: Powers **Credits: (3)** or
- POLS 4030 - Constitutional Law: Rights **Credits: (3)**

Political Economy Cohort

- MATH 1210 - Calculus I **Credits: (4)** or
- QUAN 2400 - Business Calculus **Credits: (3)**
- ECON 4020 - Intermediate Macroeconomic Theory **Credits: (3)**

Choose two of the following:

- ECON 3090 - History of Economic Thought **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 3200 - Money and Banking **Credits: (3)**
- ECON 3400 - Labor Economics **Credits: (3)**
- ECON 3410 - Women in the World Economy **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- ECON 4320 - Industrial Organization **Credits: (3)**
- ECON 4520 - Public Finance **Credits: (3)**

- ECON 4550 - Introduction to Econometrics **Credits: (3)**
- ECON 4560 - Mathematical Economics **Credits: (3)**

Choose one of the following:

- PHIL 3200 - Philosophy of Democracy **Credits: (3)**
- PHIL 3250 - Philosophy of Law **Credits: (3)**
- POLS 3320 - American Political Thought: The Founding **Credits: (3)**
- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**
- POLS 3600 - Political Parties **Credits: (3)**
- POLS 3610 - Campaigns and Elections **Credits: (3)**
- POLS 3620 - Political Behavior **Credits: (3)**
- POLS 3640 - Media and Politics **Credits: (3)**
- POLS 3700 - Bureaucratic Politics **Credits: (3)**
- POLS 3750 - Urban Government and Politics **Credits: (3)**
- POLS 3760 - State Government and Politics **Credits: (3)**
- POLS 3780 - Lobbying: Theory and Practice **Credits: (3)**
- POLS 3990 - Political Analysis **Credits: (3)**
- POLS 4020 - Constitutional Law: Powers **Credits: (3)**
- POLS 4030 - Constitutional Law: Rights **Credits: (3)**
- POLS 4100 - Free Speech **Credits: (3)**
- POLS 4640 - American Presidency **Credits: (3)**

Department of Psychological Science

Department Chair: Aaron Ashley

Location: Social Science Building, Room 370

Telephone Contact: Mickey Cole 801-626-6247

Professors: Aaron Ashley, Eric Amsel, Azenett Garza, Joseph Horvat, Theresa Kay, Leigh Shaw; **Associate**

Professor: Cade Mansfield, Shannon McGillivray, Aminda O'Hare; **Assistant Professors:** Timothy Black, Sarah Herrmann, Melinda Russell-Stamp, Xin Zhao; **Instructor:** Kathryn Sperry

The reasons for selecting a major, minor, or BIS emphasis in Psychological Science are to understand human behavior and to prepare for careers working or doing research with people. The program is designed for students to learn the core content of psychology and the foundational methods of psychological inquiry, as well as to have opportunities to integrate and apply psychological concepts.

Students majoring (including teaching majors) in Psychological Science have a program of study which provides training in the foundation in the field but allows for additional coursework in students' areas of interest. BIS students are trained in the conceptual and methodological foundation of the discipline while pursuing topics of interest in the field and related ones. Minors are free to pursue topics of interest to augment their major without the requirement that they acquire the discipline's foundational knowledge, skills, and abilities.

Psychological Science Curriculum, Requirements, and Policies

The Department of Psychological Science offers a 45 credit hour major, a 20 hour BIS emphasis, and an 18 credit hour minor. The curriculum provides classes addressing the conceptual, methodological, and statistical knowledge of the discipline (Core General Courses), the breadth of the discipline (Core Content Courses), and the integration and application of the discipline (Capstone Experience). Additional classes provide greater content area specialization (Elective Group A) and experiential or individualized instruction opportunities (Elective Group B).

All Psychological Science major (including teaching major) and minor students must meet with the designated Department Adviser as soon as they declare to plan their course of study. BIS students with an emphasis in psychological science must additionally have their psychology courses approved by the designated Department Adviser (Advising Policy).

To count towards students' degree in Psychological Science, psychological science courses must be passed with a grade of C or higher (Course Grade Policy).

Students declaring a Psychological Science major, minor, or BIS emphasis in a given catalog year can apply previously completed courses towards their degree (see Course Grade Policy) as long as the courses were taken no longer than 15 years prior to the date of declaration (Course Sunset Policy).

A student with a Psychological Science major, minor, or BIS emphasis must earn at least a 2.50 Psychology GPA for courses being used for graduation (Psychological Science GPA Policy).

Students may transfer undergraduate psychology credits from any other accredited institution of higher education toward their degree (see the Sunset Policy) by submitting a request through the University's Transfer Office. Courses taught in departments other than Psychology will not generally transfer as Psychology courses. Lower division (1000- or 2000-level) courses at another institution will not generally count as equivalent to upper division (3000- or 4000-level) WSU courses. To challenge a transfer articulation, please contact the Department Chair with documentation including the syllabi from the courses taken (Transfer Articulation Policy).

Students who are majoring in Psychological Science must complete at least 9 credit hours of Psychological Science courses (see Course Grade Policy) in residence at Weber State University; students who are minoring in Psychological Science must complete at least 6 credit hours of Psychological Science courses (see Course Grade Policy) in residence at Weber State University (Residency Requirement).

Degree Programs in Psychology

Bachelor of Science

- **Psychological Science Major (BS)**
 - 45 credit hours total, including 11 Core General Course credits, 18 Core Content Course credits, 4 Capstone Course credits, and 12 elective credits taken from any area (only 1 course from Area Group 3). However, only a maximum of 6 credits from Electives Group B will be allowed to apply toward the Psychological Science Major.
- **Psychological Science Teaching Major (BS)**
 - 45 credit hours total, including 11 Core General Course credits, 18 Core Content Course credits, 4 Capstone Course credits, PSY 4000 (taken as a capstone or elective), and 9 elective credits taken from any area. Only 6 credits from Electives Group B will be allowed to apply toward the Psychological Science Teaching Major.

Emphasis Option for Bachelor of Integrated Studies

- **Psychological Science (BIS)**
 - 20 credit hours total, including 11 Core General Course credits and 9 credits taken from any area with the approval of the designated Department Adviser.

Minor

- **Psychological Science Minor**
 - 18 credits, including PSY 1010 and 15 credits taken from any area. Only 3 credits from Electives Group B will be allowed to apply toward the Psychological Science Minor.

Honors, Departmental

- **Psychological Science Departmental Honors**
 - Department Honors is conferred on students who keep at least a 3.70 GPA in Psychological Science and 3.25 overall GPA. Students must complete PSY 4910 and 3 credits from the Honors Program. An application for department honors in Psychological Science is available from the Department Adviser.

Interdisciplinary Minors

The Psychological Science Department participates in the Latin American Studies, Linguistics, Neuroscience, and Women & Gender Studies minor programs. Students who wish to enroll in one of these programs should indicate their desire to do so with the relevant program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Associate of Science

Psychological Science (AS)

- **Program Prerequisite:** None
- **Grade Requirements:** A grade of "C" or better is required in all courses used to fulfill requirements for the Psychological Science associate's, major, teaching major, minor, or BIS emphasis (a grade of "C-" is not acceptable). An overall GPA for Psychological Science courses of 2.50 or higher is required. Refer to the general grade requirements for graduation Degree Requirements.
- **Psychological Science Sunset Policy:** Students declaring a Psychological Science associate's, major, teaching major, minor, or BIS emphasis in a given catalog year can apply previously completed courses towards their degree (see Course Grade Policy) as long as the courses were taken no longer than 15 years prior to the date of declaration.
- **Credit Hour Requirements:** 60 total hours are required, including at least 15 Psychological Science credits (PSY prefix).
- **Program Code:** 7055AS
- **CIPC:** 420101
- **Students are responsible for applying for graduation:** Click here for more information.
- **Additional Information on the Psychological Science major:** Click here to go to the Department webpage.

Program Learning Outcomes

- Goal 1: Knowledge Base
- Goal 2: Scientific Inquiry and Critical Thinking
- Goal 3: Ethical and Social Responsibility in a Diverse World
- Goal 4: Communication
- Goal 5: Professional Development

Advisement

- After declaring the Associate's in Psychological Science, students should work with the College of Social Sciences and Education Advisers to plan their degree requirements.
- Use Grad MAPS to plan your degree

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for the Psychological Science major.

General Education

Refer to Degree Requirements for Associate's Degree requirements.

Foundational Courses (12 credits)

- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- PSY 2000 SS/CC - The Psychology of Human Relationships **Credits: (3)**
- PSY 2010 - Science and Profession of Psychology **Credits: (3)**
- PSY 2710 - Biopsychology **Credits: (3)**

Elective Courses

At least 3 credits of electives (PSY prefix) are required from the following options.

- PSY 1540 - Designing Your Life **Credits: (3)**
- PSY 2020 - Mental Health Awareness **Credits: (3)**
- PSY 2250 - Learning and Memory **Credits: (3)**
- PSY 2370 - Psychology of Women and Gender **Credits: (3)**
- PSY 2400 - Positive Psychology **Credits: (3)**
- PSY 2800 INT CRE - Projects and Research **Credits: (1-3)**
- PSY 2830 CRE - Directed Readings **Credits: (1-3)**
- PSY 2860 - Practicum **Credits: (1-3)**
- PSY 2890 INT - Cooperative Work Experience **Credits: (1-2)**

Institutional Certificate

Behavioral Health Technician Certificate of Proficiency

The Behavioral Health Technician Certificate of Proficiency Program at Weber State University offers specialized training to individuals interested in pursuing careers as behavioral health technicians, providing them with the knowledge and skills needed to assist licensed mental health professionals in treating and supporting patients. This certificate is offered through a collaborative, interdisciplinary effort between Weber State University's College of Social and Behavioral Sciences (CSBS) and the Dumke College of Health Professions (DCHP).

- **Program Prerequisite:** The program is open to all students and has no special admissions prerequisites or requirements.
- **Grade Requirements:** A minimum grade of "C" in all courses counted towards the completion of the certificate (no "C-" or lower grades allowed).
- **Credit Hour Requirements:** A total of 24 credit hours is required for completion of the certificate program.
- **Program Code:** 7065CP
- **CIPC:** 511502

Advisement

All advising for the Behavioral Health Technician Certificate of Proficiency will be conducted by Psychological Science Advisors working through the Department of Psychological Science (801-626-8743).

Admission Requirements

The program is open to all students and has no special admissions prerequisites or requirements.

Program Learning Outcomes

The Behavioral Technician Certificate of Proficiency Learning Outcomes are directly taken from the Talent Ready Utah Behavioral Health Workforce Initiative Grant request for proposals (RFP) and reflect industry identified skills associated with the Behavioral Health Technician Scope of Practice.

Introduction to Mental Health

- Describe the role, function, and responsibilities of various mental health professions and community service agencies.
- Evaluate personal strengths, weaknesses, interests and values in potential alignment for a rewarding career in behavioral health and social sciences.
- Describe cognitive and behavioral strategies that support academic and career success.
- Explain the importance of whole health integration, strong support systems and self-care habits for stress management and resiliency as a successful student and valued employee.
- Define mental health and identify common mental health issues.
- Demonstrate first aid skills in a mental health emergency or in support of an individual with a common mental health disorder.
- Build job-seeking skills and a professional portfolio.
- Create professional and academic goals, including a concrete educational plan leading towards certificate(s) and/or degree(s) in behavioral health and social sciences.

Professional Resiliency and Well-Being

- Analyze historical contexts of resilience, burnout, traumatic stress, and compassion fatigue research.
- Describe factors that contribute to trauma, burnout, and compassion fatigue.
- Explain how work-related stress can compromise physical, cognitive, emotional, social, and spiritual well-being
- Develop mindfulness and self-relaxation strategies to promote mind-body awareness and equanimity.
- Practice skills to modify mindsets, explanatory styles, and core beliefs to bounce back from setbacks and adversity.
- Define meaning and purpose in work and life to enhance resilience.

- Explain elements of positive psychology and whole health integration to enhance happiness and well-being.
- Identify skills to build meaningful relationships and positive support systems to improve health and well-being.
- Explain ways to improve health-conscious practices, including healthy eating, activity, sleep, and self-compassion.
- Analyze structural factors within organizations that support resilience.
- Utilize key psychological and emotional resiliency skills to address symptoms and prevent future effects associated with traumatic stress and compassion fatigue.
- Create a six-point professional resiliency plan.

Ethical, Legal, and Professional Issues

- Identify the unlicensed and licensed professional regulating bodies, laws, and codes of ethics that govern the behavioral health fields.
- Identify governing bodies that oversee the practice of behavioral health
- Define the ethical, legal and professional responsibilities of helping professionals.
- Identify the role of supervision in the development of professional practice.
- Describe clients' rights to confidentiality and situations in which confidentiality cannot be assured, including minors and vulnerable adults.
- Explain ethical issues related to professional competence and scope of practice.
- Demonstrate accurate documentation of legal and ethical issues.
- Identify the role of attitudes, beliefs, assumptions, and personal and professional values that underlie ethical decision making.
- Demonstrate the ability to apply concepts of ethical decision making to address common issues in social and behavioral services.
- Predict ways to effectively manage and avoid boundary issues and dual relationships in behavioral health counseling.
- Explore diversity issues that are relevant within ethical decision making
- Describe the unique ethical issues in working with minor clients, including ages of consent in mental health and substance abuse treatment, consent vs. assent for minors, and the involvement of significant others in the treatment process.
- Demonstrate the ability to apply concepts of ethical decision making with specialized populations, including integrative care.

Applied Therapeutic Communication Skills

- Describe principles of interpersonal communication in the helping professions.
- Describe modes of non-verbal communications and their implications
- Describe nuances of paraverbal and verbal communications and their implications.
- Demonstrate the ability to use effective listening skills.
- Demonstrate the ability to observe and express emotions effectively and responsibly in a variety of situations.
- Explain the purpose, elements, risks, and impact of self-disclosure.
- Demonstrate proficiency with the following interpersonal communication skills: questioning, confronting, and self-disclosure.
- Describe the therapeutic alliance process and the stages of progression.
- Demonstrate necessary communication skills for establishing rapport and maintaining a helping relationship.
- Demonstrate techniques to deal with resistant clients.

- Describe elements of communication involved in family relationship development, maintenance, and repair.
- Explain effective conflict management and problem-solving strategies in a variety of interpersonal communication situations.
- Demonstrate the ability to provide appropriate feedback.
- Demonstrate the ability to receive and act upon feedback from peers.

Case Management and Clinical Documentation

- Describe the role and explain the function of case management in human services.
- Describe the methods of delivering case management services.
- Demonstrate the interpersonal skills necessary to establish and maintain rapport at all stages of case management.
- Demonstrate the process of assessment and relevant interviewing skills in case management.
- Describe whole health services delivered as part of case management.
- Explain the role of case managers in whole health service coordination.
- Describe the case management processes of outcome monitoring and reassessment.
- Apply the concepts of case management to the unique needs of multicultural clients and special populations.
- Describe the components of a whole health integrated delivery model of case management.
- Describe documentation required in a case report and client records and appropriate formats.
- Analyze examples of case reports from diverse clinical settings for completeness and correct formatting.
- Explain the legal and liability issues related to case management and report writing.

Child, Family, and Adult Advocacy

- Define advocacy and explain professional/ethical standards for advocacy.
- Practice using common advocacy strategies and tactics and discuss when each may be applicable/valuable.
- Describe the role of parental rights related to advocacy.
- Describe the procedures involved in due process, grievance and appeals in behavioral health systems
- Describe familial considerations involved in advocacy.
- Describe the importance of whole health integration in advocacy to ensure appropriate educational access and opportunity.
- Describe the role and importance of whole health integration in advocacy when working with the disability population.
- Describe the role and importance of whole health integration in advocacy when working with justice-involved persons.
- Identify several funding sources and whole health integrated related services that can help address the needs of individuals with behavioral health issues.
- Demonstrate how to navigate multiple systems to develop an advocacy plan relevant to a child and his/her family.
- Describe the importance of the wraparound process and how it relates to child and family advocacy.
- Identify integrated healthcare community support and resources for children and families that can be made available through advocacy.

Major Course Requirements

Required Courses (24 credit hours)

Semester 1

- SW 1010 SS CEL - Introduction to Generalist Social Work **Credits: (3)**
- PSY 2000 SS/CC - The Psychology of Human Relationships **Credits: (3)**
- PSY 2010 - Science and Profession of Psychology **Credits: (3)**
- HAS 3000 - The Healthcare System **Credits: (3)**

Semester 2

- PSY 2040 - Child, Family, and Adult Advocacy **Credits: (3)**
- PUBH 2050 - Case Management in Behavioral Health **Credits: (3)**
- NRSG 3440 - Resiliency in your Profession **Credits: (3)**
- HAS 4400 - Legal and Ethical Aspects of Health Administration **Credits: (3)**

Bachelor of Science

Psychological Science (BS)

- **Program Prerequisite:** None
- **Minor:** Required, unless a student is a double major. Students cannot major and minor in Psychological Science.
- **Grade Requirements:** A grade of "C" or better is required in all courses used to fulfill requirements for the Psychological Science major, Teaching major, minor, or BIS emphasis (a grade of "C-" is not acceptable). An overall GPA for Psychological Science courses of 2.50 or higher is required. Refer to the general grade requirements for graduation Degree Requirements.
- **Psychological Science Sunset Policy:** Students declaring a Psychological Science major, Teaching major, minor, or BIS emphasis in a given catalog year can apply previously completed courses towards their degree (see Course Grade Policy) as long as the courses were taken no longer than 15 years prior to the date of declaration.
- **Credit Hour Requirements:** The University requires a total of 120 credit hours for graduation, of which at least 40 credits must be upper-division (courses numbered 3000 and above). For Psychological Science, a minimum of 48 credit hours are required within the major.
- **Website:** <http://www.weber.edu/psychology>
- **Program Code:** 7055BS
- **CIPC:** 420101

Program Learning Outcomes

- Goal 1: Knowledge Base
- Goal 2: Scientific Inquiry and Critical Thinking
- Goal 3: Ethical and Social Responsibility in a Diverse World
- Goal 4: Communication
- Goal 5: Professional Development

Advisement

- After declaring Psychological Science as a major, students should contact the department office to schedule their first advising appointment with the Department Advisor. Students should meet with the Department Advisor at least annually for course planning, and to discuss progress toward graduation and professional goals.
- Use Grad MAPS to plan your degree.

- It is the student's responsibility to apply for graduation.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for the Psychological Science major.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Two Psychological Science courses fulfill General Education requirements (PSY 1010, PSY 2000) in the Social Science breadth area and one course also in the Equity, Diversity, and Inclusion area (PSY 2000). Only PSY 1010 or PSY 2000 may be used to fulfill the Social Science requirement due to the "no duplication" policy in breadth requirements (i.e., courses selected to fulfill General Education requirements must each be from a different program). Students may take PSY 1010 to fulfill the Social Science requirement and PSY 2000 to fulfill the Equity, Diversity, and Inclusion requirement as well as major requirements.

Psychological Science Major Requirements

Foundational Courses (14 credits):

Introductory Psychology

- PSY 1010 SS - Introductory Psychology **Credits: (3)**
Note: *PSY 1010 is required for all courses in the Psychological Science curriculum EXCEPT the following: PSY 1540, PSY 2000, PSY 2020, PSY 2710, PSY 3600, and PSY 3605.*
- PSY 2010 - Science and Profession of Psychology **Credits: (3)**

Statistics and Research Methods

There are two options to complete the required Statistics and Research Methods course sequence in Psychology. A student must complete one option or the other **and cannot** complete the sequence by a combination of courses in each option.

Option 1

This option is strongly encouraged for all Psychological Science majors. PSY 3615 / PSY 3616 is a two-semester course sequence offered annually: 3615 is offered in the Fall of a given academic year and 3616 is offered in the Spring. The required sequence must be completed in the same academic year and with the same faculty member. The course sequence is recommended to be taken in the junior year and has the prerequisite of PSY 1010 and MATH 1010 or QL with passing grades of C or better.

- PSY 3615 - Psychological Statistics and Methods I **Credits: (4)**
- PSY 3616 - Psychological Statistics and Methods II **Credits: (4)**

Option 2

This option is for students with schedules and graduation plans that cannot accommodate the traditional Fall-Spring sequence in Option 1.

- PSY 3600 - Statistics in Psychology **Credits: (3)** -- PSY 3600 has a prerequisite of MATH 1010 or QL with passing grade of C or better. Psychological Science majors may substitute SW 3600 or SOC 3600 for PSY 3600, but an additional 3 credits will be added to the graduation requirement (this addition is waived for dual majors).
- PSY 3605 - Psychology Statistics Lab **Credits: (1)** -- PSY 3605 has PSY 3600 or its equivalent as a prerequisite/co-requisite.
- PSY 3610 CRE - Research Methods in Psychology **Credits: (4)** -- PSY 3610 has a prerequisite of PSY 1010 and PSY 3600 (or equivalent with prior approval from the department chair). PSY 3605 is a required prerequisite or corequisite (or equivalent with prior approval from the department chair).

Core Courses (18 credits):

One course in each area must be taken to fulfill the core requirements. Students may opt to take other courses in each area as electives.

Area A: Biological Basis of Behavior

- PSY 2710 - Biopsychology **Credits: (3)**

Area B: Development Basis of Behavior

Select one course from the following:

- PSY 3000 - Child Psychology **Credits: (3)**
- PSY 3140 - Adolescent Psychology **Credits: (3)**

Area C: Psychopathology

- PSY 3010 - Psychopathology **Credits: (3)**

Area D: Cognitive Basis of Behavior

Select one course from the following:

- PSY 2250 - Learning and Memory **Credits: (3)**
- PSY 3255 - Conditioning, Learning, & Behavior Modification **Credits: (3)**
- PSY 3500 - Cognition **Credits: (3)**

Area E: Individual Differences and Social Processes

Select one course from the following:

- PSY 3430 - Theories of Personality **Credits: (3)**
- PSY 3460 - Social Psychology **Credits: (3)**

Area F: Diversity

Select one course from the following:

- PSY 2000 SS/CC - The Psychology of Human Relationships **Credits: (3)**
- PSY 2370 - Psychology of Women and Gender **Credits: (3)**
- PSY 3100 - Psychology of Diversity **Credits: (3)**

Capstone Courses (4 credits):

- 4 credit hours of capstone courses are required for Psychological Science Majors/Teaching Majors. Students must complete PSY 4950 (1 credit) and one capstone course (3 credits) listed below to fulfill the capstone requirement.
- Prerequisites: Students must complete 24 PSY credits, including PSY 3610 or PSY 3616. PSY 4950 should be taken in the final semester and requires a capstone course as a prerequisite or corequisite.
- Students may opt to take the other capstone courses as electives.
- PSY 4910 is a two-semester sequence. Students in semester one must complete and defend a research proposal. Students in semester two must complete and defend the research project.

Students Must Take:

- PSY 4950 - Capstone Experience: Promoting Psychological Literacy **Credits: (1)**

Choose 1 other course from this list:

- PSY 4000 - Advanced General **Credits: (3)**
- PSY 4050 - Evolutionary Psychology **Credits: (3)**
- PSY 4090 - History and Systems of Psychology **Credits: (3)**
- PSY 4100 - Psychology in the Media **Credits: (3)**
- PSY 4140 - Theories of Development **Credits: (3)**
- PSY 4200 - Environmental Psychology **Credits: (3)**
- PSY 4310 - Introduction to Counseling Theories **Credits: (3)**
- PSY 4760 - Tests and Measurements **Credits: (3)**
- PSY 4905 - Capstone Selected Topics in Psychology **Credits: (3)**
- PSY 4910 - Senior Thesis **Credits: (3)** (to be repeated twice for credit)
Note: Teaching majors may only select from PSY 4000 and PSY 4090.

Elective Courses (12 credits)

12 credit hours of electives are required for Psychological Science Majors. Select 12 credits of any PSY course not already taken in the major in consultation with the program advisor.

- PSY 2800, PSY 2830, and PSY 2860 are for students who have not yet completed Statistics and Research Methods sequence.
- PSY 4800, PSY 4830, and PSY 4860 are for students who have completed the Statistics and Research Methods sequence and require completion of at least 18 PSY credit hours.
- PSY 2890/PSY 4890 require students to have a current job in the field and PSY 4890 requires PSY major or minor status.

Psychological Science Teaching (BS)

- **Program Prerequisite:** None. Psychological Science Teaching majors must meet the Teacher Education admission and licensure requirements (see [Department of Teacher Education](#)).
- **Minor:** Required, unless a student is a double major. Students cannot major and minor in Psychological Science.
- **Grade Requirements:** A grade of "C" or better is required in all courses used to fulfill requirements for the Psychological Science major, Teaching major, minor, or BIS emphasis (a grade of "C-" is not acceptable). An overall GPA for Psychological Science courses of 2.50 or higher is required. Refer to the general grade requirements for graduation Degree Requirements.
- **Psychological Science Sunset Policy:** Students declaring a Psychological Science major, Teaching major, minor, or BIS emphasis in a given catalog year can apply previously completed courses towards their degree (see Course Grade Policy) as long as the courses were taken no longer than 15 years prior to the date of declaration.
- **Credit Hour Requirements:** The University requires a total of 120 credit hours for graduation, of which at least 40 credits must be upper-division (courses numbered 3000 and above). For Psychological Science, a minimum of 45 credit hours are required within the Teaching major.
- **Program Code:** 7056BS
- **CIPC:** 131335
- **Students are responsible for applying for graduation:** Click here for more information
- **Additional Information on the Psychological Science Teaching major:** Click here to go the Department webpage.

Program Learning Outcomes

- Goal 1: Knowledge Base
- Goal 2: Scientific Inquiry and Critical Thinking
- Goal 3: Ethical and Social Responsibility in a Diverse World
- Goal 4: Communication
- Goal 5: Professional Development

Advisement

- After declaring Psychological Science Teaching as a major, students should contact the department office to schedule their first advising appointment with the Department Advisor. Students should meet with the Department Advisor at least annually for course planning, and to discuss progress toward graduation and professional goals. Psychological Science Teaching majors also should regularly consult with an advisor in the Jerry and Vickie Moyes College of Education (call 801-626-6269, Teacher Education Department).(Also refer to the Department Advisor Referral List.)
- Use Grad MAPS to plan your degree

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). Whereas there are no special admission or application requirements for the Psychological Science Teaching major, Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Two Psychological Science courses fulfill General Education requirements ([PSY 1010](#), [PSY 2000](#)) in the Social Science breadth area and one course also in the Equity, Diversity, and Inclusion area (PSY 2000). Only PSY 1010 or PSY 2000 may be used to fulfill the Social Science

requirement due to the "no duplication" policy in breadth requirements (i.e., courses selected to fulfill General Education requirements must each be from a different program). Students may take PSY 1010 to fulfill the Social Science requirement and PSY 2000 to fulfill the Equity, Diversity, and Inclusion requirement as well as teaching major requirements.

Teaching Major

Psychological Science Major Requirements

Foundational Courses (14 credits):

Introductory Psychology

- PSY 1010 SS - Introductory Psychology **Credits: (3)**
Note: PSY 1010 is required for all courses in the Psychological Science curriculum EXCEPT the following: PSY 1540, PSY 2000, PSY 2020, PSY 2710, PSY 3600, and PSY 3605.
- PSY 2010 - Science and Profession of Psychology **Credits: (3)**

Statistics and Research Methods

There are two options to complete the required Statistics and Research Methods course sequence in Psychology. A student must complete one option or the other **and cannot** complete the sequence by a combination of courses in each option.

Option 1

This option is strongly encouraged for all Psychological Science majors. PSY 3615 / PSY 3616 is a two-semester course sequence offered annually: 3615 is offered in the Fall of a given academic year and 3616 is offered in the Spring. The required sequence must be completed in the same academic year and with the same faculty member. The course sequence is recommended to be taken in the junior year and has the prerequisite of PSY 1010 and MATH 1010 or QL with passing grades of C or better.

- PSY 3615 - Psychological Statistics and Methods I **Credits: (4)**
- PSY 3616 - Psychological Statistics and Methods II **Credits: (4)**

Option 2

This option is for students with schedules and graduation plans that cannot accommodate the traditional Fall-Spring sequence in Option 1.

- PSY 3600 - Statistics in Psychology **Credits: (3)** -- PSY 3600 has a prerequisite of MATH 1010 or QL with passing grade of C or better. Psychological Science majors may substitute SW 3600 or SOC 3600 for PSY 3600, but an additional 3 credits will be added to the graduation requirement (this addition is waived for dual majors).
- PSY 3605 - Psychology Statistics Lab **Credits: (1)** -- PSY 3605 has PSY 3600 or its equivalent as a prerequisite/co-requisite.
- PSY 3610 CRE - Research Methods in Psychology **Credits: (4)** -- PSY 3610 has a prerequisite of PSY 1010 and PSY 3600 (or equivalent with prior approval from the department chair). PSY 3605 is a required prerequisite or corequisite (or equivalent with prior approval from the department chair).

Core Courses (18 credits):

One course in each area must be taken to fulfill the core requirements. Students may opt to take other courses in each area as electives.

Area A: Biological Basis of Behavior

- PSY 2710 - Biopsychology **Credits: (3)**

Area B: Development Basis of Behavior

Select one course from the following:

- PSY 3000 - Child Psychology **Credits: (3)**
- PSY 3140 - Adolescent Psychology **Credits: (3)**

Area C: Psychopathology

- PSY 3010 - Psychopathology **Credits: (3)**

Area D: Cognitive Basis of Behavior

Select one course from the following:

- PSY 2250 - Learning and Memory **Credits: (3)**
- PSY 3255 - Conditioning, Learning, & Behavior Modification **Credits: (3)**
- PSY 3500 - Cognition **Credits: (3)**

Area E: Individual Differences and Social Processes

Select one course from the following:

- PSY 3430 - Theories of Personality **Credits: (3)**
- PSY 3460 - Social Psychology **Credits: (3)**

Area F: Diversity

Select one course from the following:

- PSY 2000 SS/CC - The Psychology of Human Relationships **Credits: (3)**
- PSY 2370 - Psychology of Women and Gender **Credits: (3)**
- PSY 3100 - Psychology of Diversity **Credits: (3)**

Capstone Courses (4 credits):

- 4 credit hours of capstone courses are required for Psychological Science Majors/Teaching Majors. Students must complete PSY 4950 (1 credit) and one capstone course (3 credits) listed below to fulfill the capstone requirement.

- Prerequisites: Students must complete 24 PSY credits, including PSY 3610 or PSY 3616. PSY 4950 should be taken in the final semester and requires a capstone course as a prerequisite or corequisite.
- Students may opt to take the other capstone courses as electives.
- PSY 4910 is a two-semester sequence. Students in semester one must complete and defend a research proposal. Students in semester two must complete and defend the research project.

Students Must Take:

- PSY 4950 - Capstone Experience: Promoting Psychological Literacy **Credits: (1)**

Choose 1 other course from this list:

- PSY 4000 - Advanced General **Credits: (3)**
- PSY 4050 - Evolutionary Psychology **Credits: (3)**
- PSY 4090 - History and Systems of Psychology **Credits: (3)**
- PSY 4100 - Psychology in the Media **Credits: (3)**
- PSY 4140 - Theories of Development **Credits: (3)**
- PSY 4200 - Environmental Psychology **Credits: (3)**
- PSY 4310 - Introduction to Counseling Theories **Credits: (3)**
- PSY 4760 - Tests and Measurements **Credits: (3)**
- PSY 4905 - Capstone Selected Topics in Psychology **Credits: (3)**
- PSY 4910 - Senior Thesis **Credits: (3)** (to be repeated twice for credit)
Note: Teaching majors may only select from PSY 4000 and PSY 4090.

Elective Courses (12 credits)

12 credit hours of electives are required for Psychological Science Majors. Select 12 credits of any PSY course not already taken in the major in consultation with the program advisor.

- PSY 2800, PSY 2830, and PSY 2860 are for students who have not yet completed Statistics and Research Methods sequence.
- PSY 4800, PSY 4830, and PSY 4860 are for students who have completed the Statistics and Research Methods sequence and require completion of at least 18 PSY credit hours.
- PSY 2890/PSY 4890 require students to have a current job in the field and PSY 4890 requires PSY major or minor status.

Emphasis Option for Bachelor of Interdisciplinary Studies

Psychological Science (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** A grade of "C" or better is required in all courses used to fulfill requirements for the Psychological Science major, Teaching major, minor, or BIS emphasis (a grade of "C-" is not acceptable). In addition an overall GPA for Psychological Science courses of 2.50 or higher is required. Also refer to the general grade requirements for graduation Degree Requirements.

- **Psychological Science Sunset Policy:** Students declaring a Psychological Science major, Teaching major, minor, or BIS emphasis in a given catalog year can apply previously completed courses towards their degree (see Course Grade Policy) as long as the courses were taken no longer than 15 years prior to the date of declaration.
- **Credit Hour Requirements:** Minimum of 18 20 credit hours (includes PSY 1010)
- **Program Code:** 7055
- **CIPC:** 420101
- **Students are responsible for applying for graduation:** Click here for more information.
- **Additional Information on the BIS emphasis:** Click here to go to on the Psychological Science can be found at the Department of Psychological Science's webpage.

BIS Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses / results / conclusions / reflections from the Capstone experience
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Advisement

- Review information on BIS student requirements.
- Complete the BIS Application and Contract forms (contact the BIS office at bis@weber.edu). Next, contact the department chairperson who will help you select courses that complement your other two BIS areas and to complete your BIS contract or complement your major. Classes used for General Education requirements cannot be used on BIS contracts. For more information on the BIS application process, click here.
- Use Grad MAPS to plan your Degree

Psychological Science Major Requirements

Foundational Courses (14 credits):

Introductory Psychology

- PSY 1010 SS - Introductory Psychology **Credits: (3)**
Note: PSY 1010 is required for all courses in the Psychological Science curriculum EXCEPT the following: PSY 1540, PSY 2000, PSY 2020, PSY 2710, PSY 3600, and PSY 3605.
- PSY 2010 - Science and Profession of Psychology **Credits: (3)**

Statistics and Research Methods

There are two options to complete the required Statistics and Research Methods course sequence in Psychology. A student must complete one option or the other **and cannot** complete the sequence by a combination of courses in each option.

Option 1

This option is strongly encouraged for all Psychological Science majors. PSY 3615 / PSY 3616 is a two-semester course sequence offered annually: 3615 is offered in the Fall of a given academic year and 3616 is offered in the Spring. The required sequence must be completed in the same academic year and with the same faculty member. The course sequence is recommended to be taken in the junior year and has the prerequisite of PSY 1010 and MATH 1010 or QL with passing grades of C or better.

- PSY 3615 - Psychological Statistics and Methods I **Credits: (4)**
- PSY 3616 - Psychological Statistics and Methods II **Credits: (4)**

Option 2

This option is for students with schedules and graduation plans that cannot accommodate the traditional Fall-Spring sequence in Option 1.

- PSY 3600 - Statistics in Psychology **Credits: (3)** -- PSY 3600 has a prerequisite of MATH 1010 or QL with passing grade of C or better. Psychological Science majors may substitute SW 3600 or SOC 3600 for PSY 3600, but an additional 3 credits will be added to the graduation requirement (this addition is waived for dual majors).
- PSY 3605 - Psychology Statistics Lab **Credits: (1)** -- PSY 3605 has PSY 3600 or its equivalent as a prerequisite/co-requisite.
- PSY 3610 CRE - Research Methods in Psychology **Credits: (4)** -- PSY 3610 has a prerequisite of PSY 1010 and PSY 3600 (or equivalent with prior approval from the department chair). PSY 3605 is a required prerequisite or corequisite (or equivalent with prior approval from the department chair).

Elective Courses (9 credits):

Select 9 credits of any PSY course not already taken in the major in consultation with the program advisor.

Minor

Psychological Science Minor

- **Grade Requirements:** A grade of "C" or better is required in all courses used to fulfill the Psychological Science major, Teaching major, minor, or BIS emphasis (a grade of "C-" is not acceptable). An overall GPA for Psychological Science courses of 2.50 or higher is required. Also refer to the general grade requirements for graduation Degree Requirements.
- **Psychological Science Sunset Policy:** Students declaring a Psychological Science major, Teaching major, minor, or BIS emphasis in a given catalog year can apply previously completed courses towards their degree (see Course Grade Policy) as long as the courses were taken no longer than 15 years prior to the date of declaration.
- **Credit Hour Requirements:** Minimum of 18 credit hours
- **Program Code:** 7055
- **CIPC:** 420101
- **Students are responsible for applying for graduation:** [Click here for more information.](#)
- **Additional Information on the Psychological Science minor:** [Click here to go to the Department webpage.](#)

Program Learning Outcomes

- **Goal 1:** Knowledge Base
- **Goal 2:** Scientific Inquiry and Critical Thinking
- **Goal 3:** Ethical and Social Responsibility in a Diverse World
- **Goal 4:** Communication
- **Goal 5:** Professional Development

Advisement

- After declaring Psychological Science as a minor, students should contact the department office to schedule their first advising appointment with the Department Advisor. Students should meet with the Department Advisor at least annually for course planning, and to discuss progress toward graduation and professional goals.
- Use Grad MAPS to plan your Degree

Foundational Course (3 credits)

- PSY 1010 SS - Introductory Psychology **Credits: (3)**
Note: PSY 1010 is required for all courses in the Psychological Science curriculum EXCEPT the following: PSY 1540, PSY 2000, PSY 2020, PSY 2710, PSY 3600, and PSY 3605.

Elective Courses (15 credits)

- Select 15 credits of any PSY course not already taken in the minor in consultation with the program advisor.
- Minors may take PSY 2800, PSY 2830, and PSY 2860.
- PSY 2890/PSY 4890 require students to have a current job in the field.

Department of Social Work and Gerontology

Department Chair: Kerry Kennedy-Pressey

Location: Lindquist Hall, Room 327

Telephone Contact: Taryn Pearce 801-626-6157

Professor: Mark Bigler, Kerry Kennedy-Pressey, **Associate Professors:** Barrett Bonella, Corina Segovia

Tadehara; **Assistant Professors:** Justin Lee, Kristina Moleni, Lizbeth Velazquez, Steve Vigil; **Instructor:** Heidee Miller

Social Work

The goal of social work education at every level is for students to integrate the knowledge, skills, and values of the profession into a generalist practice framework. Social work education takes place in four year undergraduate and two-year graduate programs and leads to professional degrees at the baccalaureate and master's levels, respectively. These levels of education differ from each other in the level of knowledge and skill they expect students to synthesize in practice competence. These distinctions and the discretion provided by the tradition of academic freedom contribute to the desired uniqueness of each program. The Social Work program at Weber State University is accredited at the baccalaureate level by the Council on Social Work Education.

Social Work is a self-regulating profession with sanction from public, private and voluntary auspices. Through all its roles and functions and multiple settings, social work is based on knowledge and competence in evidence-based

practice skills, and is guided by professional values and ethics. With its central focus on the transactions between people and their environments, social work uses research and theory from social, behavioral, and biological sciences as well as from social work practice itself, developing a unique perspective on the human condition.

Sound curriculum designs give the educational program the integrated focus inherent in the profession's enduring philosophical base. This ensures historical continuity and provides a stable framework from which to assess and incorporate practice innovations, emerging knowledge, and interdisciplinary exchanges. This combination of curricular stability and flexibility is essential if the program is to respond effectively to changing social forces and provide leadership in the profession's ongoing quest for progressive social change.

It is, therefore, essential that all professional social workers have in common knowledge, skills, and values that are generally transferable from one setting, population group, geographic area, or problem to another.

The Social Work program is designed to: (1) prepare students for generalist entry-level social work practice; (2) prepare students for graduate social work education; (3) prepare students to take the Social Service Worker licensing examination; (4) provide a liberal, interdisciplinary learning experience to help students in their understanding of and adjustment to living in a democratic society; and (5) provide continuing educational opportunities for baccalaureate and paraprofessional social welfare providers.

Gerontology

Gerontology is the multi-disciplinary study of the processes of aging from conception to death with special focus on the later life cycle and the problems associated with aging and the aged in society. Individuals working in the field of aging need a broad range of knowledge that transcends a single academic discipline. The Gerontology Program at Weber State University is designed to: (1) provide preparation for employment in both the private and public sector including working with senior citizen centers, nutrition programs, housing projects, long-term care facilities, state and local aging programs, Hospice, research, senior volunteer programs, job services, retirement planning and other age-related employment; (2) provide continuing education for job enrichment and preparation for persons already in the aging employment sector through consultation, workshops and academic courses to enhance career opportunities; (3) provide general education courses designed to assist students in understanding and dealing with older persons within their family and society at large; (4) encourage students to go directly into aging employment and/or to seek graduate degrees in gerontology or related fields leading to positions in national, regional and local aging network sectors.

Note: No new majors are being accepted in this program at this time. However, the minor, BIS emphasis, and non-degree certificate programs are active and available.

Bachelor of Arts

Social Work (BA)

Social Work Major Bachelor's Degree (BS or BA)

- **Program Prerequisite:** Must be accepted to the program (see Admissions Requirements described later in this section).
- **Minor:** The Social Work Major requires either: (a) the completion of a minor; or (b) a minor alternative. Minor requirements are found in the University catalog under the specific programs that offer them. As an alternative to a minor, a Social Work Major may choose to complete 18 credits (generally the equivalent of six courses) from a set of approved elective enrichment courses listed below.

- **Grade Requirements:** A grade of "C" or better is required in all courses toward and included in this major (a grade of "C-" is not acceptable). In addition, an overall GPA for these courses of 2.5 must be maintained. Also refer to the general grade requirements Degree Requirements. Students not meeting the minimum grade requirements for an individual Social Work course may repeat that course one (1) time before being dropped from the Social Work program. In the rare event a student is unable to complete SW 4860 and SW 4861 in the field agency they are originally placed, at the discretion of the field placement advisor, the student may request a new placement one (1) time only. Students at any time failing to meet the overall GPA of 2.5 will be given a probationary semester to raise their GPA to the minimum standard. Failure to comply with this policy will result in being dropped from the Social Work program.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 41 of these is required within the major not counting the prerequisite courses totaling 18 semester hours. A total of 40 upper division credit hours is required for graduation from Weber State University (courses numbered 3000 and above).
- **Program Code:** 7017BA, 7017BS
- **CIPC:** 440701

Advisement

Students accepted into the program are assigned to a faculty advisor for academic and professional advising. The faculty advisor assists students with course scheduling, academic counseling, and professional self-assessment. Students are required to see their faculty advisor at least one time per semester prior to registration. Call the Social Work/Gerontology office number, 801-626-6157, or the Department Chair, 801-626-6156, for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare a program of study (see Enrollment Services and Information). Satisfactory completion of the following is required prior to formal acceptance into the program:

1. WSU Writing Competency (Composition)*
2. WSU Information Literacy*
3. 60-63 semester graduation hours (or equivalent) including the prerequisite courses listed below for the Behavioral and Social Sciences, Human Development, and Social Work prerequisites. These courses must be completed with a grade of "C" or better and with a total GPA of 2.5 or better.
4. Students agree to abide by the National Association of Social Workers Code of Ethics.

Note:

** Refer to General Requirements on Degree Requirements*

Program Learning Outcomes

- Identify as a professional social worker and conduct oneself accordingly
- Apply social work ethical principles to guide professional practice
- Apply critical thinking to inform & communicate professional judgements
- Engage diversity and difference in practice
- Advance human rights and social and economic justice
- Engage in research-informed practice and practice-informed research
- Apply knowledge of human behavior and the social environment
- Engage in policy practice to advance social and economic well-being and to deliver effective social work services

- Respond to contexts that shape practice
- Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities

Courses Required Prior to Formal Acceptance to the Social Work Program

Behavioral and Social Science Prerequisites (9 credit hours)

- ANTH 1000 SS/CC - Introduction to Anthropology **Credits: (3)**
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)** or
- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**

Human Development Prerequisite (3 credit hours)

- ZOOL 1020 LS - Human Biology **Credits: (3)**

Note:

Any transfer course in this area must contain only human biology content, courses with animal or plant content are not acceptable

Social Work Prerequisites (6 credit hours)

- SW 1010 SS CEL - Introduction to Generalist Social Work **Credits: (3)**
- SW 2100 SS - Human Behavior and the Social Environment I **Credits: (3)**

Note:

ZOOL 1020 should be taken prior to or concurrently with SW 2100

Formal Admission to the Social Work Program

Formal applications for admission to the program will be considered during the semester the student is in the process of completing final prerequisites or anytime thereafter. Applications may be downloaded from the Department's website or obtained at the Social Work office (Lindquist Hall, Room 330). The Admissions and Retention Committee will consider all applications and make one of the following recommendations:

1. Full admission to the program;
2. Admission to the program with contingencies;
3. Denial of admission to the program.

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. See specific requirements for the BA and BS under the major course requirements. The following courses for the Social Work prerequisite requirements will also fulfill general education requirements: SW 1010 SS CEL - Introduction to Generalist Social Work; ANTH 1000 SS/CC - Introduction to Anthropology; PSY 1010 SS - Introductory Psychology; SOC 1010 SS/CC - Introduction to Sociology; and ZOOL 1020 LS - Human Biology.

Major Course Requirements for BS or BA Degree

The following should be taken after completing the above prerequisites.

Required Social Work Core Courses (38 credit hours)

- SW 2200 SS/CC - Issues in Diversity **Credits: (3)**
- SW 3100 - Human Behavior and the Social Environment II **Credits: (2)**
- SW 3200 - Child and Family Welfare **Credits: (2)**
- SW 3500 - Social Welfare & Gerontological Policy Development and Service **Credits: (3)**
- SW 3600 - Social Statistics **Credits: (3)** (or equivalent)
(Prerequisite – Quantitative Literacy. Must be completed prior to SW 4861)
- SW 3700 - Social Work Research **Credits: (3)** *(It is recommended to take a Statistics course [SW 3600] prior to Research)*
- SW 3900 - Social Work Methods, Values, and Ethics **Credits: (3)**
- SW 3910 - Social Work Practice I **Credits: (3)** *(Make application for Social Service Field Experience prior to completing SW 3910)*
- SW 3920 - Social Work Practice II **Credits: (3)**
- SW 3930 - Social Work Practice III **Credits: (3)**
- SW 4500 - Interventions for Populations at Risk **Credits: (3)**
- SW 4860 INT - Social Service Field Experience I **Credits: (4)**
- SW 4861 INT - Social Service Field Experience II **Credits: (4)**
- SW 4990 - Social Work Senior Seminar **Credits: (2)**

Courses Required to fulfill the BA

The following must be taken to qualify for a Bachelor of Arts (BA) degree in Social Work

- 12 semester credits in any foreign language
OR
- 6 semester credits in any foreign language
and
- SW 3800 - Writing in Social Work **(3)**
and

Select one of the following

- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- ENGL 2200 HU/CC - Introduction to Literature **Credits: (3)**
- ENGL 2220 HU/CC - Introduction to Fiction **Credits: (3)**
- ENGL 2710 HU/CC - Perspectives on Women's Literature **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- PHIL 2050 HU - Practical Ethics **Credits: (3)**
- PHIL 1250 HU - Critical Thinking **Credits: (3)**

Note:

Courses taken to meet BA requirements may also be applied to fill general education requirements. SW 3800 Writing in Social Work may NOT be counted by BA candidates as credit toward the 18 credit hours approved as an alternative to a traditional minor.

Electives (Optional)

- SW 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- GERT 3000 - Death and Dying **Credits: (3)** or
- SW 3000 - Death and Dying **Credits: (3)**
- GERT 3120 - Aging: Adaptation and Behavior **Credits: (3)** or
- SW 3120 - Aging: Adaptation and Behavior **Credits: (3)**
- GERT 3320 - Ethnicity and Older Women in the American Society **Credits: (3)** or
- SW 3320 - Ethnicity and Older Women in the American Society **Credits: (3)**
- SW 3800 - Writing in Social Work **Credits: (3)** (optional for BS in Social Work)
- SW 4140 - Perspectives on Drug Use and Substance Abuse **Credits: (3)**
- SW 4150 - DSM-5 **Credits: (3)** (optional for BA in Social Work)
- GERT 4220 - Societal Responses to Aging **Credits: (3)** or
- SW 4220 - Societal Responses to Aging **Credits: (3)**
- SW 4240 - Introduction to TeleMental-Health **Credits: (3)**
- SW 4250 - Medical Social Work **Credits: (3)**
- SW 4600 - Social Work in Special Settings **Credits: (2-4)**
- GERT 4650 - Retirement: Adjustment/Planning **Credits: (3)** or
- SW 4650 - Retirement: Adjustment/Planning **Credits: (3)**
- SW 4265 - Crisis Intervention and Trauma **Credits: (3)**
- SW 4800 - Projects and Research **Credits: (1-3)**
- SW 4810 - Experimental Course **Credits: (1-6)**
- SW 4830 - Directed Readings **Credits: (1-3)**
- SW 4850 - Social Work Study Abroad **Credits: (1-4)**
- SW 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

Courses Approved as an Alternative to a Traditional Minor

As an alternative to a minor, a Social Work Major may choose to complete a minimum of 18 credits (generally the equivalent of six courses) from the following list of elective enrichment courses. Other courses not on this list may be approved to meet this requirement at the discretion of a student's faculty advisor with the consent of the Social Work faculty. At least six of these credits must be taken in Social Work. No more than six credits may be taken within a single discipline. Students are strongly encouraged to consult with their faculty advisor in selecting one of these options. Courses used to meet the minor alternative MUST be pre-approved by a faculty advisor.

Social Work (6 credit hours)

- SW 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- SW 3000 - Death and Dying **Credits: (3) ***
- SW 3120 - Aging: Adaptation and Behavior **Credits: (3) ***
- SW 3320 - Ethnicity and Older Women in the American Society **Credits: (3) ***
- SW 3800 - Writing in Social Work **Credits: (3)** (optional for BS in Social Work)
- SW 4140 - Perspectives on Drug Use and Substance Abuse **Credits: (3)**
- SW 4150 - DSM-5 **Credits: (3)** (optional for BA in Social Work)
- SW 4250 - Medical Social Work **Credits: (3)**
- SW 4600 - Social Work in Special Settings **Credits: (2-4)**
- SW 4650 - Retirement: Adjustment/Planning **Credits: (3) ***
- SW 4800 - Projects and Research **Credits: (1-3)** (consent of department chair required)
- SW 4810 - Experimental Course **Credits: (1-6)**
- SW 4830 - Directed Readings **Credits: (1-3)** (consent of department chair required)
- SW 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

Note:

**Cross-listed with Gerontology (GERT)*

Anthropology

- ANTH 3500 - Advanced Cultural Anthropology **Credits: (3)**
- ANTH 3900 - Anthropology of Religion **Credits: (3)**

Communication

- COMM 3080 GLB - Intercultural Communication **Credits: (3)** (prerequisite COMM 2110)

Child and Family Studies

- FAM 3350 GLB - Diverse Families **Credits: (3)**
- ECED 3500 - Young Children: Adversity and Resilience **Credits: (3)** (prerequisite CHF 1500)
- FAM 3550 - Parenting Education **Credits: (3)**
- FAM 3650 - Introduction to Marriage and Family Therapy **Credits: (3)** (prerequisite CHF 2400, FAM 3350)
- FAM 4400 - The Family in Stress **Credits: (3)**

Criminal Justice

- CJ 3040 - Community Policing **Credits: (3)**
- CJ 3060 - Corrections in the Community **Credits: (3)**
- CJ 3270 - Theories of Crime and Delinquency **Credits: (3)**
- CJ 3300 - Victimology **Credits: (3)**
- CJ 3400 - Drugs and Crime **Credits: (3)**

Economics

- ECON 3410 - Women in the World Economy **Credits: (3)** (prerequisite ECON 2010)

Gerontology

- GERT 3000 - Death and Dying **Credits: (3)** *
- GERT 3120 - Aging: Adaptation and Behavior **Credits: (3)** *
- GERT 3320 - Ethnicity and Older Women in the American Society **Credits: (3)** *
- GERT 4650 - Retirement: Adjustment/Planning **Credits: (3)** *

Note:

** Cross-listed with Social Work (SW)*

Health

- HLTH 3000 - Foundations of Health Promotion **Credits: (3)** (prerequisite HLTH 1030)
- HLTH 3400 - Substance Abuse Prevention **Credits: (3)**
- HLTH 3420 - Multicultural Health and Nutrition **Credits: (3)** (same as NUTR 3420)
- HLTH 3500 - Human Sexuality **Credits: (3)**

Health Administrative Services

- HAS 3000 - The Healthcare System **Credits: (3)**
- PUBH 3150 - Introduction to Public Health **Credits: (3)**
- HAS 3190 - Cultural Competency in Patient Education **Credits: (3)**
- HAS 3260 - Healthcare Leadership and Management **Credits: (3)** (prerequisite HAS 3000)
- HAS 4400 - Legal and Ethical Aspects of Health Administration **Credits: (3)** (prerequisite HAS 3000 & HAS 3260)
- HAS 4520 - Long-Term Care Administration **Credits: (3)** (prerequisite HAS 3000 & HAS 4400)

Management

- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- MGMT 4400 - Advanced Organizational Behavior **Credits: (3)** (prerequisite MGMT 3010)

Philosophy

- PHIL 3350 - Medical Ethics **Credits: (3)**

Political Science

- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**
- POLS 3700 - Bureaucratic Politics **Credits: (3)**
- POLS 4600 - American Congress **Credits: (3)**

- POLS 4750 - Public Policy Analysis **Credits: (3)**

Psychology

- PSY 3000 - Child Psychology **Credits: (3)**
- PSY 3010 - Psychopathology **Credits: (3)**
- PSY 3100 - Psychology of Diversity **Credits: (3)**
- PSY 3430 - Theories of Personality **Credits: (3)** (prerequisite PSY 1010)
- PSY 3460 - Social Psychology **Credits: (3)** (prerequisite PSY 1010)
- PSY 3500 - Cognition **Credits: (3)** (prerequisite PSY 1010)

Sociology

- SOC 2600 - Families in Society **Credits: (3)**
- SOC 3270 - Criminology **Credits: (3)** (prerequisite SOC 1010 or SOC 1020)
- SOC 3300 SUS - Environment and Society **Credits: (3)**
- SOC 3410 - Sociology of Religion **Credits: (3)**
- SOC 3420 - Sociology of Education **Credits: (3)**
- SOC 3430 - Medicine and Healthcare in Society **Credits: (3)**

Women's Studies

- WGS 3050 - Introduction to Feminist Theories 1700 -- Present **Credits: (3)**

Bachelor of Science

Gerontology (BS)

Note: No new majors are being accepted in this program at this time. However, the minor, BIS emphasis, and non-degree certificate programs are active and available.

- **Program Prerequisite:** Not required.
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better is required in all courses used toward the major (a grade of "C-" is not acceptable) in addition to an overall GPA for Gerontology courses of 2.5 or higher. Also refer to the general grade requirements for graduation on Degree Requirements.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 31 of these is required within the major. A total of 40 upper division credit hours is required for graduation from Weber State University (courses numbered 3000 and above); 19-28 of these are required within the major.
- **Program Code:** 7006BS
- **CIPC:** 301101

Advisement

Students are assigned to a faculty advisor for academic and professional advising. The faculty advisor assists students with course scheduling, academic counseling, and professional self-assessment. Students are required to see their faculty advisor at least one time per semester prior to registration. Call the Social Work/Gerontology office number,

801-626-6157, for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). Students must file "Major/Minor Declaration" form with the department office.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. GERT 1010 will fill both a major/minor and general education requirement.

Major Course Requirements for BS Degree

Required Gerontology Courses (22 credit hours)

- GERT 1010 SS - Introduction to Gerontology **Credits: (3)**
- GERT 3320 - Ethnicity and Older Women in the American Society **Credits: (3)**
- GERT 3400 - Methods of Research: Social and Behavioral Research **Credits: (4)**
- GERT 3500 - Social Welfare & Gerontological Policy Development and Service **Credits: (3)**
- GERT 3600 - Social Statistics **Credits: (3)**
- GERT 4860 - Introductory Field Practicum **Credits: (2)**
- GERT 4861 - Advanced Field Practicum **Credits: (2)**
- GERT 4990 - Senior Seminar **Credits: (2)**

Gerontology Elective (3 credit hours)

Select 1 course from the following

- GERT 2220 - Introduction to Social Gerontology **Credits: (3)**
- GERT 3000 - Death and Dying **Credits: (3)**
- GERT 3120 - Aging: Adaptation and Behavior **Credits: (3)**
- GERT 4220 - Societal Responses to Aging **Credits: (3)**
- GERT 4650 - Retirement: Adjustment/Planning **Credits: (3)**

Area Course Electives (6 credit hours)

Select a minimum of six credit hours from one of the following five areas (all six credits MUST be from the same area): (1) Counseling, (2) Health and Leisure, (3) Administrative/Management, (4) Social Services, and (5) Nutrition. Students who complete a double major in a related approved field will satisfy this requirement. It should be noted that prerequisites for classes listed below must be satisfied.

1. Counseling

- PSY 3430 - Theories of Personality **Credits: (3)**
- PSY 4310 - Introduction to Counseling Theories **Credits: (3)**
- SOC 3000 - Self and Society **Credits: (3)**

- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- SW 3910 - Social Work Practice I **Credits: (3)**
- SW 3920 - Social Work Practice II **Credits: (3)**

2. Health and Leisure

- HLTH 3400 - Substance Abuse Prevention **Credits: (3)**
- HTHS 1101 - Medical Terminology **Credits: (2)**
- HTHS 3328 - Pathophysiology of Cells and Tissues **Credits: (2)**
- PE 1098 - Fitness for Life **Credits: (1)**
- PEP 2480 - Fitness for Life Concepts **Credits: (1)**
- OCRE 3100 - Recreation Leadership and Group Facilitation **Credits: (3)**

3. Administrative/Management

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 3000 - Small Business Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**

4. Social Services (select from two academic areas)

- SW 1010 SS CEL - Introduction to Generalist Social Work **Credits: (3)**
- SW 2100 SS - Human Behavior and the Social Environment I **Credits: (3)**
- SW 3900 - Social Work Methods, Values, and Ethics **Credits: (3)**
- ANTH 3500 - Advanced Cultural Anthropology **Credits: (3)**
- CHF 2400 SS/CC - Family Relations **Credits: (3)**
- FAM 4400 - The Family in Stress **Credits: (3)**

5. Nutrition

- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- NUTR 2320 - Food Values, Diet Design and Health **Credits: (3)**
- NUTR 3320 - Health and Nutrition in the Older Adult **Credits: (3)** or
- HLTH 3320 - Health and Nutrition in the Older Adult **Credits: (3)**
- NUTR 3420 GLB - Multicultural Health & Nutrition **Credits: (3)** or
- HLTH 3420 - Multicultural Health and Nutrition **Credits: (3)**

Social Work (BS)

Social Work Major Bachelor's Degree (BS or BA)

- **Program Prerequisite:** Must be accepted to the program (see Admissions Requirements described later in this section).

- **Minor:** The Social Work Major requires either: (a) the completion of a minor; or (b) a minor alternative. Minor requirements are found in the University catalog under the specific programs that offer them. As an alternative to a minor, a Social Work Major may choose to complete 18 credits (generally the equivalent of six courses) from a set of approved elective enrichment courses listed below.
- **Grade Requirements:** A grade of "C" or better is required in all courses toward and included in this major (a grade of "C-" is not acceptable). In addition, an overall GPA for these courses of 2.5 must be maintained. Also refer to the general grade requirements Degree Requirements. Students not meeting the minimum grade requirements for an individual Social Work course may repeat that course one (1) time before being dropped from the Social Work program. In the rare event a student is unable to complete SW 4860 and SW 4861 in the field agency they are originally placed, at the discretion of the field placement advisor, the student may request a new placement one (1) time only. Students at any time failing to meet the overall GPA of 2.5 will be given a probationary semester to raise their GPA to the minimum standard. Failure to comply with this policy will result in being dropped from the Social Work program.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 41 of these is required within the major not counting the prerequisite courses totaling 18 semester hours. A total of 40 upper division credit hours is required for graduation from Weber State University (courses numbered 3000 and above).
- **Program Code:** 7017BA, 7017BS
- **CIPC:** 440701

Advisement

Students accepted into the program are assigned to a faculty advisor for academic and professional advising. The faculty advisor assists students with course scheduling, academic counseling, and professional self-assessment. Students are required to see their faculty advisor at least one time per semester prior to registration. Call the Social Work/Gerontology office number, 801-626-6157, or the Department Chair, 801-626-6156, for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare a program of study (see Enrollment Services and Information). Satisfactory completion of the following is required prior to formal acceptance into the program:

1. WSU Writing Competency (Composition)*
2. WSU Information Literacy*
3. 60-63 semester graduation hours (or equivalent) including the prerequisite courses listed below for the Behavioral and Social Sciences, Human Development, and Social Work prerequisites. These courses must be completed with a grade of "C" or better and with a total GPA of 2.5 or better.
4. Students agree to abide by the National Association of Social Workers Code of Ethics.

Note:

** Refer to General Requirements on Degree Requirements*

Program Learning Outcomes

- Identify as a professional social worker and conduct oneself accordingly
- Apply social work ethical principles to guide professional practice
- Apply critical thinking to inform & communicate professional judgements
- Engage diversity and difference in practice
- Advance human rights and social and economic justice

- Engage in research-informed practice and practice-informed research
- Apply knowledge of human behavior and the social environment
- Engage in policy practice to advance social and economic well-being and to deliver effective social work services
- Respond to contexts that shape practice
- Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities

Courses Required Prior to Formal Acceptance to the Social Work Program

Behavioral and Social Science Prerequisites (9 credit hours)

- ANTH 1000 SS/CC - Introduction to Anthropology **Credits: (3)**
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)** or
- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**

Human Development Prerequisite (3 credit hours)

- ZOOL 1020 LS - Human Biology **Credits: (3)**

Note:

Any transfer course in this area must contain only human biology content, courses with animal or plant content are not acceptable

Social Work Prerequisites (6 credit hours)

- SW 1010 SS CEL - Introduction to Generalist Social Work **Credits: (3)**
- SW 2100 SS - Human Behavior and the Social Environment I **Credits: (3)**

Note:

ZOOL 1020 should be taken prior to or concurrently with SW 2100

Formal Admission to the Social Work Program

Formal applications for admission to the program will be considered during the semester the student is in the process of completing final prerequisites or anytime thereafter. Applications may be downloaded from the Department's website or obtained at the Social Work office (Lindquist Hall, Room 330). The Admissions and Retention Committee will consider all applications and make one of the following recommendations:

1. Full admission to the program;
2. Admission to the program with contingencies;
3. Denial of admission to the program.

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. See specific requirements for the BA and BS under the major course requirements. The following courses for the Social Work prerequisite requirements will also fulfill general education requirements: SW 1010 SS CEL - Introduction to Generalist Social Work; ANTH 1000 SS/CC - Introduction to Anthropology; PSY 1010 SS - Introductory Psychology; SOC 1010 SS/CC - Introduction to Sociology; and ZOOL 1020 LS - Human Biology.

Major Course Requirements for BS or BA Degree

The following should be taken after completing the above prerequisites.

Required Social Work Core Courses (38 credit hours)

- SW 2200 SS/CC - Issues in Diversity **Credits: (3)**
- SW 3100 - Human Behavior and the Social Environment II **Credits: (2)**
- SW 3200 - Child and Family Welfare **Credits: (2)**
- SW 3500 - Social Welfare & Gerontological Policy Development and Service **Credits: (3)**
- SW 3600 - Social Statistics **Credits: (3)** (or equivalent)
(Prerequisite – Quantitative Literacy. Must be completed prior to SW 4861)
- SW 3700 - Social Work Research **Credits: (3)** *(It is recommended to take a Statistics course [SW 3600] prior to Research)*
- SW 3900 - Social Work Methods, Values, and Ethics **Credits: (3)**
- SW 3910 - Social Work Practice I **Credits: (3)** *(Make application for Social Service Field Experience prior to completing SW 3910)*
- SW 3920 - Social Work Practice II **Credits: (3)**
- SW 3930 - Social Work Practice III **Credits: (3)**
- SW 4500 - Interventions for Populations at Risk **Credits: (3)**
- SW 4860 INT - Social Service Field Experience I **Credits: (4)**
- SW 4861 INT - Social Service Field Experience II **Credits: (4)**
- SW 4990 - Social Work Senior Seminar **Credits: (2)**

Courses Required to fulfill the BS

The following must be taken to qualify for a Bachelor of Science (BS) degree in Social Work

- SW 3600 - Social Statistics **Credits: (3)**
- SW 3700 - Social Work Research **Credits: (3)**
- SW 4150 - DSM-5 **Credits: (3)**

And select one of the following

- HLTH 1020 LS - Science and Application of Human Nutrition **Credits: (3)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**

Note:

Courses taken to meet BS requirements may also be applied to fill general education requirements, program prerequisites and required Social Work core courses. SW 4150 - DSM-5 may NOT be counted by BS candidates as credit toward the 18 credit hours approved as an alternative to a traditional minor.

Additional science courses may be counted as electives or be applied to fill general education requirements.

Electives (Optional)

- SW 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- GERT 3000 - Death and Dying **Credits: (3)** or
- SW 3000 - Death and Dying **Credits: (3)**
- GERT 3120 - Aging: Adaptation and Behavior **Credits: (3)** or
- SW 3120 - Aging: Adaptation and Behavior **Credits: (3)**
- GERT 3320 - Ethnicity and Older Women in the American Society **Credits: (3)** or
- SW 3320 - Ethnicity and Older Women in the American Society **Credits: (3)**
- SW 3800 - Writing in Social Work **Credits: (3)** (optional for BS in Social Work)
- SW 4140 - Perspectives on Drug Use and Substance Abuse **Credits: (3)**
- SW 4150 - DSM-5 **Credits: (3)** (optional for BA in Social Work)
- GERT 4220 - Societal Responses to Aging **Credits: (3)** or
- SW 4220 - Societal Responses to Aging **Credits: (3)**
- SW 4240 - Introduction to TeleMental-Health **Credits: (3)**
- SW 4250 - Medical Social Work **Credits: (3)**
- SW 4600 - Social Work in Special Settings **Credits: (2-4)**
- GERT 4650 - Retirement: Adjustment/Planning **Credits: (3)** or
- SW 4650 - Retirement: Adjustment/Planning **Credits: (3)**
- SW 4265 - Crisis Intervention and Trauma **Credits: (3)**
- SW 4800 - Projects and Research **Credits: (1-3)**
- SW 4810 - Experimental Course **Credits: (1-6)**
- SW 4830 - Directed Readings **Credits: (1-3)**
- SW 4850 - Social Work Study Abroad **Credits: (1-4)**
- SW 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

Courses Approved as an Alternative to a Traditional Minor

As an alternative to a minor, a Social Work Major may choose to complete a minimum of 18 credits (generally the equivalent of six courses) from the following list of elective enrichment courses. Other courses not on this list may be approved to meet this requirement at the discretion of a student's faculty advisor with the consent of the Social Work faculty. At least six of these credits must be taken in Social Work. No more than six credits may be taken within a single discipline. Students are strongly encouraged to consult with their faculty advisor in selecting one of these options. Courses used to meet the minor alternative MUST be pre-approved by a faculty advisor.

Social Work (6 credit hours)

- SW 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

- SW 3000 - Death and Dying **Credits: (3) ***
- SW 3120 - Aging: Adaptation and Behavior **Credits: (3) ***
- SW 3320 - Ethnicity and Older Women in the American Society **Credits: (3) ***
- SW 3800 - Writing in Social Work **Credits: (3)** (optional for BS in Social Work)
- SW 4140 - Perspectives on Drug Use and Substance Abuse **Credits: (3)**
- SW 4150 - DSM-5 **Credits: (3)** (optional for BA in Social Work)
- SW 4250 - Medical Social Work **Credits: (3)**
- SW 4600 - Social Work in Special Settings **Credits: (2-4)**
- SW 4650 - Retirement: Adjustment/Planning **Credits: (3) ***
- SW 4800 - Projects and Research **Credits: (1-3)** (consent of department chair required)
- SW 4810 - Experimental Course **Credits: (1-6)**
- SW 4830 - Directed Readings **Credits: (1-3)** (consent of department chair required)
- SW 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

Note:

**Cross-listed with Gerontology (GERT)*

Anthropology

- ANTH 3500 - Advanced Cultural Anthropology **Credits: (3)**
- ANTH 3900 - Anthropology of Religion **Credits: (3)**

Communication

- COMM 3080 GLB - Intercultural Communication **Credits: (3)** (prerequisite COMM 2110)

Child and Family Studies

- FAM 3350 GLB - Diverse Families **Credits: (3)**
- ECED 3500 - Young Children: Adversity and Resilience **Credits: (3)** (prerequisite CHF 1500)
- FAM 3550 - Parenting Education **Credits: (3)**
- FAM 3650 - Introduction to Marriage and Family Therapy **Credits: (3)** (prerequisite CHF 2400, FAM 3350)
- FAM 4400 - The Family in Stress **Credits: (3)**

Criminal Justice

- CJ 3040 - Community Policing **Credits: (3)**
- CJ 3060 - Corrections in the Community **Credits: (3)**
- CJ 3270 - Theories of Crime and Delinquency **Credits: (3)**
- CJ 3300 - Victimology **Credits: (3)**
- CJ 3400 - Drugs and Crime **Credits: (3)**

Economics

- ECON 3410 - Women in the World Economy **Credits: (3)** (prerequisite ECON 2010)

Gerontology

- GERT 3000 - Death and Dying **Credits: (3) ***
- GERT 3120 - Aging: Adaptation and Behavior **Credits: (3) ***
- GERT 3320 - Ethnicity and Older Women in the American Society **Credits: (3) ***
- GERT 4650 - Retirement: Adjustment/Planning **Credits: (3) ***

Note:

** Cross-listed with Social Work (SW)*

Health

- HLTH 3000 - Foundations of Health Promotion **Credits: (3)** (prerequisite HLTH 1030)
- HLTH 3400 - Substance Abuse Prevention **Credits: (3)**
- HLTH 3420 - Multicultural Health and Nutrition **Credits: (3)** (same as NUTR 3420)
- HLTH 3500 - Human Sexuality **Credits: (3)**

Health Administrative Services

- HAS 3000 - The Healthcare System **Credits: (3)**
- PUBH 3150 - Introduction to Public Health **Credits: (3)**
- HAS 3190 - Cultural Competency in Patient Education **Credits: (3)**
- HAS 3260 - Healthcare Leadership and Management **Credits: (3)** (prerequisite HAS 3000)
- HAS 4400 - Legal and Ethical Aspects of Health Administration **Credits: (3)** (prerequisite HAS 3000 & HAS 3260)
- HAS 4520 - Long-Term Care Administration **Credits: (3)** (prerequisite HAS 3000 & HAS 4400)

Management

- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- MGMT 4400 - Advanced Organizational Behavior **Credits: (3)** (prerequisite MGMT 3010)

Philosophy

- PHIL 3350 - Medical Ethics **Credits: (3)**

Political Science

- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**
- POLS 3700 - Bureaucratic Politics **Credits: (3)**
- POLS 4600 - American Congress **Credits: (3)**
- POLS 4750 - Public Policy Analysis **Credits: (3)**

Psychology

- PSY 3000 - Child Psychology **Credits: (3)**
- PSY 3010 - Psychopathology **Credits: (3)**
- PSY 3100 - Psychology of Diversity **Credits: (3)**
- PSY 3430 - Theories of Personality **Credits: (3)** (prerequisite PSY 1010)
- PSY 3460 - Social Psychology **Credits: (3)** (prerequisite PSY 1010)
- PSY 3500 - Cognition **Credits: (3)** (prerequisite PSY 1010)

Sociology

- SOC 2600 - Families in Society **Credits: (3)**
- SOC 3270 - Criminology **Credits: (3)** (prerequisite SOC 1010 or SOC 1020)
- SOC 3300 SUS - Environment and Society **Credits: (3)**
- SOC 3410 - Sociology of Religion **Credits: (3)**
- SOC 3420 - Sociology of Education **Credits: (3)**
- SOC 3430 - Medicine and Healthcare in Society **Credits: (3)**

Women's Studies

- WGS 3050 - Introduction to Feminist Theories 1700 -- Present **Credits: (3)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Gerontology (BIS)

Gerontology

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better in courses used toward the minor/emphasis (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 17 credit hours.
- **Program Code:** 7006
- **CIPC:** 301101

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills

- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements

Gerontology Courses Required (11 credit hours)

- GERT 1010 SS - Introduction to Gerontology **Credits: (3)**
- GERT 3320 - Ethnicity and Older Women in the American Society **Credits: (3)**
- GERT 3500 - Social Welfare & Gerontological Policy Development and Service **Credits: (3)**
- GERT 4860 - Introductory Field Practicum **Credits: (2)**

Gerontology Electives (6 credit hours)

Select two courses from the following 5 courses

- GERT 2220 - Introduction to Social Gerontology **Credits: (3)**
- GERT 3000 - Death and Dying **Credits: (3)**
- GERT 3120 - Aging: Adaptation and Behavior **Credits: (3)**
- GERT 4220 - Societal Responses to Aging **Credits: (3)**
- GERT 4650 - Retirement: Adjustment/Planning **Credits: (3)**

Social Work (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

Refer to the Social Work (BIS) Bachelor of Integrated Studies section of this catalog for program requirements.

- **Grade Requirements:** Minimum grade of "C" is required in all courses toward and included in the Social Work emphasis (a grade of "C-" is not acceptable). In addition, an overall GPA for these courses of 2.50 must be maintained.
- **Credit Hour Requirements:** Minimum of 19 credit hours.
- **Program Code:** 7017
- **CIPC:** 440701

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for BIS Emphasis

Social Work Courses Required (19 credit hours)

- SW 1010 SS CEL - Introduction to Generalist Social Work **Credits: (3)**
- SW 2100 SS - Human Behavior and the Social Environment I **Credits: (3)**
- SW 2200 SS/CC - Issues in Diversity **Credits: (3)**
- SW 3100 - Human Behavior and the Social Environment II **Credits: (2)**
- SW 3200 - Child and Family Welfare **Credits: (2)**
- SW 3500 - Social Welfare & Gerontological Policy Development and Service **Credits: (3)**
- SW 3700 - Social Work Research **Credits: (3)**

Minor

Gerontology Minor

Gerontology

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better in courses used toward the minor/emphasis (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 17 credit hours.
- **Program Code:** 7006
- **CIPC:** 301101

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements

Gerontology Courses Required (11 credit hours)

- GERT 1010 SS - Introduction to Gerontology **Credits: (3)**
- GERT 3320 - Ethnicity and Older Women in the American Society **Credits: (3)**
- GERT 3500 - Social Welfare & Gerontological Policy Development and Service **Credits: (3)**
- GERT 4860 - Introductory Field Practicum **Credits: (2)**

Gerontology Electives (6 credit hours)

Select two courses from the following 5 courses

- GERT 2220 - Introduction to Social Gerontology **Credits: (3)**
- GERT 3000 - Death and Dying **Credits: (3)**
- GERT 3120 - Aging: Adaptation and Behavior **Credits: (3)**
- GERT 4220 - Societal Responses to Aging **Credits: (3)**
- GERT 4650 - Retirement: Adjustment/Planning **Credits: (3)**

Certification

Gerontology Non-degree Certification

Gerontology

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better in courses used toward the minor/emphasis (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 17 credit hours.
- **Program Code:** 7006
- **CIPC:** 301101

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements

Gerontology Courses Required (11 credit hours)

- GERT 1010 SS - Introduction to Gerontology **Credits: (3)**
- GERT 3320 - Ethnicity and Older Women in the American Society **Credits: (3)**
- GERT 3500 - Social Welfare & Gerontological Policy Development and Service **Credits: (3)**
- GERT 4860 - Introductory Field Practicum **Credits: (2)**

Gerontology Electives (6 credit hours)

Select two courses from the following 5 courses

- GERT 2220 - Introduction to Social Gerontology **Credits: (3)**
- GERT 3000 - Death and Dying **Credits: (3)**

- GERT 3120 - Aging: Adaptation and Behavior **Credits: (3)**
- GERT 4220 - Societal Responses to Aging **Credits: (3)**
- GERT 4650 - Retirement: Adjustment/Planning **Credits: (3)**

Department of Sociology and Anthropology

Department Chair: Huiying Hill

Location: Lindquist Hall 241

Telephone Contact: Alexandria Monroe 801-626-6241

Professors: Pepper Glass, Huiying Hill, Brenda Marsteller Kowalewski, Marjukka Ollilainen, Carla Trentelman;

Associate Professors: Robert Morris, Robert Reynolds, David Yoder; **Assistant Professors:** Joanna Gautney, Abigail Mack, Madeline Mackie, Mark Stevenson,

Sociology

Sociology Coordinator: Dr. Huiying Hill, 801-626-6241

Sociology is the study of social life, social change, and the social causes and consequences of human behavior. Sociologists investigate the structure of groups, organizations, and societies, and how people interact within these contexts. Since all human behavior is social, the subject matter of sociology includes, but is not limited to, street crime and delinquency, corporate downsizing, how people express emotions, welfare or education reform, how families differ and flourish, divisions of ethnicity, gender and social class, religious cults, medicine, media, and other social phenomena. Because sociology addresses the most challenging issues of our time, it is a rapidly expanding field whose potential is increasingly tapped by those who craft policies and create programs. Few fields have such broad scope and relevance for research, theory, and application of knowledge. Sociology is a popular major for students planning futures in such professions as law, business, education, architecture, politics, public administration, urban planning and development, human services, and a myriad of other professions. It also provides a solid foundation for pursuing graduate degrees in related fields. Although a career as a sociologist requires a Master's Degree or PhD, an undergraduate education in sociology can be applied to almost any profession a student pursues.

Interdisciplinary Minors

The Sociology Department participates in the Asian Studies, Ethnic Studies, European Studies, Legal Studies and Women's Studies Minor Programs and the Urban and Regional Planning Emphasis Program. Students who wish to enroll in one of these programs should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Anthropology

Anthropology Coordinator: Dr. Mark Stevenson, 801-626-6244

Anthropology takes a holistic approach to describing and explaining human differences and similarities around the world and throughout time. It looks at humans both culturally and biologically within an ecological context. It examines contemporary humans as well as those of the historic and prehistoric past and searches for patterns of human existence. Specialized fields include archaeology, linguistics, ethnology, and biological anthropology. Students are taught to question and examine the significance of beliefs, attitudes and prejudices, and to understand the anthropological position of relativism and valuing cultural and biological variation. The program prepares students for a broad range of public and private sector employment in anthropology-related fields or to enter professional or graduate schools appropriate to their interests. Anthropology is an essential discipline in the 21st Century, contributing knowledge for successful living and working in our diverse human world.

Interdisciplinary Minors

The Anthropology Program participates in the Asian Studies, Ethnic Studies, Environmental Studies, European Studies, Latin American Studies, Linguistics, and Women's Studies Minor Programs. Students who wish to enroll in one of these programs should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Bachelor of Arts

Anthropology (BA)

Anthropology

- **Program Prerequisite:** Not required.
- **Minor:** Required
- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the major (a grade of "C-" is not acceptable) and an overall GPA of 2.00.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation, of which 40 must be upper division credit hours (courses numbered 3000 and above). A minimum of 39 Anthropology credit hours is required within the Anthropology General Track. A minimum of 42 Anthropology credit hours is required within the Anthropology Archaeology Track.
- **Program Code:** 7018BA or 7018BS, with ARCH or ANTH cohort based on track choice.
- **CIPC:** Anthropology General Track (450201), Anthropology Archaeology Track (450201)

Transfer students who are majoring in Anthropology can transfer up to 18 hours from an acceptable Anthropology program. Only 9 of the transferred hours can be lower division.

Advisement

All Anthropology majors, minors, and BIS students should meet with a faculty advisor at least once a year. Undeclared students and those with general questions need to contact the current coordinator of Anthropology via the Sociology & Anthropology department office phone: (801) 626-6241.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for the major or minor. New freshmen and transfer students admitted to WSU in good standing qualify for admission to this major.

Core and General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. The following courses may be used to fulfill both general education and program requirements: ANTH SS/CC 1000, ANTH LS/SUS 1020, ANTH HU/CC 1040, ANTH SS/CC 2010, and ANTH SS/CC 2030. (See university policy on any limitations).

Program Learning Outcomes

Students will understand and/or be able to apply:

- the four-field approach of anthropology;
- anthropological theory and methods;
- critical thinking and communication skills;
- human cultural and biological diversity across time and space.

Major Course Requirements

Required Program Courses (15 credit hours)

- ANTH 1000 SS/CC - Introduction to Anthropology **Credits: (3)**
- ANTH 4200 - Anthropological Theory **Credits: (3)**
- ANTH 4300 CRE - Anthropological Research Methods **Credits: (3)**
- ANTH 4900 CRE - Senior Capstone Seminar **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)** *or equivalent as approved by the program coordinator*

Note:

In addition, students must select one of the following two tracks to pursue.

Language Courses Required to fulfill the BA

6 credit hours of foreign language and two of the following language arts courses:

- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- ANTH 4830 INT - Readings and/or Projects **Credits: (1-3)** (Must register for 3 credit hours)
or refer to the Degree Requirements section in this catalog and complete Option 1 - Foreign Language listed under Requirements for Bachelor's Degrees.
- ANTH 4900 CRE - Senior Capstone Seminar **Credits: (3)**

General Anthropology Track

Four-Field Fundamentals Courses (6 credit hours)

Select two courses from the following

- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3)**
- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)**
- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3)**

Electives (18 credit hours)

Select a minimum of 18 additional credit hours from the following

- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3)** *
- ANTH 1040 HU/CC - Language and Culture **Credits: (3)** *
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)** *

- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3) ***
- ANTH 2220 - Introduction to Forensic Anthropology **Credits: (3)**
- ANTH 2810 - Experimental Course **Credits: (1-6)**
- ANTH 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ANTH 2950 - Elementary Anthropological Field Trip **Credits: (1-3)**
- ANTH 2990 - Special Topics in Anthropology **Credits: (1-3)**
- ANTH 3100 - North American Archaeology **Credits: (3)**
- ANTH 3200 - Archaeology of Early Civilizations **Credits: (3)**
- ANTH 3250 - Human Osteology **Credits: (3)**
- ANTH 3300 - Archaeological Field Techniques **Credits: (3-6)**
- ANTH 3400 CRE - Archaeological Laboratory Techniques **Credits: (3)**
- ANTH 3500 - Advanced Cultural Anthropology **Credits: (3)**
- ANTH 3600 - Culture Area Studies **Credits: (1-3)**
- ANTH 3900 - Anthropology of Religion **Credits: (3)**
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management **Credits: (3)**
- ANTH 4150 - Technical Skills in Anthropology **Credits: (3)**
- ANTH 4220 - Introduction to Forensic Anthropology **Credits: (3)**
- ANTH 4810 - Experimental Course **Credits: (1-6)**
- ANTH 4830 INT - Readings and/or Projects **Credits: (1-3)**
- ANTH 4890 INT - Internship in Anthropology **Credits: (1-3)**
- ANTH 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ANTH 4950 - Advanced Anthropological Field Trip **Credits: (1-3)**
- ANTH 4990 - Seminar in Anthropology **Credits: (1-3)**

Note:

* Course may not be used to fulfill both elective and four-field fundamental course requirements.

Anthropology (BA), Archaeology Track

Anthropology

- **Program Prerequisite:** Not required.
- **Minor:** Required
- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the major (a grade of "C-" is not acceptable) and an overall GPA of 2.00.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation, of which 40 must be upper division credit hours (courses numbered 3000 and above). A minimum of 39 Anthropology credit hours is required within the Anthropology General Track. A minimum of 42 Anthropology credit hours is required within the Anthropology Archaeology Track.
- **Program Code:** 7018BA or 7018BS, with ARCH or ANTH cohort based on track choice.
- **CIPC:** Anthropology General Track (450201), Anthropology Archaeology Track (450201)

Transfer students who are majoring in Anthropology can transfer up to 18 hours from an acceptable Anthropology program. Only 9 of the transferred hours can be lower division.

Advisement

All Anthropology majors, minors, and BIS students should meet with a faculty advisor at least once a year. Undeclared students and those with general questions need to contact the current coordinator of Anthropology via the Sociology & Anthropology department office phone: (801) 626-6241.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for the major or minor. New freshmen and transfer students admitted to WSU in good standing qualify for admission to this major.

Core and General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. The following courses may be used to fulfill both general education and program requirements: ANTH SS/CC 1000, ANTH LS/SUS 1020, ANTH HU/CC 1040, ANTH SS/CC 2010, and ANTH SS/CC 2030. (See university policy on any limitations).

Program Learning Outcomes

Students will understand and/or be able to apply:

- the four-field approach of anthropology;
- anthropological theory and methods;
- critical thinking and communication skills;
- human cultural and biological diversity across time and space.

Major Course Requirements

Required Program Courses (15 credit hours)

- ANTH 1000 SS/CC - Introduction to Anthropology **Credits: (3)**
- ANTH 4200 - Anthropological Theory **Credits: (3)**
- ANTH 4300 CRE - Anthropological Research Methods **Credits: (3)**
- ANTH 4900 CRE - Senior Capstone Seminar **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)** *or equivalent as approved by the program coordinator*

Note:

In addition, students must select one of the following two tracks to pursue.

Language Courses Required to fulfill the BA

6 credit hours of foreign language and two of the following language arts courses:

- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- ANTH 4830 INT - Readings and/or Projects **Credits: (1-3)** (Must register for 3 credit hours) *or refer to the Degree Requirements section in this catalog and complete Option 1 - Foreign Language listed under Requirements for Bachelor's Degrees.*
- ANTH 4900 CRE - Senior Capstone Seminar **Credits: (3)**

Archaeology Track

Core Courses (21 credit hours)

- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3)**
- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3)**
- ANTH 3100 - North American Archaeology **Credits: (3)**
- ANTH 3300 - Archaeological Field Techniques **Credits: (3-6)** (must complete 6 credit hours)
- ANTH 3400 CRE - Archaeological Laboratory Techniques **Credits: (3)**
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management **Credits: (3)**

Electives (must complete a minimum of 6 hours)

Must select two of the following.

- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)** and
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- ANTH 3200 - Archaeology of Early Civilizations **Credits: (3)**
- ANTH 3250 - Human Osteology **Credits: (3)**
- ANTH 4150 - Technical Skills in Anthropology **Credits: (3)**
- ANTH 4890 INT - Internship in Anthropology **Credits: (1-3)** (Must register for 3 credit hours)

Recommended

- ANTH 2990 - Special Topics in Anthropology **Credits: (1-3)**
- ANTH 4990 - Seminar in Anthropology **Credits: (1-3)**
- ANTH 3600 - Culture Area Studies **Credits: (1-3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)** (Prerequisite: ENGL 2010)
- GEO 3150 - Geomorphology **Credits: (4)**

Note:

Strongly recommended additional skills for all majors: foreign language & computer skills.

Suggested Course Sequence

Bachelor of Science

Anthropology (BS)

Anthropology

- **Program Prerequisite:** Not required.
- **Minor:** Required
- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the major (a grade of "C-" is not acceptable) and an overall GPA of 2.00.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation, of which 40 must be upper division credit hours (courses numbered 3000 and above). A minimum of 39 Anthropology credit hours is required within the Anthropology General Track. A minimum of 42 Anthropology credit hours is required within the Anthropology Archaeology Track.
- **Program Code:** 7018BA or 7018BS, with ARCH or ANTH cohort based on track choice.
- **CIPC:** Anthropology General Track (450201), Anthropology Archaeology Track (450201)

Transfer students who are majoring in Anthropology can transfer up to 18 hours from an acceptable Anthropology program. Only 9 of the transferred hours can be lower division.

Advisement

All Anthropology majors, minors, and BIS students should meet with a faculty advisor at least once a year. Undeclared students and those with general questions need to contact the current coordinator of Anthropology via the Sociology & Anthropology department office phone: (801) 626-6241.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for the major or minor. New freshmen and transfer students admitted to WSU in good standing qualify for admission to this major.

Core and General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. The following courses may be used to fulfill both general education and program requirements: ANTH SS/CC 1000, ANTH LS/SUS 1020, ANTH HU/CC 1040, ANTH SS/CC 2010, and ANTH SS/CC 2030. (See university policy on any limitations).

Program Learning Outcomes

Students will understand and/or be able to apply:

- the four-field approach of anthropology;
- anthropological theory and methods;
- critical thinking and communication skills;
- human cultural and biological diversity across time and space.

Major Course Requirements

Required Program Courses (15 credit hours)

- ANTH 1000 SS/CC - Introduction to Anthropology **Credits: (3)**
- ANTH 4200 - Anthropological Theory **Credits: (3)**
- ANTH 4300 CRE - Anthropological Research Methods **Credits: (3)**
- ANTH 4900 CRE - Senior Capstone Seminar **Credits: (3)**

- SOC 3600 - Social Statistics **Credits: (3)** or equivalent as approved by the program coordinator

Note:

In addition, students must select one of the following two tracks to pursue.

General Anthropology Track

Four-Field Fundamentals Courses (6 credit hours)

Select two courses from the following

- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3)**
- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)**
- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3)**

Electives (18 credit hours)

Select a minimum of 18 additional credit hours from the following

- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3)** *
- ANTH 1040 HU/CC - Language and Culture **Credits: (3)** *
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)** *
- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3)** *
- ANTH 2220 - Introduction to Forensic Anthropology **Credits: (3)**
- ANTH 2810 - Experimental Course **Credits: (1-6)**
- ANTH 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ANTH 2950 - Elementary Anthropological Field Trip **Credits: (1-3)**
- ANTH 2990 - Special Topics in Anthropology **Credits: (1-3)**
- ANTH 3100 - North American Archaeology **Credits: (3)**
- ANTH 3200 - Archaeology of Early Civilizations **Credits: (3)**
- ANTH 3250 - Human Osteology **Credits: (3)**
- ANTH 3300 - Archaeological Field Techniques **Credits: (3-6)**
- ANTH 3400 CRE - Archaeological Laboratory Techniques **Credits: (3)**
- ANTH 3500 - Advanced Cultural Anthropology **Credits: (3)**
- ANTH 3600 - Culture Area Studies **Credits: (1-3)**
- ANTH 3900 - Anthropology of Religion **Credits: (3)**
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management **Credits: (3)**
- ANTH 4150 - Technical Skills in Anthropology **Credits: (3)**
- ANTH 4220 - Introduction to Forensic Anthropology **Credits: (3)**
- ANTH 4810 - Experimental Course **Credits: (1-6)**
- ANTH 4830 INT - Readings and/or Projects **Credits: (1-3)**
- ANTH 4890 INT - Internship in Anthropology **Credits: (1-3)**
- ANTH 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ANTH 4950 - Advanced Anthropological Field Trip **Credits: (1-3)**
- ANTH 4990 - Seminar in Anthropology **Credits: (1-3)**

Note:

** Course may not be used to fulfill both elective and four-field fundamental course requirements.*

Anthropology, Archaeology Track (BS)

Anthropology

- **Program Prerequisite:** Not required.
- **Minor:** Required
- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the major (a grade of "C-" is not acceptable) and an overall GPA of 2.00.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation, of which 40 must be upper division credit hours (courses numbered 3000 and above). A minimum of 39 Anthropology credit hours is required within the Anthropology General Track. A minimum of 42 Anthropology credit hours is required within the Anthropology Archaeology Track.
- **Program Code:** 7018BA or 7018BS, with ARCH or ANTH cohort based on track choice.
- **CIPC:** Anthropology General Track (450201), Anthropology Archaeology Track (450201)

Transfer students who are majoring in Anthropology can transfer up to 18 hours from an acceptable Anthropology program. Only 9 of the transferred hours can be lower division.

Advisement

All Anthropology majors, minors, and BIS students should meet with a faculty advisor at least once a year. Undeclared students and those with general questions need to contact the current coordinator of Anthropology via the Sociology & Anthropology department office phone: (801) 626-6241.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for the major or minor. New freshmen and transfer students admitted to WSU in good standing qualify for admission to this major.

Core and General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. The following courses may be used to fulfill both general education and program requirements: ANTH SS/CC 1000, ANTH LS/SUS 1020, ANTH HU/CC 1040, ANTH SS/CC 2010, and ANTH SS/CC 2030. (See university policy on any limitations).

Program Learning Outcomes

Students will understand and/or be able to apply:

- the four-field approach of anthropology;
- anthropological theory and methods;
- critical thinking and communication skills;
- human cultural and biological diversity across time and space.

Major Course Requirements

Required Program Courses (15 credit hours)

- ANTH 1000 SS/CC - Introduction to Anthropology **Credits: (3)**
- ANTH 4200 - Anthropological Theory **Credits: (3)**
- ANTH 4300 CRE - Anthropological Research Methods **Credits: (3)**
- ANTH 4900 CRE - Senior Capstone Seminar **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)** *or equivalent as approved by the program coordinator*

Note:

In addition, students must select one of the following two tracks to pursue.

Archaeology Track

Core Courses (21 credit hours)

- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3)**
- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3)**
- ANTH 3100 - North American Archaeology **Credits: (3)**
- ANTH 3300 - Archaeological Field Techniques **Credits: (3-6)** (must complete 6 credit hours)
- ANTH 3400 CRE - Archaeological Laboratory Techniques **Credits: (3)**
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management **Credits: (3)**

Electives (must complete a minimum of 6 hours)

Must select two of the following.

- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)** and
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- ANTH 3200 - Archaeology of Early Civilizations **Credits: (3)**
- ANTH 3250 - Human Osteology **Credits: (3)**
- ANTH 4150 - Technical Skills in Anthropology **Credits: (3)**
- ANTH 4890 INT - Internship in Anthropology **Credits: (1-3)** (Must register for 3 credit hours)

Recommended

- ANTH 2990 - Special Topics in Anthropology **Credits: (1-3)**
- ANTH 4990 - Seminar in Anthropology **Credits: (1-3)**
- ANTH 3600 - Culture Area Studies **Credits: (1-3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)** (Prerequisite: ENGL 2010)
- GEO 3150 - Geomorphology **Credits: (4)**

Note:

Strongly recommended additional skills for all majors: foreign language & computer skills.

Suggested Course Sequence

Sociology (BS)

Sociology BS & Sociology Teaching BS

- **Program Prerequisite:** Not required for the Sociology major. Sociology Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).
- **Minor:** Required
- **Grade Requirements:** A minimum grade of "C" in courses counted toward the major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation, of which 40 must be upper division credit hours (courses numbered 3000 and above). A minimum of 36 Sociology credit hours are required for the major.
- **Program Code:** Sociology (7020BS), Sociology Teaching (7021BS)
- **CIPC:** Sociology (451101), Sociology Teaching (131317)

Transfer students who are majoring in Sociology can transfer up to 18 hours from an acceptable Sociology program. Only 9 of the transferred hours can be lower division.

Sociology Teaching Majors are also required to take SOC 3420, HIST 4500, and COMM 1020 in addition to the courses required by the Teacher Education Program.

Advisement

Sociology majors are assigned to a faculty advisor and are encouraged to meet with that advisor annually for course and program advisement. Call 801-626-6241 for additional information. Teaching majors are encouraged to also consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269).

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for the Sociology major. Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education). (Also refer to the Department Advisor Referral List.)

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following course will fulfill General Education, Diversity and program requirements: SOC 1010.

Program Learning Outcomes

- Conduct research and analyze data

- Communicate skillfully
- Identify and explain the terms, concepts, and theories of the discipline of sociology
- Practice critical thinking
- Apply historical, cultural, and global perspectives to the interaction of groups and societies
- Prepare a foundation for careers, graduate studies, and informed participation in a complex society

Major Course Requirements for BS Degree

Required Program Courses (15 credit hours)

- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)**
- SOC 3500 - Sociological Theories **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)**
- SOC 3660 - Sociological Research **Credits: (3)**
- SOC 4900 CRE - Senior Capstone Course **Credits: (3)** or
- SOC 4930 INT - Community Engaged Capstone **Credits: (3)**

Sociology Electives (21 credit hours, 9 credits can be lower division)

- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- SOC 2370 - Gender and Society **Credits: (3)**
- SOC 2400 SS/CC - Introduction to Ethnic Studies **Credits: (3)**
- SOC 2600 - Families in Society **Credits: (3)**
- SOC 2810 - Experimental Course **Credits: (1-6)**
- SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- SOC 3000 - Self and Society **Credits: (3)**
- SOC 3010 - Social Inequality **Credits: (3)**
- SOC 3250 - Deviance and Social Control **Credits: (3)**
- SOC 3270 - Criminology **Credits: (3)**
- SOC 3300 SUS - Environment and Society **Credits: (3)**
- SOC 3400 - Social Change **Credits: (3)**
- SOC 3410 - Sociology of Religion **Credits: (3)**
- SOC 3420 - Sociology of Education **Credits: (3)**
- SOC 3430 - Medicine and Healthcare in Society **Credits: (3)**
- SOC 3840 - Cities and Urban Life **Credits: (3)**
- SOC 3850 - Race & Ethnicity **Credits: (3)**
- SOC 4050 - Sociology of Work and Organizations **Credits: (3)**
- SOC 4220 - Life in a Consumer Society **Credits: (3)**
- SOC 4270 - Law and Society **Credits: (3)**
- SOC 4410 SUS - Sociology of Globalization **Credits: (3)**
- SOC 4810 - Experimental Course **Credits: (1-6)**
- SOC 4830 INT - Readings and/or Projects **Credits: (1-3)**
- SOC 4890 INT - Internship **Credits: (1-6)**
- SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- SOC 4990 - Seminar in Sociology **Credits: (3)**

Sociology Teaching (BS)

Sociology BS & Sociology Teaching BS

- **Program Prerequisite:** Not required for the Sociology major. Sociology Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).
- **Minor:** Required
- **Grade Requirements:** A minimum grade of "C" in courses counted toward the major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation, of which 40 must be upper division credit hours (courses numbered 3000 and above). A minimum of 36 Sociology credit hours are required for the major.
- **Program Code:** Sociology (7020BS), Sociology Teaching (7021BS)
- **CIPC:** Sociology (451101), Sociology Teaching (131317)

Transfer students who are majoring in Sociology can transfer up to 18 hours from an acceptable Sociology program. Only 9 of the transferred hours can be lower division.

Sociology Teaching Majors are also required to take SOC 3420, HIST 4500, and COMM 1020 in addition to the courses required by the Teacher Education Program.

Advisement

Sociology majors are assigned to a faculty advisor and are encouraged to meet with that advisor annually for course and program advisement. Call 801-626-6241 for additional information. Teaching majors are encouraged to also consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269).

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for the Sociology major. Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education). (Also refer to the Department Advisor Referral List.)

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following course will fulfill General Education, Diversity and program requirements: SOC 1010.

Program Learning Outcomes

- Conduct research and analyze data
- Communicate skillfully
- Identify and explain the terms, concepts, and theories of the discipline of sociology
- Practice critical thinking
- Apply historical, cultural, and global perspectives to the interaction of groups and societies
- Prepare a foundation for careers, graduate studies, and informed participation in a complex society

Major Course Requirements for BS Degree

Required Program Courses (15 credit hours)

- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)**
- SOC 3500 - Sociological Theories **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)**
- SOC 3660 - Sociological Research **Credits: (3)**
- SOC 4900 CRE - Senior Capstone Course **Credits: (3)** or
- SOC 4930 INT - Community Engaged Capstone **Credits: (3)**

Sociology Electives (21 credit hours, 9 credits can be lower division)

- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- SOC 2370 - Gender and Society **Credits: (3)**
- SOC 2400 SS/CC - Introduction to Ethnic Studies **Credits: (3)**
- SOC 2600 - Families in Society **Credits: (3)**
- SOC 2810 - Experimental Course **Credits: (1-6)**
- SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- SOC 3000 - Self and Society **Credits: (3)**
- SOC 3010 - Social Inequality **Credits: (3)**
- SOC 3250 - Deviance and Social Control **Credits: (3)**
- SOC 3270 - Criminology **Credits: (3)**
- SOC 3300 SUS - Environment and Society **Credits: (3)**
- SOC 3400 - Social Change **Credits: (3)**
- SOC 3410 - Sociology of Religion **Credits: (3)**
- SOC 3420 - Sociology of Education **Credits: (3)**
- SOC 3430 - Medicine and Healthcare in Society **Credits: (3)**
- SOC 3840 - Cities and Urban Life **Credits: (3)**
- SOC 3850 - Race & Ethnicity **Credits: (3)**
- SOC 4050 - Sociology of Work and Organizations **Credits: (3)**
- SOC 4220 - Life in a Consumer Society **Credits: (3)**
- SOC 4270 - Law and Society **Credits: (3)**
- SOC 4410 SUS - Sociology of Globalization **Credits: (3)**
- SOC 4810 - Experimental Course **Credits: (1-6)**
- SOC 4830 INT - Readings and/or Projects **Credits: (1-3)**
- SOC 4890 INT - Internship **Credits: (1-6)**
- SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- SOC 4990 - Seminar in Sociology **Credits: (3)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Anthropology (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the minor (a grade of "C-" is not acceptable) and an overall GPA of 2.00.
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** 7018
- **CIPC:** 450201

Transferring students with an Anthropology Minor can transfer 9 hours of credit from an acceptable Anthropology program.

Advisement

All Anthropology majors, minors, and BIS students should meet with a faculty advisor at least once a year. Undeclared students and those with general questions need to contact the current coordinator of Anthropology via the Sociology & Anthropology department office phone: (801) 626-6241.

Course Requirements

Required Program Courses (6 credit hours)

- ANTH 1000 SS/CC - Introduction to Anthropology **Credits: (3)**
- ANTH 4200 - Anthropological Theory **Credits: (3)**

Four-Field Fundamentals Courses (6 credit hours)

Select two from the following

- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3)**
- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)**
- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3)**

Electives (6 credit hours)

Select a minimum of 6 additional credit hours from the following

- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3) ***
- ANTH 1040 HU/CC - Language and Culture **Credits: (3) ***
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3) ***
- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3) ***
- ANTH 2220 - Introduction to Forensic Anthropology **Credits: (3)**
- ANTH 2810 - Experimental Course **Credits: (1-6)**
- ANTH 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ANTH 2950 - Elementary Anthropological Field Trip **Credits: (1-3)**
- ANTH 2990 - Special Topics in Anthropology **Credits: (1-3)**
- ANTH 3100 - North American Archaeology **Credits: (3)**
- ANTH 3200 - Archaeology of Early Civilizations **Credits: (3)**
- ANTH 3250 - Human Osteology **Credits: (3)**
- ANTH 3300 - Archaeological Field Techniques **Credits: (3-6)**
- ANTH 3400 CRE - Archaeological Laboratory Techniques **Credits: (3)**

- ANTH 3500 - Advanced Cultural Anthropology **Credits: (3)**
- ANTH 3600 - Culture Area Studies **Credits: (1-3)**
- ANTH 3900 - Anthropology of Religion **Credits: (3)**
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management **Credits: (3)**
- ANTH 4150 - Technical Skills in Anthropology **Credits: (3)**
- ANTH 4220 - Introduction to Forensic Anthropology **Credits: (3)**
- ANTH 4300 CRE - Anthropological Research Methods **Credits: (3)**
- ANTH 4810 - Experimental Course **Credits: (1-6)**
- ANTH 4830 INT - Readings and/or Projects **Credits: (1-3)**
- ANTH 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ANTH 4990 - Seminar in Anthropology **Credits: (1-3)**

Note:

**Course may not be used to fulfill both elective and four-field fundamental course requirements.*

Strongly recommended skills for minors: foreign language, computer, and statistics.

Sociology (BIS)

Sociology

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor programs are still accepting students.

- **Grade Requirements:** A minimum grade of "C" in courses counted toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** Sociology (7020), Sociology Teaching (7021)
- **CIPC:** Sociology (451101), Sociology Teaching (131317)

Transferring students with a Sociology Minor can transfer 9 hours of credit from an acceptable Sociology program.

Students who select the Sociology Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Sociology Teaching Minors are also required to take SOC 3420 and HIST 4500 in addition to the courses required by the Teacher Education Program.

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for Minor

Sociology Courses Required (9 credit hours)

- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)** or
- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- SOC 3500 - Sociological Theories **Credits: (3)**
- SOC 3660 - Sociological Research **Credits: (3)**

Sociology Electives (9 credit hours, only three credit hours can be lower division)

- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- SOC 2370 - Gender and Society **Credits: (3)**
- SOC 2400 SS/CC - Introduction to Ethnic Studies **Credits: (3)**
- SOC 2600 - Families in Society **Credits: (3)**
- SOC 2810 - Experimental Course **Credits: (1-6)**
- SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- SOC 3000 - Self and Society **Credits: (3)**
- SOC 3010 - Social Inequality **Credits: (3)**
- SOC 3250 - Deviance and Social Control **Credits: (3)**
- SOC 3270 - Criminology **Credits: (3)**
- SOC 3300 SUS - Environment and Society **Credits: (3)**
- SOC 3400 - Social Change **Credits: (3)**
- SOC 3410 - Sociology of Religion **Credits: (3)**
- SOC 3420 - Sociology of Education **Credits: (3)**
- SOC 3430 - Medicine and Healthcare in Society **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)**
- SOC 3840 - Cities and Urban Life **Credits: (3)**
- SOC 3850 - Race & Ethnicity **Credits: (3)**
- SOC 4050 - Sociology of Work and Organizations **Credits: (3)**
- SOC 4220 - Life in a Consumer Society **Credits: (3)**
- SOC 4270 - Law and Society **Credits: (3)**
- SOC 4410 SUS - Sociology of Globalization **Credits: (3)**
- SOC 4810 - Experimental Course **Credits: (1-6)**
- SOC 4830 INT - Readings and/or Projects **Credits: (1-3)**
- SOC 4890 INT - Internship **Credits: (1-6)**
- SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- SOC 4990 - Seminar in Sociology **Credits: (3)**

Minor

Anthropology Minor

- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the minor (a grade of "C-" is not acceptable) and an overall GPA of 2.00.

- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** 7018
- **CIPC:** 450201

Transferring students with an Anthropology Minor can transfer 9 hours of credit from an acceptable Anthropology program.

Advisement

All Anthropology majors, minors, and BIS students should meet with a faculty advisor at least once a year. Undeclared students and those with general questions need to contact the current coordinator of Anthropology via the Sociology & Anthropology department office phone: (801) 626-6241.

Course Requirements

Required Program Courses (6 credit hours)

- ANTH 1000 SS/CC - Introduction to Anthropology **Credits: (3)**
- ANTH 4200 - Anthropological Theory **Credits: (3)**
OR
- ANTH 4300 CRE - Anthropological Research Methods **Credits: (3)**

Four-Field Fundamentals Courses (6 credit hours)

Select two from the following

- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3)**
- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)**
- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3)**

Electives (6 credit hours)

Select a minimum of 6 additional credit hours from the following

- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3) ***
- ANTH 1040 HU/CC - Language and Culture **Credits: (3) ***
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3) ***
- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3) ***
- ANTH 2220 - Introduction to Forensic Anthropology **Credits: (3)**
- ANTH 2810 - Experimental Course **Credits: (1-6)**
- ANTH 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ANTH 2950 - Elementary Anthropological Field Trip **Credits: (1-3)**
- ANTH 2990 - Special Topics in Anthropology **Credits: (1-3)**
- ANTH 3100 - North American Archaeology **Credits: (3)**
- ANTH 3200 - Archaeology of Early Civilizations **Credits: (3)**
- ANTH 3250 - Human Osteology **Credits: (3)**
- ANTH 3300 - Archaeological Field Techniques **Credits: (3-6)**

- ANTH 3400 CRE - Archaeological Laboratory Techniques **Credits: (3)**
- ANTH 3500 - Advanced Cultural Anthropology **Credits: (3)**
- ANTH 3600 - Culture Area Studies **Credits: (1-3)**
- ANTH 3900 - Anthropology of Religion **Credits: (3)**
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management **Credits: (3)**
- ANTH 4150 - Technical Skills in Anthropology **Credits: (3)**
- ANTH 4220 - Introduction to Forensic Anthropology **Credits: (3)**
- ANTH 4300 CRE - Anthropological Research Methods **Credits: (3)**
- ANTH 4810 - Experimental Course **Credits: (1-6)**
- ANTH 4830 INT - Readings and/or Projects **Credits: (1-3)**
- ANTH 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ANTH 4950 - Advanced Anthropological Field Trip **Credits: (1-3)**
- ANTH 4990 - Seminar in Anthropology **Credits: (1-3)**

Note:

**Course may not be used to fulfill both elective and four-field fundamental course requirements.*

Strongly recommended skills for minors: foreign language, computer, and statistics.

Ethnic Studies Minor/BIS

This program has been suspended pending formal discontinuance and is no longer accepting new students.

Ethnic Studies considers the experiences of people of color in the United States, especially focusing on power relations and conflict between dominant and marginalized groups. Primary focus is on people of African, Asian, Latino, and Native American descent. An element of American identity that cuts across disciplinary categories, the study of ethnicity draws on the humanities, the social sciences, and other related fields. Researchers also consider the topic historically and comparatively, paying attention to the five centuries of North American minority experience and the perspectives of other New World societies and cultures. Above all, the program seeks to convey knowledge and understanding of racial difference and disparity in the United States, helping students learn about the opportunities and responsibilities they have as citizens in an increasingly multicultural nation.

- **Program Prerequisite:** None
- **Grade Requirements:** A grade of "C" or better is required for all courses in Ethnic Studies.
- **Credit Hour Requirements:** A minimum of 18 credit hours.
- **Program Code:** 7062
- **CIPC:** 050200

Advisement

All Ethnic Studies minors students should meet with a faculty advisor at least once a year. Undeclared students and those with general questions need to contact the current coordinator. Reach out to Pepper Glass at pepperglass@weber.edu.

Program Learning Outcomes

- Compare and contrast the history and experiences of ethnic and immigrant groups in the United States, especially people of African, Asian, Latino, and Native American descent.

- Identify and explain the interdisciplinary terms, concepts, and theories involved in Ethnic Studies.
- Practice critical thinking, especially by applying critical frameworks to understanding racial divisions and inequality.

Minor Course Requirements

Required Courses (6 credit hours)

- SOC 2400 SS/CC - Introduction to Ethnic Studies **Credits: (3)**
- SOC 3850 - Race & Ethnicity **Credits: (3)**

Elective Courses (12 credit hours)

- ANTH 3100 - North American Archaeology **Credits: (3)**
- ARTH 3015 - Latinx Visual Art and Culture **Credits: (4)**
- CJ 4710 - Race, Crime, and Justice **Credits: (3)**
- FAM 4300 - Latino Child and Family Development **Credits: (3)**
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**
- HIST 1600 AI/CC - The Black Experience **Credits: (3)**
- HIST 1610 AI - The Latinx Experience **Credits: (3)**
- HIST 3010 - History of Indigenous America **Credits: (3)**
- HIST 3030 - African-American History **Credits: (3)**
- HIST 3050 - History of U.S. Latinos **Credits: (3)**
- PSY 3100 - Psychology of Diversity **Credits: (3)**
- SW 2200 SS/CC - Issues in Diversity **Credits: (3)**
- SW 3320 - Ethnicity and Older Women in the American Society **Credits: (3)**

Sociology Minor

Sociology

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor programs are still accepting students.

- **Grade Requirements:** A minimum grade of "C" in courses counted toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** Sociology (7020), Sociology Teaching (7021)
- **CIPC:** Sociology (451101), Sociology Teaching (131317)

Transferring students with a Sociology Minor can transfer 9 hours of credit from an acceptable Sociology program.

Students who select the Sociology Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Sociology Teaching Minors are also required to take SOC 3420 and HIST 4500 in addition to the courses required by the Teacher Education Program.

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for Minor

Sociology Courses Required (9 credit hours)

- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)** or
- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- SOC 3500 - Sociological Theories **Credits: (3)**
- SOC 3660 - Sociological Research **Credits: (3)**

Sociology Electives (9 credit hours, only three credit hours can be lower division)

- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- SOC 2370 - Gender and Society **Credits: (3)**
- SOC 2400 SS/CC - Introduction to Ethnic Studies **Credits: (3)**
- SOC 2600 - Families in Society **Credits: (3)**
- SOC 2810 - Experimental Course **Credits: (1-6)**
- SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- SOC 3000 - Self and Society **Credits: (3)**
- SOC 3010 - Social Inequality **Credits: (3)**
- SOC 3250 - Deviance and Social Control **Credits: (3)**
- SOC 3270 - Criminology **Credits: (3)**
- SOC 3300 SUS - Environment and Society **Credits: (3)**
- SOC 3400 - Social Change **Credits: (3)**
- SOC 3410 - Sociology of Religion **Credits: (3)**
- SOC 3420 - Sociology of Education **Credits: (3)**
- SOC 3430 - Medicine and Healthcare in Society **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)**
- SOC 3840 - Cities and Urban Life **Credits: (3)**
- SOC 3850 - Race & Ethnicity **Credits: (3)**
- SOC 4050 - Sociology of Work and Organizations **Credits: (3)**
- SOC 4220 - Life in a Consumer Society **Credits: (3)**
- SOC 4270 - Law and Society **Credits: (3)**
- SOC 4410 SUS - Sociology of Globalization **Credits: (3)**
- SOC 4810 - Experimental Course **Credits: (1-6)**
- SOC 4830 INT - Readings and/or Projects **Credits: (1-3)**
- SOC 4890 INT - Internship **Credits: (1-6)**

- SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- SOC 4990 - Seminar in Sociology **Credits: (3)**

Teaching Minor

Sociology Teaching Minor

Sociology

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor programs are still accepting students.

- **Grade Requirements:** A minimum grade of "C" in courses counted toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** Sociology (7020), Sociology Teaching (7021)
- **CIPC:** Sociology (451101), Sociology Teaching (131317)

Transferring students with a Sociology Minor can transfer 9 hours of credit from an acceptable Sociology program.

Students who select the Sociology Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Sociology Teaching Minors are also required to take SOC 3420 and HIST 4500 in addition to the courses required by the Teacher Education Program.

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for Minor

Sociology Courses Required (9 credit hours)

- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)** or
- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- SOC 3500 - Sociological Theories **Credits: (3)**
- SOC 3660 - Sociological Research **Credits: (3)**

Sociology Electives (9 credit hours, only three credit hours can be lower division)

- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- SOC 2370 - Gender and Society **Credits: (3)**
- SOC 2400 SS/CC - Introduction to Ethnic Studies **Credits: (3)**
- SOC 2600 - Families in Society **Credits: (3)**
- SOC 2810 - Experimental Course **Credits: (1-6)**
- SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- SOC 3000 - Self and Society **Credits: (3)**
- SOC 3010 - Social Inequality **Credits: (3)**
- SOC 3250 - Deviance and Social Control **Credits: (3)**
- SOC 3270 - Criminology **Credits: (3)**
- SOC 3300 SUS - Environment and Society **Credits: (3)**
- SOC 3400 - Social Change **Credits: (3)**
- SOC 3410 - Sociology of Religion **Credits: (3)**
- SOC 3420 - Sociology of Education **Credits: (3)**
- SOC 3430 - Medicine and Healthcare in Society **Credits: (3)**
- SOC 3600 - Social Statistics **Credits: (3)**
- SOC 3840 - Cities and Urban Life **Credits: (3)**
- SOC 3850 - Race & Ethnicity **Credits: (3)**
- SOC 4050 - Sociology of Work and Organizations **Credits: (3)**
- SOC 4220 - Life in a Consumer Society **Credits: (3)**
- SOC 4270 - Law and Society **Credits: (3)**
- SOC 4410 SUS - Sociology of Globalization **Credits: (3)**
- SOC 4810 - Experimental Course **Credits: (1-6)**
- SOC 4830 INT - Readings and/or Projects **Credits: (1-3)**
- SOC 4890 INT - Internship **Credits: (1-6)**
- SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- SOC 4990 - Seminar in Sociology **Credits: (3)**

Department of Teacher Education

Department Chair: DeeDee Mower

Location: McKay Education Building, Room 234

Telephone Contact: Lisa Karle 801-626-7171

Advisement Contacts: Angie Collinwood 801-626-6309; Brogan Stampick 801-626-6636

Professors: Melina Alexander, Vincent Bates, David Byrd, Kristin Hadley, Louise Moulding, Pene'e Stewart, Shernavaz Vakil, Natalie Allen Williams; **Associate Professors:** Shirley Dawson, DeeDee Mower, Daniel Pyle, Clay Rasmussen, Sheryl Rushton; **Assistant Professors:** Jadelyn Abbott, Ryan Cain, Sara Gailey, Dustin Grote, Megan Hamilton, Andrea Martinez, Katarina Pantic, Stephanie Speicher

The major purpose of the professional education programs in teacher education is to prepare candidates for teaching in elementary and secondary schools. Preparation is also provided for teachers of students with mild to moderate disabilities with the special education mild/moderate license. The department prepares students for endorsements in Mathematics, ESL (English as a Second Language), Dual Language Immersion, Basic Reading (graduate level only), and Education of the Gifted (graduate level only). All programs are accredited through the Teacher Education Accreditation Council (TEAC).

The preparation for teaching falls academically within four major categories: University General Education, support courses, subject specialization, and professional education.

1. University General Education requirements -- In selecting courses to satisfy the general education requirements, candidates should note the general education courses recommended and/or required in their major and/or professional education requirement sheets available in the Teacher Education Advisement Center (ED 230).
2. Support courses
3. Specializations are required of all elementary candidates. Elementary education majors have two track options; K-6 and 1-8. The K-6 track requires one 9 credit specialization and a 9 credit early childhood specialization while the 1-8 track requires a 18 credit specialization or a teaching minor. The professional education program outlines acceptable subject specialization areas and requirements. Special Education majors choose one 9-hour specialization or a teaching minor. Secondary candidates completing a teaching major may be required to complete a teaching minor (refer to the teaching major program requirements). The teaching major and teaching minor must be in subjects taught in Utah public secondary schools.
4. Professional Education courses help the prospective teacher learn about children, the nature of the learning process, and how to provide desirable learning experiences. To meet licensure requirements, secondary school candidates are required to complete a minimum of 24 semester hours of professional course work; 55 semester hours are required of the prospective elementary school teacher.

Professional course work in the program is organized into sequential levels. As students move through the program, they are required to demonstrate in a variety of ways the knowledge, skills and dispositions that embody the department's organizing theme and program model.

It is important that interested students contact the Teacher Education Advisement Center (ED 230) as quickly as they decide to become a teacher. Specific program admission requirements, required courses, and recommended general education course work are available.

Admission to Teacher Education

Admission to the Teacher Education Programs is a separate process from general university admission. The Teacher Education programs maintain a competitive admissions process. **Applicants are provisionally admitted each semester after submitting their application materials and meeting the minimum admission criteria listed below.** Students are admitted two times per year: fall semester and spring semester. Applicants are evaluated by cumulative GPA and admission interview score.

Minimum Admission Requirements

1. Formal Application submitted online by the deadline date.
2. At least 40 semester hours of general education and relevant prerequisite courses.

Those intending to teach Special Education or teach at the elementary level, please note:

*The Professional Education component of the Special Education major and the Elementary Education major requires **four semesters** to complete. Therefore, it is **very important** that candidates have completed the General Education requirements and have taken most of the required Support Courses prior to entering the program. Because of possible scheduling difficulties, failure to do so could mean spending an extra semester (or more) in completing the program.*

Those intending to teach at the secondary level, please note:

*The Professional Education component of the Secondary Education program requires **two semesters** to complete. Therefore, it is **very important** that candidates have completed the General Education requirements and most of the teaching major and minor requirements prior to entering the program. Because of possible scheduling difficulties, failure to do so could mean spending an extra semester (or more) in completing the program.*

3. **Passing the appropriate Praxis II Content test or passing the ACT with the composite score of 21 with a verbal/English score no less than 20 and a mathematics/quantitative score of no less than 19 is required for all programs.** The Utah State Office of Education specifies the passing

score for each test. **Students will not be considered for admission if they do not meet the state specified passing score on the Praxis II or ACT.**

4. Sign up for an interview in the Advisement Center when you turn in application materials (the schedule will be available approximately one (1) month prior to the interview dates).
 5. Composition general education requirement completed (grade "C" or above in ENGL 2010 EN2, or equivalent).
 - Quantitative Literacy requirement completed (see General Requirements in this catalog).
Note: MATH 2010, MATH 2015, MATH 2020 are required of all Elementary, Special Education, and Early Childhood Education majors.
 - Quantitative Literacy requirements for all *Elementary, Special Education, and Early Childhood Education majors* is fulfilled after completing MATH 2020 which follows MATH 2015 which follows MATH 2010 .
 - There are many prerequisite options to enter MATH 2010 though the most popular methods include earning a C or better MATH 0970 , MATH 1030 , ACT Math score of 23 or better, or ALEKS math score of 46 or higher.
 - Any *Elementary, Special Education, and Early Childhood Education major* pursuing the Middle School Mathematics Teaching minor is encouraged to take MATH 1050 and MATH 1060 or MATH 1080 as soon as possible as part of the requirements for that minor.
3. Communication competency completed (grade "B-" or above in COMM 1020 or COMM 2110 or equivalent).
 4. University Computer and Information Literacy competency completed (see General Requirements in this catalog).
 5. EDUC 1010 Exploring Teaching or approved equivalent course completed.
 6. Teacher Education also recognizes specific program and diversity needs of professional education and reserves the right to consider such factors in the admission of candidates.
 7. For teacher education applicants who are English language learners, an additional requirement of 6.5 on each of the four sections of the International English Language Testing System (IELTS) test is required for admission.

Additional Notes

- a. **Fingerprinting/background check must be completed immediately after being admitted.** Go to the following link for more information: <https://weber.edu/fingerprinting>
- b. Students are provisionally admitted to a specific teacher education program: (1) early childhood education; (2) elementary education; (3) special education; (4) secondary education.
- c. Provisional admission to a specific program is valid for a period of five years. If a student has not completed the program within the five-year period or desires to pursue a different program, he/she must seek readmission under the current admission standards and complete current course/program requirements. Changes in state licensure requirements may necessitate more immediate program changes.
- d. Professional education credits older than five years at the time of program admission generally will not be counted. However, students may revalidate outdated course work by following procedures available in the Teacher Education Advisement Center, ED 230.
- e. A Graduate Certificate in Teaching is also available through the Master of Education program.
- f. Applicants who hold Bachelor's degrees older than five years and who have not had more recent relevant course work or work experiences related to their major and minor must take at least two courses in their major and one course in their minor as designated by the academic department.
- g. Applicants with an earned graduate degree seeking initial licensure must satisfactorily complete requirements 1, 2, 4, and 5. They are then placed in the pool with others seeking provisional admission.
- h. Data are collected on students admitted to the Teacher Education program for the purposes of national accreditation and program improvement. No personal information is used in this process.

Early Childhood Education Major

The Departments of Child and Family Studies and Teacher Education offer a major in Early Childhood Education with licensure for teaching in programs which serve children from birth through eight years of age (Pre-K through 3rd grade). Requirements are listed under the Department of Child and Family Studies. See Room ED 248 for additional information.

Elementary Education Major

Students preparing to teach in elementary schools graduate with a major in Elementary Education. The elementary education major has a K-6 track and a 1-8 track.

The Teacher Education Advisement Center and faculty advisors from the Department of Teacher Education are available to advise prospective teachers. A program requirement sheet is available from the Teacher Education Advisement Center in Room 230 in the McKay Education Building. It is to the student's advantage to begin program planning early.

Interdisciplinary Minors

The Teacher Education Department participates in the interdisciplinary Linguistics Minor Program. Students who wish to enroll in this program should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Associate of Science

Education (AS)

The Associate of Science degree (AS) in Education is a two-year program designed to prepare students for the elementary or special education bachelors programs. Students completing this program will develop skills and get the hands-on experience necessary to be accepted into the professional courses offered at the university level. Course work will satisfy the General Education requirements for the first two years of a bachelor's degree in elementary or special education. Specific requirements for the bachelor's degrees in elementary education and special education can be found at Department of Teacher Education.

- **Credit Hour Requirements:** A total of 60 credit hours are required for graduation; 24 or these are required Education-related and support courses and 36 are required general education courses.
- **Program Code:** 5025AS
- **CIPC:** 130101

Advisement

All students should meet with an advisor in the Teacher Education Advisement Center and from the Department of Teacher Education. Call 801-626-6309 for more information or to schedule an appointment. See <https://www.weber.edu/teachered/advisor.html>

General Education

Refer to Degree Requirements for Associate of Science requirements. The following courses required for the AS in Education will also fulfill general education requirements: CHF SS/CC 1500, COMM HU 1020 or COMM HU CEL

2110, GEOG SS/SUS/CC 1300 or GEOG SS/CC/SUS 1520, MATH QL 2020. It is recommended that students fulfill the Computer and Information Literacy Part D requirement with LIBS 2604/EDUC 2604.

Major Course Requirements for AS Degree

Required Education-related Courses (30-31 credit hours)

- EDUC 1010 CEL - Exploring Teaching **Credits: (3)**
- EDUC 2010 CEL - Human Exceptionality and Assistive Technology **Credits: (3)**
- CHF 1500 SS/CC - Human Development **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3) OR**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- ENGL 3300 - Children's Literature **Credits: (3)**
- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3) OR**
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**
- MATH 2010 - Arithmetic for Elementary Teachers **Credits: (3) grade of C or above**
- MATH 2015 - Algebra for Elementary Teachers **Credits: (3) grade of C or above**
- MATH 2020 QL - Geometry for Elementary Teachers **Credits: (3) grade of C or above**

AND one of the following:

- ART 1030 CA - Studio Art for the Non-Art Major **Credits: (3)** Can not double count as Gen Ed
- DANC 3640 INT - Elementary Dance Pedagogy **Credits: (3)**
- EDUC 3430 - Creative Processes in the Elementary School **Credits: (3)**
- MUSC 3824 - Music for Elementary Teachers **Credits: (3)**
- THEA 4603 - Creative Drama **Credits: (3)**

Required Support Courses (15 credit hours)

Select 6 credit hours from the following, *with at least 3 from Creative Arts (don't duplicate departments):*

Humanities

- ENGL 2200 HU/CC - Introduction to Literature **Credits: (3)**
- ENGL 2220 HU/CC - Introduction to Fiction **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- MUSC 1043 HU - Music, the Arts & Civilizations **Credits: (3)**

Creative Arts

- ART 1010 CA - Introduction to the Visual Arts **Credits: (3)**
- ART 1030 CA - Studio Art for the Non-Art Major **Credits: (3)**
- DANC 1010 CA/CC - Introduction to Dance **Credits: (3)**
- MUSC 1040 CA - Music of World Cultures **Credits: (3)**
- THEA 1033 CA - Introduction to Acting **Credits: (3)**

Select 3 credit hours from the following to satisfy the science with a lab requirement (may not duplicate departments):

- GEO 1350 PS - Principles of Earth Science **Credits: (3) OR**
- CHEM 1360 PS - Principles of Physical Science **Credits: (3)** or PHYS PS 1360 **OR**
- BTNY 1370 LS - Principles of Life Science **Credits: (3)** or MICR LS 1370 or ZOOL LS 1370

Select 6 additional credit hours from the General Education Physical Science and Life Science requirements.

Required Track-Specific Support Courses (6 credit hours)

Elementary and Special Education: 6 credit hours towards an area of specialization.

Institutional Certificate

Paraeducator Certificate of Proficiency

The Paraeducator Certification Program is a one-year program designed for those seeking employment as a paraeducator, improving their skills as an experienced paraeducator, or earning stackable degrees towards a teaching license and bachelor degree. Students are able to earn the Paraeducator Certificate as a standalone achievement or part of a continuous career plan designed to connect to a teaching career and bachelor's degree. High school students may begin taking some courses in the Career Pathway for Education. Others can begin taking courses at any time. The courses in the Paraeducator Certificate can apply to an associate degree. Eventually students are able to apply some courses in the Paraeducator Certificate Program to a bachelor's degree and a Utah Teaching License in Elementary, Secondary, or Special Education.

- **Grade Requirements:** A grade of "C" or better in all courses used for this certificate.
- **Credit Hour Requirements:** A total of 18 credit hours is required.
- **Program Code:** 5062CP
- **CIP Code:** 131501

Advisement

Students in the Paraeducator Certification Program should meet with the program advisor for course and program advisement. Call Kristin Radulovich at 801-626-6309 for more information or to schedule an appointment.

Required Courses

- EDUC 1010 CEL - Exploring Teaching **Credits: (3)**
- EDUC 2010 CEL - Human Exceptionality and Assistive Technology **Credits: (3)**
- EDUC 2800 - Instruction, Technology, Assessment, and Planning **Credits: (3)**
- EDUC 2820 - Creating a Learning Environment **Credits: (3)**
- CHF 1500 SS/CC - Human Development **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**

Bachelor of Science

Elementary and Special Education (BS)

- **Program Prerequisite:** Provisional admission to a Teacher Education Program (see the admission requirements described under Teacher Education).
- **Minor/Specialization:** One or two subject area specializations (total of 18 credit hours) or a teaching minor must be selected and an approved teaching minor must be completed.
- **Grade Requirements:** Elementary Education majors must maintain a cumulative GPA of 3.00 or higher in all college/university courses. Each professional education course to continue in the program. Majors must also achieve at least a "C" grade in MATH 2010, MATH 2020, and MATH 2030.
- **Credit Hour Requirements:** A minimum of 123 credit hours is required for graduation; The following are required within the program: Program Courses: 42; Minor or Specialization Courses: 18; Elementary and Special Education Courses: 63.
- **Program Code:** 5068BS
- **CIPC:** 131202

Admission Requirements

Declare a program of study (see Program of Study (Major/Minor) Declaration). Follow the provisional admission requirements outlined in the Teacher Education department.

Advisement

All Elementary and Special Education majors should meet with an advisor in the Teacher Education Advisement Center and from the Department of Teacher Education at 801-626-7694 for more information or to schedule an appointment.

For Elementary and Special Education majors, there are III areas of course work that are required: I. General Education and Pre-Professional Education Courses; II. Professional Education Courses; and III. Specialization Courses. Details for each of these required areas follow.

Program Learning Outcomes

- Claim/Outcome 1: Graduates meet the needs of diverse learners by creating a safe and equitable learning environment;
- Claim/Outcome 2: Graduates use effective instructional practices based on deep and flexible knowledge of content and pedagogy;
- Claim/Outcome 3: Graduates engage in reflective practice, exhibit ethical behavior, and fulfill professional responsibilities.

General Education

I. University and General Education Requirements

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for the Elementary Education major are: COMM 1020 or COMM 2110, GEOG 1300 OR GEOG 1520, MATH 2020 and CHF 1500. Meeting the general education science requirements. Following the suggested guidelines below will assure that both University general education and elementary education science requirements are met.

Major Course Requirements for BS Degree resulting in a Elementary K-8 and Special Education K-12 License

II. Support Courses Required (or equivalent) (24 credit hours)

- CHF 1500 SS/CC - Human Development **Credits: (3)**

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- EDUC 1010 CEL - Exploring Teaching **Credits: (3)**
- EDUC 2010 CEL - Human Exceptionality and Assistive Technology **Credits: (3)**
- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)** or
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**
- MATH 2010 - Arithmetic for Elementary Teachers **Credits: (3)** *Grade of C or above required*
- MATH 2015 - Algebra for Elementary Teachers **Credits: (3)** *Grade of C or above required*
- MATH 2020 QL - Geometry for Elementary Teachers **Credits: (3)** *Grade of C or above required*

At least one course from the following

- ART 1030 CA - Studio Art for the Non-Art Major **Credits: (3)**
- MUSC 3824 - Music for Elementary Teachers **Credits: (3)**
- EDUC 3430 - Creative Processes in the Elementary School **Credits: (3)**
- DANC 3640 INT - Elementary Dance Pedagogy **Credits: (3)**
- THEA 4603 - Creative Drama **Credits: (3)**

III. Required Area of Specialization (18 credit hours)

One or two subject area specializations (total of 18 credit hours) or a teaching minor must be selected. To teach up to 8th grade, an approved teaching specialization/minor must be completed. For further information concerning the courses involved in the areas of specialization, see the Teacher Advisement Center.

The Professional Education component of the Elementary and Special Education major requires four semesters to complete. Therefore, it is very important that candidates have completed the General Education requirements and have taken at least some of the required Support Courses prior to entering the program. Because of possible scheduling difficulties, failure to do so could mean spending an extra semester (or more) in completing the program.

IV. Professional Education Courses Required (63 credit hours)

Admission to teacher education is required prior to enrollment in Professional Education courses. Cohort codes required for these courses. During the first and second semesters students need to take a practicum course, and during the third and fourth semesters students are required to take a 3 credit hour student teaching course.

Level A (17)

- EDUC 3120 - Reading Instruction in the Primary Grades **Credits: (3)**
- EDUC 3545 - Universal Positive Behavior Support Strategies for Teachers **Credits: (2)**
- EDUC 3205 - Culturally and Linguistically Responsive Teaching **Credits: (3)**
- EDUC 3270 - Addressing Differentiation, Collaboration and IEPs for Inclusive Teaching **Credits: (3)**
- EDUC 3575 - Special Education Math Methods for students on IEPs **Credits: (2)**
- EDUC 3130 - Curriculum, Instructional Planning, and Assessment **Credits: (3)**
- EDUC 3860 - Practicum In Special Education **Credits: (1-3)**

Level B (17)

- EDUC 3240 - Reading Instruction in the Intermediate Grades **Credits: (3)**
- EDUC 3145 - Educational Psychology and Child and Adolescent Development **Credits: (3)**

- EDUC 4345 - Elementary Integrated Arts Methods **Credits: (3)**
- EDUC 3230 - Media and Data Science for Elementary Settings **Credits: (3)**
- EDUC 3280 - Elementary Social Studies Methods **Credits: (3)**
- EDUC 3210 INT - Practicum in Elementary Education **Credits: (2)**

Level C (15)

- EDUC 4530 - Principles of Assessment and IEP Development **Credits: (3)**
- EDUC 4330 - Elementary Science Methods **Credits: (3)**
- EDUC 4320 - Elementary Language Arts Methods **Credits: (3)**
- EDUC 4300 - Elementary Mathematics Methods **Credits: (3)**
- EDUC 4840A INT - Student Teaching in Elementary Education **Credits: (3-8)**

Level D (15)

- PEP 3620 - Methods of Teaching Physical Education and Health for Elementary Teachers **Credits: (3)**
- EDUC 4545 - Individualized Behavioral Strategies Using Applied Behavior Analysis **Credits: (3)**
- EDUC 3565 - Elementary English Language Arts: Evaluation, Remediation and Supports **Credits: (2)**
- EDUC 4515 - Special Education Law and Transition **Credits: (3)**
- EDUC 4680A INT - Special Education Student Teaching **Credits: (3-8)**

Elementary Education (BS)

This program has been suspended pending formal discontinuance and is no longer accepting new students. Elementary and Special Education (BS) will be one major moving forward and is accepting new students.

- **Program Prerequisite:** Provisional admission to a Teacher Education Program (see the admission requirements described under the Department of Teacher Education).
- **Minor/Specialization:** One or two subject area specializations (total of 18 credit hours) or a teaching minor must be selected. To teach up to 8th grade, an approved teaching minor must be completed.
- **Grade Requirements:** Elementary Education majors must maintain a cumulative GPA of 3.00 or higher in all college/university work and at least a "B-" grade in each professional education course to continue in the program. Elementary Education majors must also achieve at least a "C" grade in MATH 2010, MATH 2015 and MATH 2020.
- **Credit Hour Requirements:** A minimum of 120 credit hours is required for graduation; a minimum of 46 of these is required within the Elementary Education major. A total of 40 upper division credit hours is required (courses number 3000 and above).
- **Program Code:** 5005BS
- **CIPC:** 131202

Admission Requirements

Declare a program of study (see Program of Study (Major/Minor) Declaration). Follow the provisional admission requirements outlined under the Teacher Education department.

Advisement

All Elementary Education majors should meet with an advisor in the Teacher Education Advisement Center and from the Department of Teacher Education. Call 801-626-7694 for more information or to schedule an appointment.

For Elementary Education majors, there are 4 areas of course work that are required: I. University and General Education Requirements; II. Support Courses; III. Subject Area Specialization; and IV. Professional Education Courses. Details for each of these required areas follow.

Program Learning Outcomes

- Claim/Outcome 1: Graduates meet the needs of diverse learners by creating a safe and equitable learning environment;
- Claim/Outcome 2: Graduates use effective instructional practices based on deep and flexible knowledge of content and pedagogy; and
- Claim/Outcome 3: Graduates engage in reflective practice, exhibit ethical behavior, and fulfill professional responsibilities.

General Education

I. University and General Education Requirements

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for the Elementary Education major will also satisfy general education requirements: COMM 1020 or COMM 2110, GEOG SS/SUS/CC 1300 OR GEOG SS/CC/SUS 1520, MATH QL 2020 and CHF 1500. Meeting the general education science requirements may not meet elementary education science requirements. Following the suggested guidelines below will assure that both University general education and Elementary Education requirements are met.

Students pursuing a BS degree must take 9 credit hours, at least one (1) course from a life science group and at least one (1) course from a physical science group. One of the courses must be PS1350 (Principles of Earth Science), PS1360 (Principles of Physical Science), or LS1370 (Principles of Life Science), or at least one science lab course.

Major Course Requirements for BS Degree resulting in a K-8 License

II. Support Courses Required (or equivalent) (27-29 credit hours)

- CHF 1500 SS/CC - Human Development **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- EDUC 1010 CEL - Exploring Teaching **Credits: (3)**
- EDUC 2010 CEL - Human Exceptionality and Assistive Technology **Credits: (3)**
- ENGL 3300 - Children's Literature **Credits: (3)**
- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)** OR
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**
- MATH 2010 - Arithmetic for Elementary Teachers **Credits: (3)** *Grade of C or above required*
- MATH 2015 - Algebra for Elementary Teachers **Credits: (3)** *Grade of C or above required*
- MATH 2020 QL - Geometry for Elementary Teachers **Credits: (3)** *Grade of C or above required*

At least one course from the following

- ART 1030 CA - Studio Art for the Non-Art Major **Credits: (3)**
- MUSC 3824 - Music for Elementary Teachers **Credits: (3)**

- EDUC 3430 - Creative Processes in the Elementary School **Credits: (3)**
- DANC 3640 INT - Elementary Dance Pedagogy **Credits: (3)**
- THEA 4603 - Creative Drama **Credits: (3)**

III. Required Area of Specialization (18 credit hours)

One or two subject area specializations (total of 18 credit hours) or a teaching minor must be selected. To teach up to 8th grade, an approved teaching minor must be completed. For further information concerning the courses involved in the areas of specialization, see the Teacher Advisement Center, ED230.

The Professional Education component of the Elementary Education major requires four semesters to complete. Therefore, it is very important that candidates have completed the General Education requirements and have taken at least some of the required Support Courses prior to entering the program. Because of possible scheduling difficulties, failure to do so could mean spending an extra semester (or more) in completing the program.

IV. Professional Education Courses Required (56 credit hours)

Admission to teacher education is required prior to enrollment in Professional Education courses.

Level 1 (12 credit hours)

Note: Cohort codes required for these courses (ECE, ELEM, or DUAL). Program codes required for these courses: Early Childhood Education (5002BS), Elementary Education (5005BS), or both.

- EDUC 3120 - Reading Instruction in the Primary Grades **Credits: (3)**
- EDUC 3145 - Educational Psychology and Child and Adolescent Development **Credits: (3)**
- EDUC 3205 - Culturally and Linguistically Responsive Teaching **Credits: (3)**
- EDUC 3270 - Addressing Differentiation, Collaboration and IEPs for Inclusive Teaching **Credits: (3)**

Level 2 (14 credit hours)

Note: K-6 majors take an area of specialization course (3) and 1-8 majors take an a minor/endorsement course (3). Cohort codes required for these courses (ECE, ELEM, or DUAL). Program codes required for these courses: Early Childhood Education (5002BS), Elementary Education (5005BS), or both.

- EDUC 3130 - Curriculum, Instructional Planning, and Assessment **Credits: (3)**
- EDUC 3210 INT - Practicum in Elementary Education **Credits: (2)**
- EDUC 3230 - Media and Data Science for Elementary Settings **Credits: (3)**
- EDUC 3240 - Reading Instruction in the Intermediate Grades **Credits: (3)**
- EDUC 4345 - Elementary Integrated Arts Methods **Credits: (3)**

Level 3 (18 credit hours)

Cohort codes required for these courses (ECE, ELEM, or DUAL). Program codes required for these courses: Early Childhood Education (5002BS), Elementary Education (5005BS), or both.

- EDUC 3280 - Elementary Social Studies Methods **Credits: (3)**
- EDUC 4210 INT - Elementary Level III Practicum **Credits: (3)**
- EDUC 4320 - Elementary Language Arts Methods **Credits: (3)**
- EDUC 4330 - Elementary Science Methods **Credits: (3)**

- PEP 3620 - Methods of Teaching Physical Education and Health for Elementary Teachers **Credits: (3)**
- EDUC 4300 - Elementary Mathematics Methods **Credits: (3)**

Level 4 (12 credit hours)

Cohort codes required for these courses (ECE, ELEM, or DUAL). Program codes required for these courses: Early Childhood Education (5002BS), Elementary Education (5005BS), or both.

- EDUC 4840A INT - Student Teaching in Elementary Education **Credits: (3-8)**
- EDUC 4850 - Integrated Elementary Education Student Teaching Seminar and Synthesis **Credits: (4)**

Special Education (BS)

This program has been suspended pending formal discontinuance and is no longer accepting new students. Elementary and Special Education (BS) will be one major moving forward and is accepting new students.

- **Program Prerequisite:** Provisional admission to a Teacher Education Program (see the admission requirements described under the Teacher Education Department).
- **Specialization:** Required (9 or more credit hours). Students may choose any academic teaching minor (refer to department listings for specific requirements). Or, choose a specialization area (see below).
- **Grade Requirements:** A "B-" or higher is required for any upper division EDUC or MED course, in addition, Special Education majors must maintain a cumulative GPA of 3.00 or higher in all college/university work.
- **Credit Hour Requirements:** A minimum of 120 credit hours is required for graduation. The following are required within the program: Support Courses 21; Specialization 9; Professional Education 12; Special Education 44. A total of 40 upper division credit hours is required (courses number 3000 and above).
- **Program Code:** 5007BS
- **CIPC:** 131001

Admission Requirements

Declare a program of study (see Student Access and Success, Services and Information). Follow the provisional admission requirements outlined under the Teacher Education department. Also refer to the Department Advisor Referral List.)

Advisement

All Special Education majors should meet with an advisor in the Teacher Education Advisement Center and with an assigned advisor from the Special Education faculty. Call 801-626-7694 for more information or to schedule an appointment.

For Special Education majors, there are 4 areas of course work that are required: I. University and General Education Requirements; II. Support Courses; III. Area of Specialization; and, IV. Professional Courses. Details for each of these required areas follow.

Program Learning Outcomes

- Claim/Outcome 1: Graduates meet the needs of diverse learners by creating a safe and equitable learning environment;

- Claim/Outcome 2: Graduates use effective instructional practices based on deep and flexible knowledge of content and pedagogy; and
- Claim/Outcome 3: Graduates engage in reflective practice, exhibit ethical behavior, and fulfill professional responsibilities.

General Education

I. University and General Education Requirements

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for the Special Education major will also satisfy general education requirements: COMM 1020 or COMM 2110, MATH QL 2020, and CHF SS/CC 1500.

Students pursuing a BS degree must take 9 credit hours, at least one (1) course from a life science group and at least one (1) course from a physical science group. One of the courses must be GEO PS 1350 (Principles of Earth Science), CHEM 1360 PS/PHYS PS 1360 (Principles of Physical Science), or BTNY LS 1370 /MICR LS 1370/ZOOL LS 1370 (Principles of Life Science), or at least one science lab course.

Major Course Requirements for BS Degree

II. Support Courses Required (or equivalent) (21 credits)

- EDUC 1010 CEL - Exploring Teaching **Credits: (3)**
- EDUC 2010 CEL - Human Exceptionality and Assistive Technology **Credits: (3)**
- CHF 1500 SS/CC - Human Development **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- MATH 2010 - Arithmetic for Elementary Teachers **Credits: (3)** *Grade of C or above required*
- MATH 2015 - Algebra for Elementary Teachers **Credits: (3)** *Grade of C or above required*
- MATH 2020 QL - Geometry for Elementary Teachers **Credits: (3)** *Grade of C or above required*

And at least 6 credit hours from the following

- ENGL 3300 - Children's Literature **Credits: (3)**
- EDUC 3390 - Literacy in the Primary Grades **Credits: (2)**
- EDUC 3430 - Creative Processes in the Elementary School **Credits: (3)**
- EDUC 4250 - Second Language Acquisition: Theories and Implementation **Credits: (3)**
- EDUC 4270 - Literacy Strategies for Teaching English Language Learners **Credits: (3)**
- CHF 2400 SS/CC - Family Relations **Credits: (3)**
- ECED 2500 - Development of the Child **Credits: (3)**
- ECED 3640 - Collaborating with Families of Young Children **Credits: (3)**
- PSY 3000 - Child Psychology **Credits: (3)**
- PSY 3140 - Adolescent Psychology **Credits: (3)**
- PEP 3660 - Adapted Physical Education **Credits: (3)**

III. Area of Specialization options (9 credits)

In addition, complete a 9-hour specialization in one of the areas listed below. For further information concerning the courses involved in the areas of specialization, see the Teacher Advisement Center, ED230.

1. Mathematics
2. English as a Second Language
3. Early Childhood
4. Family Studies
5. Language Arts (Secondary)
6. International Education

IV. Courses Required for the Major (55 credits)

Level 1 - Foundation Education Courses (14 credits)

- EDUC 3115 - Media Integration in Elementary Education Settings **Credits: (2)**
- EDUC 3120 - Reading Instruction in the Primary Grades **Credits: (3)**
- EDUC 3145 - Educational Psychology and Child and Adolescent Development **Credits: (3)**
- EDUC 3205 - Culturally and Linguistically Responsive Teaching **Credits: (3)**
- EDUC 3270 - Addressing Differentiation, Collaboration and IEPs for Inclusive Teaching **Credits: (3)**

Level 2 - Inclusion Methods (15 credits)

- EDUC 3371 - Assistive Technology **Credits: (1)**
- EDUC 3545 - Universal Positive Behavior Support Strategies for Teachers **Credits: (2)**
- EDUC 3585 - Working with Students with ELA or Math Disabilities in Inclusion Settings **Credits: (3)**
- EDUC 4521 - Practicum in Special Education A **Credits: (3)**
- EDUC 4535 - Strategic Plan for Disability **Credits: (3)**
- EDUC 4580 - Instructional and Transition Planning for Special Education Students **Credits: (3)**

Level 3 - Special Education Methods (16 credits)

- EDUC 3590 - Working with Students with ELA or Math Disabilities in Resource Settings **Credits: (3)**
- EDUC 4515 - Special Education Law and Transition **Credits: (3)**
- EDUC 4530 - Principles of Assessment and IEP Development **Credits: (3)**
- EDUC 4545 - Individualized Behavioral Strategies Using Applied Behavior Analysis **Credits: (3)**
- EDUC 4582 INT - Practicum in Special Education B **Credits: (3)**

Student Teaching in Special Education (12 credits)

- EDUC 4680A INT - Special Education Student Teaching **Credits: (3-8)**
- EDUC 4686 - Special Education Student Teaching Seminar & Synthesis for Special Education Majors **Credits: (4)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Education - Non-Teaching (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Code: 5025**
- **CIPC: 130101**

The Bachelor of Integrated Studies (BIS) is designed to meet the needs of students who have clear educational goals that they would like to meet through an individualized university program. The 18-credit education emphasis is for those who have prior coursework or special interest in teaching and learning. Specific courses are determined through advisement. This program does not lead to educator licensure.

Minor

ESL (English as a Second Language) Minor

ESL (English as a Second Language) Minor/Endorsement

This program will meet the requirements for the English as a Second Language (ESL) Endorsement to be added to the Early Childhood, Elementary, or Secondary Education licensure.

These courses taken at the graduate level may also be used as electives for the MEd degree. See the Department of Teacher Education or the Master of Education Office for more details.

- **Grade Requirements:** A GPA of 3.00 or better in courses used toward the minor in addition to an overall GPA of 3.00 or higher.
- **Credit Hour Requirements:** 17 credit hours required.
- **Program Code: Minor 5009**
- **CIPC: 131401**

Students must satisfy the Teacher Education admission and licensure requirements.

Course Requirements for Minor/Endorsement

Required Courses (18 credit hours)

- EDUC 4250 - Second Language Acquisition: Theories and Implementation **Credits: (3)** (MED 6250)
- EDUC 4270 - Literacy Strategies for Teaching English Language Learners **Credits: (3)** (MED 6270)
- EDUC 4740 - Building School Partnerships with ESL/Bilingual Families **Credits: (1)**
- EDUC 5770 INT - Field Experience in ESL/Bilingual Education **Credits: (2)** **
- ENGL 4410 - Strategies and Methodology of Teaching ESL/Bilingual **Credits: (3)** * (MENG 6410)
- ENGL 4420 - English Phonology and Syntax for ESL/Bilingual Teachers **Credits: (3)** (MENG 6420)
- ENGL 4450 - ESL/Bilingual Assessment: Theory, Methods, and Practices **Credits: (3)** (MENG 6450)

Note:

* WLC 4400, *Methods of Teaching a Foreign Language*, may be substituted for ENGL 4410.

** EDUC 5770 needs to be completed with Student Teaching.

Endorsement programs are also offered through the graduate program as electives.

Endorsement

Dual Language Immersion Endorsement

This program will meet the requirements for the Dual Language Immersion Endorsement to be added to the Elementary or Secondary Education licensure. Students must also demonstrate language proficiency at the Advanced Mid or higher Level, as determined by the Foreign Language Department.

These courses taken at the graduate level may also be used as electives for the MED degree. See the Department of Teacher Education or the Master of Education Office for more details.

Course Requirements for Endorsement

Required Courses (15 credit hours)

Graduate students should contact the MED director for approved substitutions.

- EDUC 3375 - Foundations of Dual Immersion or Immersion Education **Credits: (3)** (MED 6375)
- EDUC 4415 - Content-Based Second Language Curriculum, Instruction and Assessment **Credits: (3)** (MED 6415)
- EDUC 4270 - Literacy Strategies for Teaching English Language Learners **Credits: (3)** (MED 6270)
- EDUC 4740 - Building School Partnerships with ESL/Bilingual Families **Credits: (1)**
- WLC 4400 - Methods for Teaching Languages **Credits: (5)**
- EDUC 5770 INT - Field Experience in ESL/Bilingual Education **Credits: (2)** *

Note:

** EDUC 5770 needs to be completed with Student Teaching.*

Endorsement programs are also offered through the graduate program as electives.

Note:

It is recommended that candidates for the Dual Language Immersion Endorsement also complete the ESL Endorsement with the following courses:

- EDUC 4250 - Second Language Acquisition: Theories and Implementation **Credits: (3)** (MED 6250)
- ENGL 4420 - English Phonology and Syntax for ESL/Bilingual Teachers **Credits: (3)** (MENG 6420)
- ENGL 4450 - ESL/Bilingual Assessment: Theory, Methods, and Practices **Credits: (3)** (MENG 6450)

ESL (English as a Second Language) Endorsement

ESL (English as a Second Language) Minor/Endorsement

This program will meet the requirements for the English as a Second Language (ESL) Endorsement to be added to the Early Childhood, Elementary, or Secondary Education licensure.

These courses taken at the graduate level may also be used as electives for the MEd degree. See the Department of Teacher Education or the Master of Education Office for more details.

- **Grade Requirements:** A GPA of 3.00 or better in courses used toward the minor in addition to an overall GPA of 3.00 or higher.
- **Credit Hour Requirements:** 17 credit hours required.
- **Program Code: Minor** 5009
- **CIPC:** 131401

Students must satisfy the Teacher Education admission and licensure requirements.

Course Requirements for Minor/Endorsement

Required Courses (18 credit hours)

- EDUC 4250 - Second Language Acquisition: Theories and Implementation **Credits: (3)** (MED 6250)
- EDUC 4270 - Literacy Strategies for Teaching English Language Learners **Credits: (3)** (MED 6270)
- EDUC 4740 - Building School Partnerships with ESL/Bilingual Families **Credits: (1)**
- EDUC 5770 INT - Field Experience in ESL/Bilingual Education **Credits: (2)** **
- ENGL 4410 - Strategies and Methodology of Teaching ESL/Bilingual **Credits: (3)** * (MENG 6410)
- ENGL 4420 - English Phonology and Syntax for ESL/Bilingual Teachers **Credits: (3)** (MENG 6420)
- ENGL 4450 - ESL/Bilingual Assessment: Theory, Methods, and Practices **Credits: (3)** (MENG 6450)

Note:

** WLC 4400, Methods of Teaching a Foreign Language, may be substituted for ENGL 4410.*

*** EDUC 5770 needs to be completed with Student Teaching.*

Endorsement programs are also offered through the graduate program as electives.

Licensure

Secondary Education Licensure

- **Program Prerequisite:** Provisional admission to a Teacher Education Program (see the admission requirements described under the Teacher Education Department). Select an academic teaching major and teaching minor or composite teaching major and teaching minor that WSU offers. In many departments the teaching major and minor are different from the departmental major and minor.
- **Minor:** A teaching minor is recommended and may be required with most teaching majors (please consult your content major advisor). A teaching minor is generally not required with a composite teaching major (refer to specific composite major program requirements).
- **Grade Requirements:** Secondary Education students must meet minimum major course grade requirements and maintain a cumulative GPA of 3.00 or higher in all college work and achieve at least a "B-" grade in each professional education course to continue in the program.
- **Credit Hour Requirements:** A total of 120 semester hours is required for graduation; a minimum of 24 of these is required within the Secondary Licensure program. A total of 40 upper division credit hours is required (courses number 3000 and above).

The academic teaching major and teaching minor must consist of not less than 30 and 16 semester hours respectively, or a composite major of a minimum of 46 semester hours. The teaching major and teaching minor

must be in subjects taught in Utah public secondary schools. *Either the major or minor must be a subject which Utah secondary schools are required to teach (those marked with asterisks do not satisfy this second requirement - see the list of teaching majors and minors below).*

Admission Requirements

Declare a program of study (see Enrollment Services and Information). Follow the provisional admission requirements outlined under the Teacher Education Department.

Advisement

All Secondary Education students should meet with an advisor in the Department of Teacher Education. Call 801-626-7694 for more information or to schedule an appointment. In addition, students should seek advisement from both their teaching major and their teaching minor program areas.

For Secondary Licensure candidates, there are 4 areas of course work that are required: I. University and General Education Requirements; II. Support Courses; III. Teaching Major and Teaching Minors (when required) that WSU offers; and IV. Professional Education Courses. Details for each of these required areas follow.

General Education

I. University and General Education Requirements

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. The following courses required for the Secondary Education Licensure Program will also satisfy general education requirements: COMM 1020 or COMM 2110 and CHF 1500.

Course Requirements for Licensure

II. Support Courses Required (or equivalent)

- EDUC 1010 CEL - Exploring Teaching **Credits: (3)**

One course from the following

- CHF 1500 SS/CC - Human Development **Credits: (3)** or
- PSY 3140 - Adolescent Psychology **Credits: (3)**

One course from the following

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**

III. Teaching Majors and Minors

Majors and Minors

Chemistry	Communication*
Dance	English
French	Geography
German	History
Mathematics	Physical Education
Physics	Political Science*
Psychology*	Sociology*
Spanish	Theatre Arts

** Subjects which Utah secondary schools are not required to teach*

Minors Only

Art
Biology
Business Education
Business/Marketing Education
Computer Science
Earth Science
Economics
ESL (English as a Second Language)
Health Promotion
Physical Education/Coaching Education Dual Teaching

Licensure Programs

Special Education (Mild/Moderate)

Composite Majors

In lieu of the major and minor, a candidate may elect a composite teaching major which consists of a minimum of forty-six (46) hours of subjects in closely related fields.

Art (<i>minor required</i>)	Biology
Business Education	Earth Science
Music Education	Physical Science
Social Science	

IV. Professional Education Courses Required (24 hours)

Secondary Teacher Education Core

- EDUC 3220 - Foundations of Diversity **Credits: (2)**
- EDUC 3265 - The Exceptional Student **Credits: (2)**
- EDUC 3315 - Media Integration in the Secondary School Setting **Credits: (2)**
- EDUC 3900 - Preparing, Teaching, and Assessing Instruction **Credits: (2)**
- EDUC 3910 INT - Secondary Education Practicum **Credits: (2)**
- EDUC 3935 - Reading and Writing Across the Secondary Curriculum **Credits: (2)**

Secondary Teacher Education Student Teaching

- EDUC 4940A INT - Student Teaching in Secondary Education **Credits: (8)**
- EDUC 4950 - Integrated Secondary Student Teaching Seminar **Credits: (4)**

Additional Information:

Provisional admission to teacher education is required prior to enrollment in 3000 level and above education classes.

*HIST 4500 is a **required course** for the Social & Behavioral Science Teaching Major/Teaching Minor.*

The Professional Education component of the Secondary Education program requires two semesters to complete. Therefore, it is very important that candidates have completed the General Education requirements and most of the major and minor requirements prior to entering the program. Because of possible scheduling difficulties, failure to do so could mean spending an extra semester (or more) in completing the program.

Graduate Studies in Education (MED)

- **Director:** Louise Moulding
- **Location:** Swenson Building, Room 402
- **Telephone Contact:** Ellyn Raynor, 801-626-6278
- **Website:** <https://weber.edu/med>

Areas of Emphasis

Select one of the following areas of emphasis:

- Masters of Education, Educational Technology (MEd)
- Masters of Education, Family Life Education (MEd)
- Masters of Education, Higher Education Leadership (MEd)
- Masters of Education, Sport Coaching Leadership (MEd)
- Masters of Education, Curriculum & Instruction (MEd)
- Masters of Education, Educational Leadership (MEd)
- Educational Leadership Post Masters Certificate
- Masters of Education, Inclusive Early Childhood Education and Care (MEd)

Curriculum and Instruction: The Master of Education with an emphasis in Curriculum and Instruction is designed for candidates seeking more in-depth knowledge and skill for classroom instruction. In addition to foundation courses, students may select from a variety of electives including courses leading to license endorsements. Candidates will complete a classroom or school-based project as a culminating experience.

Educational Leadership: The Master of Education with an emphasis in Educational Leadership is designed for candidates seeking administrative positions in P-12 schools and is focused on the Utah Educational Leadership Standards. After completion of an intensive administrative internship, candidates will be eligible to be recommended to the Utah State Board of Education for a School Leadership license.

Educational Technology: The Master of Education with an emphasis in Educational Technology is designed for candidates seeking in-depth knowledge and skill in the use of educational technology for enhancing instruction and student engagement. Candidates will complete a project or thesis as a culminating experience.

Family Life Education: This Master of Education with an emphasis on Family Life Education is designed for candidates seeking careers in family life and community education, and those seeking a more in-depth study of the historical foundations, policies, and psychology of education and the theory, research, and structure of family life

education and family systems in general. Candidates will also integrate the best practices for theory-based program delivery, management, evaluation, and research.

Higher Education Leadership: The Master of Education with an emphasis in Higher Education Leadership is designed for candidates seeking to work in a higher education environment to gain a deep understanding of the roles, mechanisms, and policies that impact higher education. Candidates can select an intensive internship or a site-based research project as a culminating experience.

The Master of Education with an emphasis in Inclusive Early Childhood Education and Care is designed for all early childhood professionals to acquire knowledge and skills for working with diverse children, families, and communities. There is a focus on the change in systemic inequities by using emotionally responsive practices and creating learning communities in a relationship-based approach. Candidates will complete a thesis as a culminating experience.

The Master of Education with an emphasis in Sport Coaching Leadership is designed for sport coaches to acquire content knowledge, sport coaching methodologies, and enhance their individual coaching in the area of sport. Upon completion of the program, students may pursue jobs as an athletic coach, athlete development specialist, athletic director, or operations manager. Candidates will complete a project or thesis as a culminating experience.

Admission Requirements

The MEd program is selective with a limited number of openings available for qualified students. Admission deadline is March 15 for Fall semester. For additional information contact the Master of Education office, (801) 626-6278.

The following items are required:

1. Admission to Weber State University and application for the MEd Program.
2. Payment of the MEd program application fee.
3. Verification of a bachelor's degree from an accredited institution.
4. Official transcripts from all institutions attended.
5. Recommendation forms (3).
6. Minimum GPA of 3.00 either cumulative or on the last 60 semester hours (90 quarter hours) of approved undergraduate/graduate course work.
7. Writing proficiency assessment with a minimum score of 4 out of 6.
8. Interview with Graduate Studies in Education faculty members with a score of 4 out of 6.

Additional Requirements for Educational Leadership Emphasis/Graduate Certificate:

In addition to the above, those seeking admission to the Educational Leadership emphasis must also

1. Clear a USBE fingerprint background check;
2. Hold a Professional Educator License;
3. Be deemed effective or higher by: an evaluation system meeting the standards of R277-531; **or** the LEA's equivalent on the applicant's most recent evaluation;
4. Have a recommendation from: the individual's immediate administrative supervisor; or an LEA-level administrator with knowledge regarding the individual's potential as an education leader.

Additional Requirements for International Students

Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or sis@weber.edu

- TOEFL score of 223 (computer-based) or 85 (internet-based) or IELTS 6.5 or Duolingo 120.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.

- Courses evaluated into the equivalent of American credits and letter grades.
- Contact WSU International Student Services Office and submission of a WSU International Student Application **and** a Graduate Financial Guarantee form.

GPA Requirements for all GSE Students

Following admission to the Graduate Studies in Education program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all foundation classes. Coursework in which Ds, Es, or UWs are earned is unacceptable and could result in removal from the program if the problem persists.

- **Program Code:** 5056MED with Emphasis in 5057 (Curriculum and Instruction) or 5058 (Educational Leadership) or 50XX (Educational Technology) or 5059 (Family Life Education) or 5060 (Higher Education Leadership) or 50XX (Inclusive Early Childhood Education and Care) or 50XX (Sport Coaching Leadership).
- **CIPC:** 130101

Program Learning Outcomes

1. Critical Analysis -- Critically analyze key theories, issues, trends, and/or concepts affecting the education/family system. Issues, theories, and/or concerns are critically considered, clearly stated, and comprehensively described. Information is incorporated with interpretation and/or evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are thoroughly questioned and/or analyzed. Complex issues are analyzed in-depth. Limits of the analysis, perspective, and/or thesis are acknowledged.
2. Research -- Design and/or implement research or evaluation related to current issues. Specific research/evaluation question(s) and/or aims of the study are clearly stated and described in the context of previous studies relevant to education. Research/evaluation design and methods for data collection and analysis are clearly explained and analyzed for their strengths and weaknesses in relation to the research question. Results/outcomes/products are clearly and accurately discussed in the context of the research/evaluation question, and limits of the study's findings are identified and discussed in relation to the question and methods.
3. Writing -- Model professional-level writing skills in academic and non-academic settings. The written work includes an introduction and conclusion that clearly state and explain the thesis, position, or purpose of the work. Information is organized in a logical and easy to understand format that makes effective use of transitional statements between ideas. The writing is mostly free of errors relative to effectively communicating ideas. The tone and style of writing is appropriate to a professional/academic and/or non-academic audience.
4. Evaluation -- Create and/or defend an evidence-based argument regarding effective models within education contexts. Evaluation of arguments contains thorough and insightful explanation, reviews logic/reason, examines feasibility of solution(s), and weighs impacts of solution(s). Proposes one or more solutions/hypotheses that indicates a deep comprehension of the problem/issue. Solution/hypotheses are sensitive to contextual factors as well as ethical, logical, and cultural dimensions of the problem/issue. Studies/reports used are appropriate to the topic and are from current and professional sources.

Post Master's Certificate

Educational Leadership Post Masters Certificate

Educational Leadership Graduate Certificate: The Educational Leadership Graduate Certificate is designed for candidates who hold a master's degree in education or related field seeking administrative positions in P-12 schools and is focused on the Utah Educational Leadership Standards. After completion of an intensive administrative internship, candidates will be eligible to be recommended to the Utah State Board of Education for an administrative/supervisory license.

- **Program Code:** 5058PMC
- **CIPC:** 130401

Admission Requirements

The Graduate Studies in Education program is selective with a limited number of openings available for qualified students. Admission deadline is March 15 for Fall semester. For additional information contact the Graduate Studies in Education office, (801) 626-6278.

The following items are required:

1. Admission to Weber State University and application for the GSE Program.
2. Payment of the GSE program application fee.
3. Verification of a bachelor's degree from an accredited institution.
4. Official transcripts from all institutions attended.
5. Recommendation forms (3).
6. Minimum GPA of 3.00 either cumulative or on the last 60 semester hours (90 quarter hours) of approved undergraduate/graduate coursework.
7. Interview with Graduate Studies in Education faculty members with a score of 4 out of 6.

Additional Requirements for Educational Leadership Emphasis:

In addition to the above, those seeking admission to the Educational Leadership emphasis must also

1. Clear a USOE fingerprint background check;
2. Hold a Professional Educator License;
3. Be deemed effective or higher by:
an evaluation system meeting the standards of R277-531; or
the LEA's equivalent on the applicant's most recent evaluation;

Have a recommendation from:

- the individual's immediate administrative supervisor; or
- an LEA-level administrator with knowledge regarding the individual's potential as an education leader.

GPA Requirements for all MEd Students

Following admission to the MEd program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all foundation classes. Coursework in which Ds, Es, or UWs are earned is unacceptable and could result in removal from the program if the problem persists.

Professional Core (27)

- GSE 6100 - Educational Leadership and Management **Credits: (3)**
- GSE 6101 - Assessment and Data-Driven Decision Making **Credits: (3)**
- GSE 6102 - Education Finance and Resource Management **Credits: (3)**
- GSE 6210 - Education Law and Policy **Credits: (3)**
- GSE 6600 - Ethical and Collaborative Leadership **Credits: (3)**
- GSE 6601 - Community Engagement and Advocacy **Credits: (3)**
- GSE 6602 - Curriculum and Instructional Leadership **Credits: (3)**
- GSE 6603 - School Improvement through Strategic Student Support **Credits: (3)**

- GSE 6604 - Educational Leader Internship **Credits: (3)**

Master of Education

Masters of Education (MEd)

- **Program Code:** 5056MED with an emphasis in 5057 (Curriculum and Instruction), 5058 (Educational Leadership), 5063 (Educational Technology), 5059 (Family Life Education), 5060 (Higher Education Leadership), 5064 (Inclusive Early Childhood Education and Care) or 5065 (Sport Coaching Leadership).
- **CIPC:** 131202 with 130301 (Curriculum and Instruction), 130401 (Educational Leadership), 130501 (Educational Technology), 190701 (Family Life Education), 130406 (Higher Education Leadership), 131210 (Inclusive Early Childhood Education and Care) or 310504 (Sport Coaching Leadership).

Areas of Emphasis

Select one of the following areas of emphasis

- Masters of Education, Curriculum & Instruction (MEd)
- Masters of Education, Educational Leadership (MEd)
- Masters of Education, Educational Technology (MEd)
- Masters of Education, Family Life Education (MEd)
- Masters of Education, Higher Education Leadership (MEd)
- Masters of Education, Inclusive Early Childhood Education and Care (MEd)
- Masters of Education, Sport Coaching Leadership (MEd)

Curriculum and Instruction: The Master of Education with an emphasis in Curriculum and Instruction is designed for candidates seeking more in-depth knowledge and skill for classroom instruction. In addition to foundation courses, students may select from a variety of electives including courses leading to license endorsements. Candidates will complete a classroom or school-based project as a culminating experience.

Educational Leadership: The Master of Education with an emphasis in Educational Leadership is designed for candidates seeking administrative positions in P-12 schools and is focused on the Utah Educational Leadership Standards. After completion of an intensive administrative internship, candidates will be eligible to be recommended to the Utah State Board of Education for a School Leadership license.

Educational Technology: The Master of Education with an emphasis in Educational Technology is designed for candidates seeking in-depth knowledge and skill in the use of educational technology for enhancing instruction and student engagement. Candidates will complete a project or thesis as a culminating experience.

Family Life Education: This Master of Education with an emphasis on Family Life Education is designed for candidates seeking careers in family life and community education, and those seeking a more in-depth study of the historical foundations, policies, and psychology of education and the theory, research, and structure of family life education and family systems in general. Candidates will also integrate the best practices for theory-based program delivery, management, evaluation, and research.

Higher Education Leadership: The Master of Education with an emphasis in Higher Education Leadership is designed for candidates seeking to work in a higher education environment to gain a deep understanding of the roles, mechanisms, and policies that impact higher education. Candidates can select an intensive internship or a site-based research project as a culminating experience.

Inclusive Early Childhood Education and Care: The Master of Education with an emphasis in Inclusive Early Childhood Education and Care is designed for all early childhood professionals to acquire knowledge and skills for

working with diverse children, families, and communities. There is a focus on the change in systemic inequities by using emotionally responsive practices and creating learning communities in a relationship-based approach. Candidates will complete a thesis as a culminating experience.

Sport Coaching Leadership: The Master of Education with an emphasis in Sport Coaching Leadership is designed for sport coaches to acquire content knowledge, sport coaching methodologies, and enhance their individual coaching in the area of sport. Upon completion of the program, students may pursue jobs as an athletic coach, athlete development specialist, athletic director, or operations manager.

Admission Requirements

The MEd program is selective with a limited number of openings available for qualified students. Admission deadlines is March 15 for Fall semester. For additional information contact the Master of Education office, (801) 626-6278.

The following items are required:

1. Admission to Weber State University and application for the MEd Program.
2. Payment of the MEd program application fee.
3. Verification of a bachelor's degree from an accredited institution.
4. Official transcripts from all institutions attended.
5. Recommendation forms (3).
6. Minimum GPA of 3.00 either cumulative or on the last 60 semester hours (90 quarter hours) of approved undergraduate/graduate course work.
7. Writing proficiency assessment with a minimum score of 4 out of 6.
8. Interview with Graduate Studies in Education faculty members with a score of 4 out of 6.

Additional Requirements for Educational Leadership Emphasis

In addition to the above, those seeking admission to the Educational Leadership emphasis must also

1. Clear a USBE fingerprint background check;
2. Hold a Professional Educator License;
3. Be deemed effective or higher by:
an evaluation system meeting the standards of R277-531; **or**
the LEA's equivalent on the applicant's most recent evaluation;
4. Have a recommendation from:
the individual's immediate administrative supervisor; or
an LEA-level administrator with knowledge regarding the individual's potential as an education leader.

Additional Requirements for International Students

- Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or sis@weber.edu
- TOEFL score of 223 (computer-based) or 85 (internet-based) or IELTS 6.5 or Duolingo 120.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.
- Courses evaluated into the equivalent of American credits and letter grades.
- Contact WSU International Student Services Office and submission of a WSU International Student Application **and** a Graduate Financial Guarantee form.

GPA Requirements for all MEd Students

Following admission to the Graduate Studies in Education program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all foundation classes. Coursework in which Ds, Es, or UWs are earned is unacceptable and could result in removal from the program if the problem persists.

Program Learning Outcomes

1. **Critical Analysis** - Critically analyze key theories, issues, trends, and/or concepts affecting the education/family system. Issues, theories, and/or concerns are critically considered, clearly stated, and comprehensively described. Information is incorporated with interpretation and/or evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are thoroughly questioned and/or analyzed. Complex issues are analyzed in-depth. Limits of the analysis, perspective, and/or thesis are acknowledged.
2. **Research** - Design and/or implement research or evaluation related to current issues. Specific research/evaluation question(s) and/or aims of the study are clearly stated and described in the context of previous studies relevant to education. Research/evaluation design and methods for data collection and analysis are clearly explained and analyzed for their strengths and weaknesses in relation to the research question. Results/outcomes/products are clearly and accurately discussed in the context of the research/evaluation question, and limits of the study's findings are identified and discussed in relation to the question and methods.
3. **Writing** - Model professional-level writing skills in academic and non-academic settings. The written work includes an introduction and conclusion that clearly state and explain the thesis, position, or purpose of the work. Information is organized in a logical and easy to understand format that makes effective use of transitional statements between ideas. The writing is mostly free of errors relative to effectively communicating ideas. The tone and style of writing is appropriate to a professional/academic and/or non-academic audience.
4. **Evaluation** - Create and/or defend an evidence-based argument regarding effective models within education contexts. Evaluation of arguments contains thorough and insightful explanation, reviews logic/reason, examines feasibility of solution(s), and weighs impacts of solution(s). Proposes one or more solutions/hypotheses that indicates a deep comprehension of the problem/issue. Solution/hypotheses are sensitive to contextual factors as well as ethical, logical, and cultural dimensions of the problem/issue. Studies/reports used are appropriate to the topic and are from current and professional sources.

Masters of Education, Curriculum & Instruction (MED)

- **Program Code:** 5056MED with Emphasis in 5057 (Curriculum & Instruction)
- **CIPC:** 131202 with 130301 (Curriculum & Instruction)

Admission Requirements

Curriculum and Instruction: The Master of Education with an emphasis in Curriculum and Instruction is designed for candidates seeking more in-depth knowledge and skill for classroom instruction. In addition to foundation courses, students may select from a variety of electives including courses leading to license endorsements. Candidates will complete a classroom or school-based project as a culminating experience. The following items are required:

1. Admission to Weber State University and application for the GSE Program.
2. Payment of the GSE program application fee.
3. Verification of a bachelor's degree from an accredited institution.
4. Official transcripts from all institutions attended.

5. Recommendation forms (3).
6. Minimum GPA of 3.00 either cumulative or on the last 60 semester hours (90 quarter hours) of approved undergraduate/graduate coursework.
7. Interview with Graduate Studies in Education faculty members with a score of 4 out of 6.

Additional Requirements for International Students

- Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or sis@weber.edu
- TOEFL score of 223 (computer-based) or 85 (internet-based) or IELTS 6.5 or Duolingo 120.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.
- Courses evaluated into the equivalent of American credits and letter grades.

Contact WSU International Student Services Office and submission of a WSU International Student Application and a Graduate Financial Guarantee form.

GPA Requirements for all MEd Students

Following admission to the MEd program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all foundation classes. Coursework in which Ds, Es, or UWs are earned is unacceptable and could result in removal from the program if the problem persists.

Course Requirements

The 36 credit-hour program of study consists of 9 credit-hours foundation requirement, 12 credit-hours professional core requirement, 9 credit hours of graduate electives, and 6 credit-hours to complete a master's project/thesis.

Foundations (9)

- GSE 6000 - Fundamentals of Graduate Study **Credits: (3)**
- GSE 6020 - Creating Environments for Student Success **Credits: (3)**
- GSE 6080 - Conducting Educational Research **Credits: (3)**

Emphasis Specific Courses (12)

- GSE 6010 - History, Philosophy, and Policy in Education **Credits: (3)**
- GSE 6030 - Applied Learning Theory **Credits: (3)**
- GSE 6055 - Curriculum Theory and Development **Credits: (3)**
- GSE 6065 - Assessment and Informed Decision-Making **Credits: (3)**

Project (6)

- GSE 6910 - Project Development I **Credits: (1)**
- GSE 6920 - Project Development II **Credits: (1)**

- GSE 6930 - Project Development III **Credits: (1)**
- GSE 6970 - Master of Education Project/Thesis/Capstone **Credits: (3)**

Electives (9)

Electives must be graduate level (i.e. 6000 level credit) and may be selected from offerings in professional education, discipline areas, or specialized courses leading to endorsements.

Masters of Education, Educational Leadership (MEd)

Educational Leadership: The Master of Education with an emphasis in Educational Leadership is designed for candidates seeking administrative positions in P-12 schools and is focused on the Utah Educational Leadership Standards. After completion of an intensive administrative internship, candidates will be eligible to be recommended to the Utah State Board of Education for an administrative/supervisory license.

- **Program Code:** 5056MED with Emphasis in 5058 (Educational Leadership)
- **CIPC:** 131202 with 130401 (Educational Leadership)

Admission Requirements

The Graduate Studies in Education program is selective with a limited number of openings available for qualified students. Admission deadline is March 15 for Fall semester. For additional information contact the Graduate Studies in Education office, (801) 626-6278.

The following items are required:

1. Admission to Weber State University and application for the GSE Program.
2. Payment of the GSE program application fee.
3. Verification of a bachelor's degree from an accredited institution.
4. Official transcripts from all institutions attended.
5. Recommendation forms (3).
6. Minimum GPA of 3.00 either cumulative or on the last 60 semester hours (90 quarter hours) of approved undergraduate/graduate coursework.
7. Interview with Graduate Studies in Education faculty members with a score of 4 out of 6.

Additional Requirements for Educational Leadership Emphasis:

In addition to the above, those seeking admission to the Educational Leadership emphasis must also

1. Clear a USOE fingerprint background check;
2. Hold a Professional Educator License;
3. Be deemed effective or higher by:
an evaluation system meeting the standards of R277-531; or
the LEA's equivalent on the applicant's most recent evaluation;

Have a recommendation from:

the individual's immediate administrative supervisor; or
an LEA-level administrator with knowledge regarding the individual's potential as an education leader.

GPA Requirements for all MEd Students

Following admission to the MEd program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all foundation classes. Coursework in which Ds, Es, or UWs are earned is unacceptable and could result in removal from the program if the problem persists.

Course Requirements

The 36 credit-hour program of study consists of 9 credit-hours foundation requirement and 27 credit-hours of emphasis-specific courses including a field-based internship.

Foundations (9)

- GSE 6000 - Fundamentals of Graduate Study **Credits: (3)**
- GSE 6020 - Creating Environments for Student Success **Credits: (3)**
- GSE 6080 - Conducting Educational Research **Credits: (3)**

Emphasis Specific Courses (27)

- GSE 6100 - Educational Leadership and Management **Credits: (3)**
- GSE 6101 - Assessment and Data-Driven Decision Making **Credits: (3)**
- GSE 6102 - Education Finance and Resource Management **Credits: (3)**
- GSE 6210 - Education Law and Policy **Credits: (3)**
- GSE 6600 - Ethical and Collaborative Leadership **Credits: (3)**
- GSE 6601 - Community Engagement and Advocacy **Credits: (3)**
- GSE 6602 - Curriculum and Instructional Leadership **Credits: (3)**
- GSE 6603 - School Improvement through Strategic Student Support **Credits: (3)**
- GSE 6604 - Educational Leader Internship **Credits: (3)**

Masters of Education, Educational Technology (MEd)

Educational Technology: The Master of Education with an emphasis in Educational Technology is designed for candidates seeking in-depth knowledge and skill in the use of educational technology for enhancing instruction and student engagement. Candidates will complete a project or thesis as a culminating experience.

- **Program Code:** 5056MED with Emphasis in 5063 (Educational Technology)
- **CIPC:** 131202 with 130501 (Educational Technology)

Admission Requirements

The Graduate Studies in Education program is selective with a limited number of openings available for qualified students. Admission deadline is March 15 for Fall semester. For additional information contact the Graduate Studies in Education office, (801) 626-6278. The following items are required:

1. Admission to Weber State University and application for the GSE Program.
2. Payment of the GSE program application fee.
3. Verification of a bachelor's degree from an accredited institution.

4. Official transcripts from all institutions attended.
5. Recommendation forms (3).
6. Minimum GPA of 3.00 either cumulative or on the last 60 semester hours (90 quarter hours) of approved undergraduate/graduate coursework.
7. Interview with Graduate Studies in Education faculty members with a score of 4 out of 6.

Additional Requirements for International Students:

- Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or sis@weber.edu
- TOEFL score of 223 (computer-based) or 85 (internet-based) or IELTS 6.5 or Duolingo 120.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.
- Courses evaluated into the equivalent of American credits and letter grades.
- Contact WSU International Student Services Office and submission of a WSU International Student Application and a Graduate Financial Guarantee form.

GPA Requirements for all MEd Students

Following admission to the MEd program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all foundation classes. Coursework in which Ds, Es, or UWs are earned is unacceptable and could result in removal from the program if the problem persists.

Course Requirements

The 36 credit-hour program of study consists of 9 credit-hours foundation requirement, 15 credit-hours professional core requirement, 3 credit hours of graduate electives, and 6 credit-hours to complete a master's project/thesis.

Foundations (9)

- GSE 6000 - Fundamentals of Graduate Study **Credits: (3)**
- GSE 6020 - Creating Environments for Student Success **Credits: (3)**
- GSE 6080 - Conducting Educational Research **Credits: (3)**

Emphasis Specific Courses (15)

- GSE 6030 - Applied Learning Theory **Credits: (3)**
- GSE 6501 - Introduction to K-12 Coding **Credits: (3)**
- GSE 6502 - Advanced Educational Technology **Credits: (3)**
- GSE 6504 - Analyzing Education Data with R **Credits: (3)**
- GSE 6505 - Educative Making in K-12 Settings **Credits: (3)**

Project (6)

- GSE 6910 - Project Development I **Credits: (1)**
- GSE 6920 - Project Development II **Credits: (1)**
- GSE 6930 - Project Development III **Credits: (1)**
- GSE 6970 - Master of Education Project/Thesis/Capstone **Credits: (3)**

Electives (6)

Electives must be graduate level (i.e., 6000 level credit) and may be selected from offerings in professional education, discipline areas, or specialized courses leading to endorsements. Students need to show proof of prior experience with technology (qualifying courses as EDUC 6229, EDUC 3315, EDUC 3115-7 or a corresponding course from a qualifying institution (e.g. EDUC 5500 from USU). If prior experience is not shown, then EDUC 6229 is required.

Masters of Education, Family Life Education (MEd)

This Master of Education with an emphasis on Family Life Education is designed for candidates seeking careers in family life and community education, and those seeking a more in-depth study of the historical foundations, policies, and psychology of education and the theory, research, and structure of family life education and family systems in general. Candidates will also integrate the best practices for theory-based program delivery, management, evaluation, and research.

- **Program Code:** 5056MED with Emphasis in 5059 (Family Life Education)
- **CIPC:** 131202 with 190701 (Family Life Education)

Admission Requirements

Family Life Education: This Master of Education with an emphasis on Family Life Education is designed for candidates seeking careers in family life and community education, and those seeking a more in-depth study of the historical foundations, policies, and psychology of education and the theory, research, and structure of family life education and family systems in general. Candidates will complete a project or thesis as a culminating experience. The following items are required:

1. Admission to Weber State University and application for the GSE Program.
2. Payment of the GSE program application fee.
3. Verification of a bachelor's degree from an accredited institution.
4. Official transcripts from all institutions attended.
5. Recommendation forms (3).
6. Minimum GPA of 3.00 either cumulative or on the last 60 semester hours (90 quarter hours) of approved undergraduate/graduate coursework.
7. Interview with Graduate Studies in Education faculty members with a score of 4 out of 6.

Additional Requirements for International Students:

- Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or sis@weber.edu
- TOEFL score of 223 (computer-based) or 85 (internet-based) or IELTS 6.5 or Duolingo 120.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.
- Courses evaluated into the equivalent of American credits and letter grades.
- Contact WSU International Student Services Office and submission of a WSU International Student Application **and** a Graduate Financial Guarantee form.

GPA Requirements for all MEd Students

Following admission to the MEd program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all foundation classes. Coursework in which Ds, Es, or UWs are earned is unacceptable and could result in removal from the program if the problem persists.

Course Requirements

The 36 credit-hour program of study consists of 9 credit-hours foundation requirement, 18 credit-hours professional core requirement, and 6 credit-hours to complete a master's project/thesis.

Foundations (9)

- GSE 6000 - Fundamentals of Graduate Study **Credits: (3)**
- GSE 6020 - Creating Environments for Student Success **Credits: (3)**
- GSE 6080 - Conducting Educational Research **Credits: (3)**

Professional Core (18)

- GSE 6301 - Specialized Family and School Programs **Credits: (3)**
- GSE 6302 - Advanced Family Theories **Credits: (3)**
- GSE 6303 - Diverse Family Contexts **Credits: (3)**
- GSE 6304 - Organization and Leadership in Non-profit Family Services **Credits: (3)**
- GSE 6305 - Advanced Skills for Family Life Educators **Credits: (3)**
- GSE 6306 - Parenting Education **Credits: (3)**

Project (6)

- GSE 6910 - Project Development I **Credits: (1)**
- GSE 6920 - Project Development II **Credits: (1)**
- GSE 6930 - Project Development III **Credits: (1)**
- GSE 6970 - Master of Education Project/Thesis/Capstone **Credits: (3)**

Elective (3)

Electives must be graduate level (i.e. 6000 level credit) and may be selected from offerings in professional education, discipline areas, or specialized courses leading to endorsements.

Masters of Education, Higher Education Leadership (MEd)

The Master of Education with an emphasis in Higher Education Leadership is designed for candidates seeking to work in a higher education environment to gain a deep understanding of the roles, mechanisms, and policies that impact higher education. Candidates can select an intensive internship or a site-based research project as a culminating experience.

- **Program Code:** 5056MED with Emphasis in 5060 (Higher Education Leadership)
- **CIPC:** 131202 with 130406 (Higher Education Leadership)

Admission Requirements

The Graduate Studies in Education program is selective with a limited number of openings available for qualified students. Admission deadline is March 15 for Fall semester. For additional information contact the Graduate Studies in Education office, (801) 626-6278.

The following items are required:

1. Admission to Weber State University and application for the GSE Program.
2. Payment of the GSE program application fee.
3. Verification of a bachelor's degree from an accredited institution.
4. Official transcripts from all institutions attended.
5. Recommendation forms (3).
6. Minimum GPA of 3.00 either cumulative or on the last 60 semester hours (90 quarter hours) of approved undergraduate/graduate coursework.
7. Interview with Graduate Studies in Education faculty members with a score of 4 out of 6.

Additional Requirements for International Students:

- Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or sis@weber.edu
- TOEFL score of 223 (computer-based) or 85 (internet-based) or IELTS 6.5 or Duolingo 120.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.
- Courses evaluated into the equivalent of American credits and letter grades.
- Contact WSU International Student Services Office and submission of a WSU International Student Application **and** a Graduate Financial Guarantee form.

GPA Requirements for all MEd Students

Following admission to the MEd program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all foundation classes. Coursework in which Ds, Es, or UWs are earned is unacceptable and could result in removal from the program if the problem persists.

Course Requirements

The 36 credit-hour program of study consists of 9 credit-hours of foundation requirements, 21 credit-hours of emphasis specific courses, and 6 credits of internship experiences or a research thesis/capstone project.

Foundations (9)

- GSE 6000 - Fundamentals of Graduate Study **Credits: (3)**
- GSE 6020 - Creating Environments for Student Success **Credits: (3)**
- GSE 6080 - Conducting Educational Research **Credits: (3)**

Emphasis Specific Courses (21)

- GSE 6010 - History, Philosophy, and Policy in Education **Credits: (3)**
- GSE 6100 - Educational Leadership and Management **Credits: (3)**
- GSE 6102 - Education Finance and Resource Management **Credits: (3)**
- GSE 6210 - Education Law and Policy **Credits: (3)**
- GSE 6700 - Higher Education Administration **Credits: (3)**
- GSE 6701 - Current Issues in Higher Education **Credits: (3)**

- MED 6702 - Organizational Change and Human Resource Management **Credits: (3)**
- GSE 6101 - Assessment and Data-Driven Decision Making **Credits: (3)** or
- GSE 6702 - College Student Access and Success **Credits: (3)**

Internship Experiences Or Project (6)

- GSE 6704 - Higher Education Internship **Credits: (3)** Must be taken twice for a total of 6 credits
or
- GSE 6910 - Project Development I **Credits: (1)**
- GSE 6920 - Project Development II **Credits: (1)**
- GSE 6930 - Project Development III **Credits: (1)**
- GSE 6970 - Master of Education Project/Thesis/Capstone **Credits: (3)**

Masters of Education, Inclusive Early Childhood Education and Care (MEd)

- **Program Code:** 5056MED with Emphasis in 5064 (Inclusive Early Childhood Education and Care)
- **CIPC:** 131202 with 131210 (Inclusive Early Childhood Education and Care)

Admission Requirements

The Master of Education with an emphasis in Inclusive Early Childhood Education and Care is designed for all early childhood professionals to acquire knowledge and skills for working with diverse children, families, and communities. There is a focus on the change in systemic inequities by using emotionally responsive practices and creating learning communities in a relationship-based approach. Candidates will complete a thesis as a culminating experience. The following items are required:

1. Admission to Weber State University and application for the GSE Program.
2. Payment of the GSE program application fee.
3. Verification of a bachelor's degree from an accredited institution.
4. Official transcripts from all institutions attended.
5. Recommendation forms (3).
6. Minimum GPA of 3.00 either cumulative or on the last 60 semester hours (90 quarter hours) of approved undergraduate/graduate coursework.
7. Interview with Graduate Studies in Education faculty members with a score of 4 out of 6.

Additional Requirements for International Students

- Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or sis@weber.edu
- TOEFL score of 223 (computer-based) or 85 (internet-based) or IELTS 6.5 or Duolingo 120.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.
- Courses evaluated into the equivalent of American credits and letter grades.
- Contact WSU International Student Services Office and submit a WSU International Student Application **and** a Graduate Financial Guarantee form.

GPA Requirements for all MEd Students

Following admission to the MEd program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all foundation classes. Coursework in which Ds, Es, or UWs are earned is unacceptable and could result in removal from the program if the problem persists.

Course Requirements

The 36 credit-hour program of study consists of 9 credit-hours foundation requirement, 10 credit-hours professional core requirement, 11 credit hours of graduate electives, and 6 credit-hours to complete a master's project/thesis. Electives must be graduate level (i.e. 6000 level credit) and may be selected from offerings in education or specialized courses leading to credentials (certification, endorsement, or license).

Foundations (9)

- GSE 6000 - Fundamentals of Graduate Study **Credits: (3)**
- GSE 6020 - Creating Environments for Student Success **Credits: (3)**
- GSE 6080 - Conducting Educational Research **Credits: (3)**

Emphasis Specific Courses (10)

- GSE 6215 - Critical Perspectives and Research in Inclusive Early Childhood Education and Care **Credits: (3)**
- GSE 6220 - Understanding Children Beyond Behaviors **Credits: (3)**
- GSE 6230 - Observing and Assessing Children in Context **Credits: (3)**
- GSE 6820 - Child Observation Seminar **Credits: (1)**

Project (6)

- GSE 6910 - Project Development I **Credits: (1)**
- GSE 6920 - Project Development II **Credits: (1)**
- GSE 6930 - Project Development III **Credits: (1)**
- GSE 6970 - Master of Education Project/Thesis/Capstone **Credits: (3)**

Electives (11)

- GSE 6240 - Culturally Sustaining Advocacy and Collaboration with Children and Families **Credits: (3)**
- GSE 6250 - Inclusive Early Childhood Intervention and Special Education **Credits: (3)**
- GSE 6260 - Inclusive Early Childhood Curriculum **Credits: (3)**
- GSE 6270 - Young Children's Play **Credits: (3)**
- GSE 6280 - Student Teaching in Early Childhood Education **Credits: (3-6)**
- GSE 6290 - Practicum/Internship in Early Childhood Education **Credits: (1-6)**
- GSE 6900 - Individual Study **Credits: (1-3)**
- GSE 6950 - Supervised College Teaching **Credits: (3)**

Masters of Education, Sport Coaching Leadership (MEd)

The Master of Education with an emphasis in Sport Coaching Leadership is designed for sport coaches to acquire content knowledge, sport coaching methodologies, and enhance their individual coaching in the area of sport. Upon completion of the program, students may pursue jobs as an athletic coach, athlete development specialist, athletic director, or operations manager.

- **Program Code:** 5056MED with Emphasis in 5065 (Sport Coaching Leadership)
- **CIPC:** 131202 with 310504 (Sport Coaching Leadership)

Admission Requirements

The Graduate Studies in Education program is selective with a limited number of openings available for qualified students. Admission deadline is March 15 for Fall semester. For additional information contact the Graduate Studies in Education office, (801) 626-6278. The following items are required:

1. Admission to Weber State University and application for the GSE Program.
2. Payment of the GSE program application fee.
3. Verification of a bachelor's degree from an accredited institution.
4. Official transcripts from all institutions attended.
5. Recommendation forms (3).
6. Minimum GPA of 3.00 either cumulative or on the last 60 semester hours (90 quarter hours) of approved undergraduate/graduate coursework.
7. Interview with Graduate Studies in Education faculty members with a score of 4 out of 6.

Additional Requirements for International Students

- Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or sis@weber.edu
- TOEFL score of 223 (computer-based) or 85 (internet-based) or IELTS 6.5 or Duolingo 120.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.
- Courses evaluated into the equivalent of American credits and letter grades.
- Contact WSU International Student Services Office and submission of a WSU International Student Application and a Graduate Financial Guarantee form.

GPA Requirements for all MEd Students

Following admission to the MEd program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all foundation classes. Coursework in which Ds, Es, or UWs are earned is unacceptable and could result in removal from the program if the problem persists.

Course Requirements

The 36 credit-hour program of study consists of 9 credit-hours foundation requirement, 18 credit-hours professional core requirement, 3 credit hours of graduate electives, and 6 credit-hours to complete a master's project/thesis.

Foundations (9)

- GSE 6000 - Fundamentals of Graduate Study **Credits: (3)**
- GSE 6020 - Creating Environments for Student Success **Credits: (3)**
- GSE 6080 - Conducting Educational Research **Credits: (3)**

Emphasis Specific Courses (18)

- GSE 6400 - Principles of Coaching and Leadership **Credits: (3)**
- GSE 6401 - Psychological Aspects of Sport Coaching **Credits: (3)**
- GSE 6402 - Strength & Conditioning/Injury Prevention **Credits: (3)**
- GSE 6403 - Ethics in Sport **Credits: (3)**
- GSE 6404 - Facilities and Event Management in Sport **Credits: (3)**
- GSE 6405 - Advanced Sport Pedagogy **Credits: (3)**

Project (6)

- GSE 6910 - Project Development I **Credits: (1)**
- GSE 6920 - Project Development II **Credits: (1)**
- GSE 6930 - Project Development III **Credits: (1)**
- GSE 6970 - Master of Education Project/Thesis/Capstone **Credits: (3)**

Electives (3)

Electives must be graduate level (i.e. 6000 level credit) and may be selected from offerings in professional education, discipline areas, or specialized courses leading to endorsements.

Master of Criminal Justice Program

Program Director: Bradford Reyns

Telephone Contact: 801-626-6151

Who Should Apply

The program is designed for criminal justice and social service professionals who wish to continue their education.

Program Description

The Master of Science Degree in Criminal Justice is designed to provide post-baccalaureate education to criminal justice professionals and traditional students who have not yet begun a career in criminal justice. The primary goal of the program is to develop in graduates the ability to analyze, comprehend, and explore the complex problems confronting the criminal justice system. The program emphasizes theory, research and administration in the criminal justice system. Students will be able to conceptualize the problems of crime and justice from social, cultural, economic, and political perspectives. In addition, the successful graduate will understand research methods and design as well as statistical strategies used to analyze social science research. Course work will also provide a foundation for those students desiring to pursue doctoral studies.

About the Faculty

The graduate faculty brings diverse backgrounds both in terms of education and professional experience. Faculty graduate degrees include Public Administration, Sociology, Criminal Justice, Psychology, and the Law. Past professional experiences among the faculty include law enforcement administration, prosecuting attorney, criminal defense attorney, probation officer, corrections officer, and forensic investigator. Faculty research interests cross the full spectrum of the justice system and include issues related to the police, courts, criminal procedures, adult and youth corrections.

About the Program

The Master of Science Degree in Criminal Justice is a fully on-line degree program that allows students the opportunity to continue their education from anywhere with active Internet service. Applications are accepted on a continuous basis and courses are offered every semester (fall, spring, and summer). In general, students should be able to complete their degree in as few as 12-16 months.

Master of Science

Master of Science in Criminal Justice (MCJ)

- **Grade Requirements:** A minimum GPA of 3.0 for all courses is required. No "C" grade or lower is allowed in core courses. The remaining hours will be chosen from elective courses of interest to the student. More than one "C" grade in these courses will not count toward completion of the degree.
- **Program Code:** 7033MS
- **CIPC:** 430104

Admission Requirements

Admission to the master's program will be competitive and entrance restricted to a limited number of well qualified applicants. Applicants should possess an undergraduate degree from a regionally accredited university or college. Specific admissions criteria include:

- A completed application to the Master of Criminal Justice Program.
- A cumulative undergraduate GPA of at least 3.0; or if the cumulative undergraduate GPA is below 3.0, a 3.0 GPA calculated on the last undergraduate work comprising a minimum of 60 semester hours (90 quarter hours) of undergraduate work.*
- Official transcripts from all colleges/universities attended.
- A current resume or vita.
- A written personal statement explaining interest in the program.
- Three (3) Letters of Recommendation
- TOEFL (required for International students and may be required for students who do not use English as their primary language)

*Simply meeting the minimum overall GPA of 3.0 does not guarantee admission into the program

Students should familiarize themselves with the MCJ program policies found on the Criminal Justice Department website.

Graduation Requirements

The Master of Science Degree in Criminal Justice requires the completion of 36 semester hours. Five core courses totaling 15 semester hours are required.

Program Learning Outcomes

- Critically analyze key issues, ideas, and/or concepts affecting the criminal justice system. (Critical analysis)
- Design and/or implement empirically valid research related to criminal justice. (Research methods)

- Model professional-level writing skills in academic and/or non-academic settings. (Writing)
- Create and/or defend an evidence-based argument regarding criminal justice law, policies, or procedures. (Evaluation)

Master of Science Degree Criminal Justice Courses

Required Courses (15 credit hours)

- MCJ 6100 - Contemporary Criminal Justice **Credits: (3)**
- MCJ 6110 - Research Methods in Criminal Justice **Credits: (3)**
- MCJ 6210 - American Criminal Courts **Credits: (3)**
- MCJ 6220 - Contemporary Law Enforcement **Credits: (3)**
- MCJ 6230 - Contemporary Corrections **Credits: (3)**

Elective Courses (21 credit hours)

Select 21 credit hours of courses with an MCJ prefix.

Master of Social Work

Department Chair: Mark Bigler

Program Director: Corina Segovia Tadehara

Location: Lindquist Hall, Room 330

Telephone Contact: Taryn Pearce 801-626-6157

WSU Master of Social Work (MSW) Eligibility Requirements

To be eligible for admission to the Weber State University Master of Social Work (MSW) Program, applicants must meet the following minimum requirements:

1. Possession of a bachelor's degree or recognized equivalent from an accredited institution. NOTE: Individuals who have earned an undergraduate degree in social work from a CSWE-accredited program can apply for the MSW program with advanced standing status. The undergraduate social work degree must have been granted no more than five years prior the student's first semester in the WSU MSW program.
2. A satisfactory scholastic average, generally a minimum grade-point average of B or better (3.0 on a 4-point scale) in all coursework after the first two years (typically the first 60 semester units or 90 quarter units) of undergraduate study.
3. Significant undergraduate exposure to study in the social sciences. As a minimum this includes at least nine (9) semester credit hours of coursework in the social sciences, such as anthropology, criminal justice, political science, psychology, and sociology (courses in other disciplines a student believes are relevant may be approved by review of course syllabi).
4. A course in introductory statistics, research methods, or quantitative reasoning. This requirement must be satisfied prior to matriculation if you are offered admission.
5. Candidates for advanced standing must also have a course in mental health diagnostics.
6. The following courses are strongly recommended: Introduction to Psychology; Introduction to Sociology; Human Biology or any biology course covering anatomy and physiology that emphasizes the impact of organic, chemical, and body systems impairments on human behavior (NOT Introduction to Biology); social science courses that examine a macro context (e.g., Introduction to Political Science, Introduction to Economics, Introduction to Anthropology, etc.).

WSU Master of Social Work (MSW) Admissions Requirements

Application for admission to the Weber State University Master of Social Work (MSW) Program involves submission of the following:

1. The WSU MSW Program application form.
2. A \$30.00 application fee (non-refundable).
3. Official transcripts from all undergraduate institutions attended. Electronic transcripts from a college or university records office are acceptable. Official transcripts in hard copy can be mailed to the ATTN: MSW Admissions, Department of Social Work and Gerontology, Weber State University 1299 Edvalson Street, Ogden, UT, 84408.
4. A resume that outlines the student's employment history, specifically highlighting social work-related experience.
5. An original statement of purpose (three to four double-spaced pages in length, with one-inch margins, and 12-point Times New Roman font). This should include
 - A description of your understanding of the social work profession and its core values. How have you incorporated social work values in your human service experiences and interactions with others? What significant relationships and life experiences have you had in giving or receiving help that have motivated you to enter the field of social work? What personal qualities equip you for the social work profession? Discuss your experiences and feelings about working with populations different from your own.
 - A description of your areas of interest in social work practice, why you have this area of interest, what social problem(s) you expect to address with an MSW, and how the MSW will facilitate change in this or these areas.
 - A discussion of what you expect to be doing in five years and 10 years.
 - An explanation of why the WSU MSW Program is a good fit for your goals.
6. A minimum of three recommendations from academic instructors and/or professional colleagues who have supervised you in a social work-related position (paid, volunteer, or internship). Personal recommendations are not acceptable (i.e., recommendations from friends, family members, or religious leaders).

Grade Requirements

To receive a Master of Social Work (MSW) degree, the student must complete all course in the MSW program, including leveling and/or bridge courses (if applicable) with a grade of "C" or higher, and maintain an overall GPA of 3.0 or higher.

Master of Social Work

Master of Social Work (MSW)

- **Program Code:** 7017MSW
- **Cohort Code:** MSW_ADV (Advanced) or MSW_TRAD (Traditional)
- **CIPC:** 440701

WSU Master of Social Work (MSW) Eligibility Requirements

To be eligible for admission to the Weber State University Master of Social Work (MSW) Program, applicants must meet the following minimum requirements:

1. Possession of a bachelor's degree or recognized equivalent from an accredited institution. NOTE: Individuals who have earned an undergraduate degree in social work from a CSWE-accredited program can apply for the

MSW program with advanced standing status. The undergraduate social work degree must have been granted no more than five years prior the student's first semester in the WSU MSW program.

2. A satisfactory scholastic average, generally a minimum grade-point average of B or better (3.0 on a 4-point scale) in all coursework after the first two years (typically the first 60 semester units or 90 quarter units) of undergraduate study.
3. Significant undergraduate exposure to study in the social sciences. As a minimum this includes at least nine (9) semester credit hours of coursework in the social sciences, such as anthropology, criminal justice, political science, psychology, and sociology (courses in other disciplines a student believes are relevant may be approved by review of course syllabi).
4. A course in introductory statistics, research methods, or quantitative reasoning. This requirement must be satisfied prior to matriculation if you are offered admission.
5. Candidates for advanced standing must also have a course in mental health diagnostics.
6. The following courses are strongly recommended: Introduction to Psychology; Introduction to Sociology; Human Biology or any biology course covering anatomy and physiology that emphasizes the impact of organic, chemical, and body systems impairments on human behavior (NOT Introduction to Biology); social science courses that examine a macro context (e.g., Introduction to Political Science, Introduction to Economics, Introduction to Anthropology, etc.).

WSU Master of Social Work (MSW) Admissions Requirements

Application for admission to the Weber State University Master of Social Work (MSW) Program involves submission of the following:

1. The WSU MSW Program application form.
2. A \$30.00 application fee (non-refundable).
3. Official transcripts from all undergraduate institutions attended. Electronic transcripts from a college or university records office are acceptable. Official transcripts in hard copy can be mailed to the ATTN: MSW Admissions, Department of Social Work and Gerontology, Weber State University 1299 Edvalson Street, Ogden, UT, 84408.
4. A resume that outlines the student's employment history, specifically highlighting social work-related experience.
5. An original statement of purpose (three to four double-spaced pages in length, with one-inch margins, and 12-point Times New Roman font). This should include
 - A description of your understanding of the social work profession and its core values. How have you incorporated social work values in your human service experiences and interactions with others? What significant relationships and life experiences have you had in giving or receiving help that have motivated you to enter the field of social work? What personal qualities equip you for the social work profession? Discuss your experiences and feelings about working with populations different from your own.
 - A description of your areas of interest in social work practice, why you have this area of interest, what social problem(s) you expect to address with an MSW, and how the MSW will facilitate change in this or these areas.
 - A discussion of what you expect to be doing in five years and 10 years.
 - An explanation of why the WSU MSW Program is a good fit for your goals.
6. A minimum of three recommendations from academic instructors and/or professional colleagues who have supervised you in a social work-related position (paid, volunteer, or internship). Personal recommendations are not acceptable (i.e., recommendations from friends, family members, or religious leaders).

Grade Requirements

To receive a Master of Social Work (MSW) degree, the student must complete all course in the MSW program, including leveling and/or bridge courses (if applicable) with a grade of "C" or higher, and maintain an overall GPA of 3.0 or higher.

Program Learning Outcomes

- Competency 1: Demonstrate ethical and professional behavior;
- Competency 2: Engage diversity and difference in practice;
- Competency 3: Advance human rights and social, economic, and environmental justice;
- Competency 4: Engage in practice-informed research and research-informed practice;
- Competency 5: Engage in policy practice;
- Competency 6: Engage with individuals, families, groups, organizations, and communities;
- Competency 7: Assess individuals, families, groups, organizations, and communities;
- Competency 8: Intervene with individuals, families, groups, organizations, and communities;
- Competency 9: Evaluate practice with individuals, families, groups, organizations, and communities.

Programs

Master of Social Work, Traditional (MSW)

Master of Social Work, Advanced (MSW)

Master of Social Work, Advanced (MSW)

- **Program Code:** 7017MSW with MSW_ADV cohort
- **CIPC:** 440701

WSU Master of Social Work (MSW) Eligibility Requirements

To be eligible for admission to the Weber State University Master of Social Work (MSW) Program, applicants must meet the following minimum requirements:

1. Possession of a bachelor's degree or recognized equivalent from an accredited institution. NOTE: Individuals who have earned an undergraduate degree in social work from a CSWE-accredited program can apply for the MSW program with advanced standing status. The undergraduate social work degree must have been granted no more than five years prior the student's first semester in the WSU MSW program.
2. A satisfactory scholastic average, generally a minimum grade-point average of B or better (3.0 on a 4-point scale) in all coursework after the first two years (typically the first 60 semester units or 90 quarter units) of undergraduate study.
3. Significant undergraduate exposure to study in the social sciences. As a minimum this includes at least nine (9) semester credit hours of coursework in the social sciences, such as anthropology, criminal justice, political science, psychology, and sociology (courses in other disciplines a student believes are relevant may be approved by review of course syllabi).
4. A course in introductory statistics, research methods, or quantitative reasoning. This requirement must be satisfied prior to matriculation if you are offered admission.
5. Candidates for advanced standing must also have a course in mental health diagnostics.
6. The following courses are strongly recommended: Introduction to Psychology; Introduction to Sociology; Human Biology or any biology course covering anatomy and physiology that emphasizes the impact of organic, chemical, and body systems impairments on human behavior (NOT Introduction to Biology); social science courses that examine a macro context (e.g., Introduction to Political Science, Introduction to Economics, Introduction to Anthropology, etc.).

WSU Master of Social Work (MSW) Admissions Requirements

Application for admission to the Weber State University Master of Social Work (MSW) Program involves submission of the following:

1. The WSU MSW Program application form.
2. A \$30.00 application fee (non-refundable).
3. Official transcripts from all undergraduate institutions attended. Electronic transcripts from a college or university records office are acceptable. Official transcripts in hard copy can be mailed to the ATTN: MSW Admissions, Department of Social Work and Gerontology, Weber State University 1299 Edvalson Street, Ogden, UT, 84408.
4. A resume that outlines the student's employment history, specifically highlighting social work-related experience.
5. An original statement of purpose (three to four double-spaced pages in length, with one-inch margins, and 12-point Times New Roman font). This should include
 - A description of your understanding of the social work profession and its core values. How have you incorporated social work values in your human service experiences and interactions with others? What significant relationships and life experiences have you had in giving or receiving help that have motivated you to enter the field of social work? What personal qualities equip you for the social work profession? Discuss your experiences and feelings about working with populations different from your own.
 - A description of your areas of interest in social work practice, why you have this area of interest, what social problem(s) you expect to address with an MSW, and how the MSW will facilitate change in this or these areas.
 - A discussion of what you expect to be doing in five years and 10 years.
 - An explanation of why the WSU MSW Program is a good fit for your goals.
6. A minimum of three recommendations from academic instructors and/or professional colleagues who have supervised you in a social work-related position (paid, volunteer, or internship). Personal recommendations are not acceptable (i.e., recommendations from friends, family members, or religious leaders).

Grade Requirements

To receive a Master of Social Work (MSW) degree, the student must complete all course in the MSW program, including leveling and/or bridge courses (if applicable) with a grade of "C" or higher, and maintain an overall GPA of 3.0 or higher.

- **Program Code:** 7017MSW with MSW_ADV cohort.
- **CIPC:** 440701

Program Learning Outcomes

- Competency 1: Demonstrate ethical and professional behavior;
- Competency 2: Engage diversity and difference in practice;
- Competency 3: Advance human rights and social, economic, and environmental justice;
- Competency 4: Engage in practice-informed research and research-informed practice;
- Competency 5: Engage in policy practice;
- Competency 6: Engage with individuals, families, groups, organizations, and communities;
- Competency 7: Assess individuals, families, groups, organizations, and communities;
- Competency 8: Intervene with individuals, families, groups, organizations, and communities;
- Competency 9: Evaluate practice with individuals, families, groups, organizations, and communities.

Required Summer Bridge Courses (6 credits)

- MSW 6300 - Ethics, Ethical Practice, Ethical Decision-Making **Credits: (3)**
- MSW 6910 - Clinical Practice II: Vulnerable and At-Risk Populations **Credits: (3)**

Required Core Courses (15 credits)

- MSW 6400 - Macro Aspects of Clinical Practice **Credits: (3)**
- MSW 6600 - Research I: Research Informed Practice **Credits: (3)**
- MSW 6700 - Research II: Practice-Informed Research **Credits: (3)**
- MSW 6930 - Clinical Practice III: Evidence-Based Practice **Credits: (3)**
- MSW 6940 - Clinical Practice IV: Group Work **Credits: (3)**

Required Field Courses (6 credits)

- MSW 6860 - Advanced Field I **Credits: (3)**
- MSW 6861 - Advanced Field II **Credits: (3)**

Electives (9 credits)

Select from the following courses:

- EDUC 6020 - Promoting Success for K-12 Learners **Credits: (2)**
- GSE 6030 - Applied Learning Theory **Credits: (3)**
- GSE 6100 - Educational Leadership and Management **Credits: (3)**
- GSE 6140 - Adolescent Development **Credits: (2)**
- GSE 6302 - Advanced Family Theories **Credits: (3)**
- GSE 6303 - Diverse Family Contexts **Credits: (3)**
- GSE 6306 - Parenting Education **Credits: (3)**
- MHA 6000 - Health Systems & the Healthcare Economy **Credits: (3)**
- MHA 6100 - Leading & Managing People in Healthcare **Credits: (3)**
- MHA 6320 - Health Policy and Economics **Credits: (3)**
NOTE: It is strongly recommended that MSW students take MHA 6000 or MHA 6100 prior to enrolling in this course.
- MHA 6350 - Decision Making for Healthcare Leaders **Credits: (3)**
NOTE: It is strongly recommended that MSW students take MHA 6000 or MHA 6100 prior to enrolling in this course.
- MHA 6440 - Health Ethics and Law **Credits: (3)**
- MSW 6235 - Loss Across the Lifespan **Credits: (3)**
- MSW 6245 - Aging Services **Credits: (3)**
- MSW 6255 - Sexuality in Social Work Practice **Credits: (3)**
- MSW 6265 - Crisis Intervention and Trauma **Credits: (3)**
- MSW 6275 - Harm Reduction in Practice **Credits: (3)**
- MSW 6285 - Dialectical Behavior Therapy **Credits: (3)**
- MSW 6850 - Graduate Social Work Study Abroad **Credits: (1-4)**

Master of Social Work, Traditional (MSW)

- **Program Code:** 7017MSW with MSW_TRAD cohort
- **CIPC:** 440701

WSU Master of Social Work (MSW) Eligibility Requirements

To be eligible for admission to the Weber State University Master of Social Work (MSW) Program, applicants must meet the following minimum requirements:

1. Possession of a bachelor's degree or recognized equivalent from an accredited institution. NOTE: Individuals who have earned an undergraduate degree in social work from a CSWE-accredited program can apply for the MSW program with advanced standing status. The undergraduate social work degree must have been granted no more than five years prior the student's first semester in the WSU MSW program.
2. A satisfactory scholastic average, generally a minimum grade-point average of B or better (3.0 on a 4-point scale) in all coursework after the first two years (typically the first 60 semester units or 90 quarter units) of undergraduate study.
3. Significant undergraduate exposure to study in the social sciences. As a minimum this includes at least nine (9) semester credit hours of coursework in the social sciences, such as anthropology, criminal justice, political science, psychology, and sociology (courses in other disciplines a student believes are relevant may be approved by review of course syllabi).
4. A course in introductory statistics, research methods, or quantitative reasoning. This requirement must be satisfied prior to matriculation if you are offered admission.
5. Candidates for advanced standing must also have a course in mental health diagnostics.
6. The following courses are strongly recommended: Introduction to Psychology; Introduction to Sociology; Human Biology or any biology course covering anatomy and physiology that emphasizes the impact of organic, chemical, and body systems impairments on human behavior (NOT Introduction to Biology); social science courses that examine a macro context (e.g., Introduction to Political Science, Introduction to Economics, Introduction to Anthropology, etc.).

WSU Master of Social Work (MSW) Admissions Requirements

Application for admission to the Weber State University Master of Social Work (MSW) Program involves submission of the following:

1. The WSU MSW Program application form.
2. A \$30.00 application fee (non-refundable).
3. Official transcripts from all undergraduate institutions attended. Electronic transcripts from a college or university records office are acceptable. Official transcripts in hard copy can be mailed to the ATTN: MSW Admissions, Department of Social Work and Gerontology, Weber State University 1299 Edvalson Street, Ogden, UT, 84408.
4. A resume that outlines the student's employment history, specifically highlighting social work-related experience.
5. An original statement of purpose (three to four double-spaced pages in length, with one-inch margins, and 12-point Times New Roman font). This should include
 - A description of your understanding of the social work profession and its core values. How have you incorporated social work values in your human service experiences and interactions with others? What significant relationships and life experiences have you had in giving or receiving help that have motivated you to enter the field of social work? What personal qualities equip you for the social work profession? Discuss your experiences and feelings about working with populations different from your own.

- A description of your areas of interest in social work practice, why you have this area of interest, what social problem(s) you expect to address with an MSW, and how the MSW will facilitate change in this or these areas.
 - A discussion of what you expect to be doing in five years and 10 years.
 - An explanation of why the WSU MSW Program is a good fit for your goals.
6. A minimum of three recommendations from academic instructors and/or professional colleagues who have supervised you in a social work-related position (paid, volunteer, or internship). Personal recommendations are not acceptable (i.e., recommendations from friends, family members, or religious leaders).

Grade Requirements

To receive a Master of Social Work (MSW) degree, the student must complete all course in the MSW program, including leveling and/or bridge courses (if applicable) with a grade of "C" or higher, and maintain an overall GPA of 3.0 or higher.

- **Program Code:** 7017MSW with MSW_TRAD cohort.
- **CIPC:** 440701

Program Learning Outcomes

- Competency 1: Demonstrate ethical and professional behavior;
- Competency 2: Engage diversity and difference in practice;
- Competency 3: Advance human rights and social, economic, and environmental justice;
- Competency 4: Engage in practice-informed research and research-informed practice;
- Competency 5: Engage in policy practice;
- Competency 6: Engage with individuals, families, groups, organizations, and communities;
- Competency 7: Assess individuals, families, groups, organizations, and communities;
- Competency 8: Intervene with individuals, families, groups, organizations, and communities;
- Competency 9: Evaluate practice with individuals, families, groups, organizations, and communities.

Required Core Courses (39 credits)

- MSW 6010 - Foundations of Social Work **Credits: (3)**
- MSW 6100 - Behavior, Environment & Social Systems **Credits: (3)**
- MSW 6150 - Behavioral Health, Diagnostics, and Mental Health **Credits: (3)**
- MSW 6200 - Human and Social Diversity and Oppression **Credits: (3)**
- MSW 6300 - Ethics, Ethical Practice, Ethical Decision-Making **Credits: (3)**
- MSW 6400 - Macro Aspects of Clinical Practice **Credits: (3)**
- MSW 6500 - Social Policy and Social Work Practice **Credits: (3)**
- MSW 6600 - Research I: Research Informed Practice **Credits: (3)**
- MSW 6700 - Research II: Practice-Informed Research **Credits: (3)**
- MSW 6900 - Clinical Practice I: Traditional Theories and Model **Credits: (3)**
- MSW 6910 - Clinical Practice II: Vulnerable and At-Risk Populations **Credits: (3)**
- MSW 6930 - Clinical Practice III: Evidence-Based Practice **Credits: (3)**
- MSW 6940 - Clinical Practice IV: Group Work **Credits: (3)**

Required Field Courses (12 credits)

- MSW 6760 - Foundation Field I **Credits: (3)**
- MSW 6761 - Foundation Field II **Credits: (3)**
- MSW 6860 - Advanced Field I **Credits: (3)**
- MSW 6861 - Advanced Field II **Credits: (3)**

Electives (9 credits)

Select from the following courses:

- MCJ 6100 - Contemporary Criminal Justice **Credits: (3)**
- MCJ 6120 - Theories of Crime and Delinquency **Credits: (3)**
- MCJ 6150 - Race, Class, Gender, and Criminal Justice **Credits: (3)**
- MCJ 6170 - Juvenile Justice & Delinquency **Credits: (3)**
- MCJ 6200 - Advanced Victimology **Credits: (3)**
- MCJ 6210 - American Criminal Courts **Credits: (3)**
- MCJ 6220 - Contemporary Law Enforcement **Credits: (3)**
- MCJ 6230 - Contemporary Corrections **Credits: (3)**
- EDUC 6020 - Promoting Success for K-12 Learners **Credits: (2)**
- GSE 6030 - Applied Learning Theory **Credits: (3)**
- GSE 6100 - Educational Leadership and Management **Credits: (3)**
- GSE 6140 - Adolescent Development **Credits: (2)**
- GSE 6303 - Diverse Family Contexts **Credits: (3)**
- GSE 6306 - Parenting Education **Credits: (3)**
- MHA 6000 - Health Systems & the Healthcare Economy **Credits: (3)**
- MHA 6100 - Leading & Managing People in Healthcare **Credits: (3)**
- MHA 6320 - Health Policy and Economics **Credits: (3)**
NOTE: It is strongly recommended that MSW students take MHA 6000 or MHA 6100 prior to enrolling in this course.
- MHA 6350 - Decision Making for Healthcare Leaders **Credits: (3)**
NOTE: It is strongly recommended that MSW students take MHA 6000 or MHA 6100 prior to enrolling in this course.
- MHA 6440 - Health Ethics and Law **Credits: (3)**
- MSW 6235 - Loss Across the Lifespan **Credits: (3)**
- MSW 6245 - Aging Services **Credits: (3)**
- MSW 6255 - Sexuality in Social Work Practice **Credits: (3)**
- MSW 6265 - Crisis Intervention and Trauma **Credits: (3)**
- MSW 6275 - Harm Reduction in Practice **Credits: (3)**
- MSW 6285 - Dialectical Behavior Therapy **Credits: (3)**
- MSW 6850 - Graduate Social Work Study Abroad **Credits: (1-4)**

Military Science (Army ROTC)

Chair: Lieutenant Colonel Angelique A. Pifer

Location: Annex 11/Mail Code 4501

Telephone Contact: Jane Michels, 801-626-6518; Fax 801-626-7651

Military Science (Army ROTC) focuses on leadership development. Students pursue the major of their choice while studying Military Science, and graduate with the ability to function effectively as leaders. Upon completion of Army ROTC and graduation from college students become commissioned officers in the active Army, Army Reserve or National Guard.

Instructors, uniforms and equipment are provided at no cost to the student or the University. All contracted students receive \$300- \$500 per month (\$3,000-\$5,000 per academic year). Army ROTC also covers the cost of tuition and fees for Army ROTC scholarship students and provides a book allowance of \$1,200 per academic year.

The Margin of Difference. Army ROTC cadets learn to be leaders and receive hands-on experience in managing physical, financial, and human resources. They develop self-confidence and superior decision-making skills. Employers value these leadership qualities and recognize associated potential.

Four-Year Program. The traditional Army ROTC program covers four years consistent with normal undergraduate progression (freshman-senior). The four-year program is divided into two parts called the basic course and the advanced course. The basic course is usually taken during the first two years of college. It covers subjects such as land navigation, leadership development, small unit tactics, weapons marksmanship and military history. This program is designed for high performing students who wish to try Military Science without obligation, while enhancing their leadership skills and self-confidence. Upon successful completion of the basic course, students are eligible to enter the advanced course.

Advanced course requirements are normally completed during the junior and senior years. The advanced course further develops and refines leadership competencies, and qualifies the student for a commission in the United States Army. Advanced course students receive a \$450 (Junior year) - \$500 (Senior year) per month tax-free subsistence allowance [\$4,500 (Junior year) - \$5,000 (Senior year) per year].

Two-Year Program. This is a special program for junior and community college transfers or students who did not take Army ROTC during their first two years of college. To enter the two year program, a student first participates in a four-week leadership training course. This usually takes place between the sophomore and junior year. Students are paid for attending this instruction, have the opportunity to compete for two-year scholarships, and may receive academic credit.

Scholarships. Army ROTC provides numerous scholarship opportunities. All WSU contracted cadets receive some form of financial assistance, which can include up to 100% tuition, fees, books and other costs paid. High school seniors may qualify for the four-year Army ROTC scholarship. College students may qualify for four, three, or two-year scholarships. Students may choose from two different options. The first option pays the cost of tuition and fees and a flat rate for textbooks and classroom supplies. The second option pays the students up to \$10,000 for housing and the same flat rate for textbooks and classroom supplies. The Green to Gold scholarship allows Soldiers serving on active duty to leave the Army early and attend college/ROTC full-time while receiving scholarship benefits. Other scholarship opportunities include: room and book grants and the Western Undergraduate Exchange (WUE) program. Nursing students qualify for additional incentives. Call or visit the Department of Military Science for details.

Placement Credit For Veterans. Veterans may qualify for advanced course placement based on prior military experience. Concurrently, they can take full advantage of veteran's benefits and receive financial aid for Army ROTC participation.

Simultaneous Membership Program (SMP). This program is available to cadets who wish to serve in the Army Reserve or National Guard while attending college and pursuing a commission through Army ROTC. SMP students are eligible to receive Reserve drill pay, tuition assistance, other monetary incentives, and \$350-\$500 per month (\$3,000-\$5,000 per academic year) from Army ROTC. Call or visit the Department of Military Science for details.

Leave of Absence. Students, including scholarship recipients, who wish to take a leave of absence to serve a mission for their church can do so conveniently before the start of the Junior year.

Commission Requirements. In order to qualify for a commission as a Second Lieutenant in the United States Army, each student must:

1. Complete all required Military Science instruction while attending college as a full-time student, and obtain a baccalaureate or higher degree prior to age 31 (age waiver possible for qualified students).
2. Meet medical and physical fitness standards.
3. Be a U.S. citizen.
4. Successfully complete the Leadership Development and Assessment Course.
5. Be recommended by the Professor of Military Science.

Service Obligation. There is no military service obligation for basic course students, unless on scholarship.

Advanced course and scholarship (contracted) students incur an obligation to serve in the active Army, Army Reserve or National Guard.

Minor

Military Science Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Foundational Courses:** In order to enroll in courses leading to the Military Science minor, students should complete MILS 1010, MILS 1020, MILS 2010, MILS 2020 and MILS 2400. The department may award experiential credit for these courses for: prior military service, Advanced Individual Training (AIT), Leader's Training Course (LTC) or Accelerated Cadet Commissioning Training (ACCT).
- **Grade Requirements:** Obtain a grade of "C" or better in all courses used toward the minor, and a cumulative GPA of 2.5 for Military Science courses.
- **Credit Hour Requirements:** A minimum of 21 hours in Military Science courses as outlined below.
- **Program Code:** 7010
- **CIPC:** 280599

Required Courses (21 credit hours)

- MILS 3010 - Adaptive Team Leadership **Credits: (4)**
- MILS 3020 - Leadership in Changing Environments **Credits: (4)**
- MILS 4010 - Mission Command and the Army Profession, Part 1 **Credits: (4)**
- MILS 4020 - Mission Command and the Army Profession, Part 2 **Credits: (4)**
- MILS 4400 - Advanced Physical Readiness **Credits: (2)**
- MILS 3000 - Leadership in Military History **Credits: (3)** or
- HIST 3280 GLB - American Military History from 1500 to 1890 **Credits: (3)** or
- HIST 3290 GLB - American Military History from 1890 to the Present **Credits: (3)**

Post Baccalaureate Certificate in Teaching

Post Baccalaureate Certificate

Elementary Teaching Post Baccalaureate Certificate

Teacher licensure program for individuals who have already completed a bachelor's degree from an accredited college or university.

- **Program Code:** 5042PBC
- **CIPC:** 131202

GPA Requirements

Following admission to the PBCT program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all licensure classes.

Course Requirements

The 33 credit hour program of study consists of:

- 25 hour credits hours in specific coursework.
- Practicum is a 2 credit hour which requires 60 clock hours in an elementary classroom.
- Student teaching is a 6 credit hour which requires 60 full teaching days in elementary classrooms.

Required Courses

- EDUC 6020 - Promoting Success for K-12 Learners **Credits: (2)**
- EDUC 6050 - Curriculum Design, Evaluation & Assessment **Credits: (3)**
- EDUC 6110 - Introduction to Classroom Management **Credits: (3)**
- EDUC 6229 - Instructional Technology for Pre-service Teachers **Credits: (2)**
- EDUC 6265 - Foundations of Inclusive Teaching **Credits: (2)**
- EDUC 6311 - Content Instruction in the Elementary School: Science **Credits: (2)**
- EDUC 6312 - Content Instruction in the Elementary School: Mathematics **Credits: (2)**
- EDUC 6313 - Content Instruction in the Elementary School: Social Studies **Credits: (2)**
- EDUC 6314 - Reading Instruction in Elementary Schools **Credits: (3)**
- EDUC 6316 - Language Arts Instruction in Elementary Schools **Credits: (2)**
- EDUC 6317 - Arts Integration for Elementary Teachers **Credits: (2)**
- EDUC 6860 INT - Practicum in Education **Credits: (2)** (2 credit hours required)
- EDUC 6870 INT - Student Teaching and Seminar in Elementary Education **Credits: (6)** (6 credit hours required)

Secondary Teaching Post Baccalaureate Certificate

Teacher licensure program for individuals who have already completed a bachelor's degree from an accredited college or university.

- **Program Code:** 5043PBC
- **CIPC:** 131205

GPA Requirements

Following admission to the PBCT program, students must maintain a 3.0 cumulative grade point average. Students must earn at least a B- in all licensure classes.

Course Requirements

The program of study consists of:

- 17 credit hours in specific coursework.
- Practicum is a 2 credit hour "course" which requires 60 clock hours in a secondary, subject-specific classroom.
- Student teaching is a 6 credit hour "course" which requires a minimum of 60 full teaching days in a secondary, subject-specific classroom.

Required Courses

- EDUC 6020 - Promoting Success for K-12 Learners **Credits: (2)**
- EDUC 6050 - Curriculum Design, Evaluation & Assessment **Credits: (3)**
- EDUC 6060 - Instructional Strategies **Credits: (2)**
- EDUC 6110 - Introduction to Classroom Management **Credits: (3)**
- EDUC 6229 - Instructional Technology for Pre-service Teachers **Credits: (2)**
- EDUC 6265 - Foundations of Inclusive Teaching **Credits: (2)**
- EDUC 6320 - Content Area Literacy Instruction **Credits: (3)**
- EDUC 6860 INT - Practicum in Education **Credits: (2)** (*2 credit hours required*)
- EDUC 6880 INT - Student Teaching and Seminar in Secondary Education **Credits: (6)** (*6 credit hours required*)

Some additional courses may be required for endorsement area.

Special Education Teaching Post Baccalaureate Certificate

Teacher licensure program for individuals who have already completed a bachelor's degree from an accredited college or university.

- **Program Code:** 5045PBC
- **CIPC:** 131001

Required Courses

- EDUC 6515 - Foundations in Special Education: Law and Practice **Credits: (3)**
- EDUC 6530 - Principles and Applications of Special Education Assessment **Credits: (3)**
- EDUC 6540 - Advanced Managing Student Behavior **Credits: (3)**
- EDUC 6580 - Advanced Learning Strategies and Transition for Special Education Students **Credits: (3)**
- EDUC 6565 - Advanced Instructional Methods and Practices: English Language Arts **Credits: (3)** concurrently with
- EDUC 6860 INT - Practicum in Education **Credits: (2)**
- EDUC 6575 - Advanced Instructional Methods and Practices: Mathematics **Credits: (3)** concurrently with
- EDUC 6860 INT - Practicum in Education **(2)**

- EDUC 6890 INT - Student Teaching and Seminar in Special Education **Credits: (6)**
- EDUC 6500 - Curriculum Planning and Evaluation for Special Education Students **Credits: (3)**
- EDUC 6529 - Assistive Technology **Credits: (2)**

Naval Science

Weber State provides a program in Naval Science (Navy and Marines Corps) through an inter-campus agreement with the University of Utah. Students may minor in Naval Science by satisfying requirements identified.

For information on this program contact the College of Social & Behavioral Sciences at 801-626-6232

Goals:

1. To help educate midshipmen in a major field of interest to the Navy or Marine Corps leading to a baccalaureate degree.
2. To provide midshipmen with fundamental concepts and principles of naval science and with the professional naval knowledge necessary to establish a sound basis for future growth as a Naval or Marine Corps officer.
3. To prepare midshipmen for service with the highest sense of honor and integrity as commissioned officers, to cultivate the essential elements of military leadership, and to foster the growth of a strong sense of loyalty and dedication to the service and the nation.
4. To prepare midshipmen to continue their education in a field of interest to naval science later in their careers.
5. To instill the values of civilian higher education into the naval service by utilizing the expertise of civilian faculty instruction.

Cross-town Enrollment Agreement

Weber State and the University of Utah have entered a Crosstown Enrollment Agreement effective Autumn Quarter, 1982. Interested Weber State students may attend for credit at the University of Utah Naval Science courses leading to active duty commission in the United States Navy or Marine Corps upon graduation.

Four-Year Scholarship Program

A four-year, government sponsored educational program to attract young men and women to a career as commissioned officers in the United States Navy or Marine Corps. Admission is obtained through national competition. The optimum time for application is during the fall school period in the senior year of high school. The program is open, however, to Weber State students who are freshmen or sophomores so long as they are within the age limitations.

The Navy provides uniforms and textbooks, pays tuition and fees, and provides a \$100.00 per month retainer pay for a period not to exceed four years. Students requiring more than four years to earn their degree are granted a leave of absence, equivalent to the excess over four years. Students in approved engineering majors may receive up to five (5) years of benefits. Upon completion of the Naval Science curriculum and the awarding of a college degree, the graduate is commissioned in the Regular Navy or Marine Corps and serves on active duty for a period of not less than four years.

Two-Year Scholarship Program

Similar to the program above, but only two years in length. The benefits (tuition, books, fees and \$100 per month) are the same, as is the four-year commitment upon graduation. Freshman/sophomore curriculum in Naval Science is taught in condensed form at Newport, Rhode Island, during the summer prior to the junior year.

Application for the two-year scholarship must be made by April of the sophomore year. Selection is on a national scale. Applicants must have completed at least two semesters of calculus and at least one semester of physics by the end of the sophomore year. You may apply at the Naval Science Department or at the Navy Recruiting Office.

NROTC College Program

NROTC College Program is a program which leads to a commission in the U.S. Naval Reserve or Marine Corps Reserve. Admission is obtained through application at the University Department of Naval Science. Selection is made on the basis of the predicted grade point average and an interview with two or more assistant professors in the Department of Naval Science. Final acceptance is contingent on meeting the mental, physical, and aptitude requirements.

NROTC College Program students are supplied with uniforms and Naval Science textbooks. They must pay their own tuition, fees and other educational expenses. On entering the upper division level (junior and senior years), they receive a \$100.00 per month retainer pay for a period not to exceed two years. On completion of the Naval Science curriculum which is identical to that for the NROTC Scholarship Program, and receipt of a college degree, the NROTC College Program graduate is commissioned in the Naval Reserve or Marine Corps Reserve and serves on active duty for a period of not less than three years.

Two-Year NROTC College Program

Students who are going to enter their junior year or the last two years of a five-year academic program leading to a BS/BA degree may apply for the Two-Year College Program during the winter before their junior year. Applicants must successfully complete a physical examination, have at least a C average, and have completed or agreed to complete course work in mathematics and science. The Two-Year College program midshipman attend a six week Naval Science institute prior to their junior year. They receive Naval Science books and uniforms, and \$100.00 a month during the junior and senior years. The program is identical with the College Program during the last two years. The Two-Year College Program midshipman serves a minimum of three-years on active duty upon graduation and commissioning.

Marine Option

A special upper division curriculum in the Department of Naval Science for NROTC students desiring a commission in the Marine Corps. The Marine Option is available to a limited number of applicants. See course listing for description of courses in Marine Option curriculum.

LDS Missions

Subject to approval by the Chief of Naval Personnel, NROTC students may be granted a two-year leave of absence to serve on a church mission.

Supplemental Workshops

One or two per year treating subjects of current interest, e.g., topics of Defense Management, International Security, Maritime Strategy, Ocean Resources/Exploration and the like.

Summer Training

NROTC Scholarship Program students are required to participate in three summer training periods termed "summer cruises." The periods are normally of eight weeks duration and are taken during the summer following the freshmen, sophomore and junior years, respectively. NROTC College Program students are required to participate in one summer training period of 6-8 weeks duration. The "cruise" occurs at the end of the junior year. Marine option

students are required to complete Officer Candidate School (Bulldog) training in summer between Junior and Senior year.

Minor

Naval Science Minor

- **Mission:** The Navy ROTC Program was established to develop midshipmen mentally, morally, and physically; to imbue them with the highest ideals of duty, loyalty, and with the core values of honor, courage, and commitment in order to commission college graduates as naval officers who possess a basic professional background, are motivated toward careers in the naval service, and have a potential for future development in mind and character so as to assume the highest responsibilities of command, citizenship and government.
- **Program Prerequisites:** Students must be enrolled in a program leading to a Bachelor's degree at Weber State University. Students must also be enrolled in the NROTC program with the Navy Detachment at the University of Utah. (<https://nrotc.utah.edu/>)
- **Grade Requirements:** There are no course grade requirements, however there are term GPA requirements to remain in good standing with NROTC program (see the current NROTC Battalion Handbook for GPA minimums).
- **Credit Hour Requirements:** A total of 23 credit hours is required for the Navy Option; or 17 credit hours is required for the Marine Option.
- **Program Code:** 7059
- **CIPC:** 280401

Advising

Students wishing to take NAVS courses must be enrolled in the NROTC program at the University of Utah. Student should speak with an academic advisor in the Division of Online & Continuing Education at Weber State University to demonstrate their enrollment in the program and receive the appropriate cohort tag in their program of study to be able to register for NAVS courses.

Completion of the minor program requires enrollment in the NROTC program through the Naval Detachment at the University of Utah. NROTC program enrollment leads to commissioning in the US Navy or Marine Corps. Students interested in completing this program should contact the Executive Secretary at the University of Utah Department of Naval Science (nrotc@navsci.utah.edu or <https://nrotc.utah.edu/>).

Program Requirements

In addition to the course requirements, students are expected to maintain the academic and programmatic standards as part of NROTC program enlistment. These standards are listed in the NROTC Battalion Handbook, found at the University of Utah NROTC website (<https://nrotc.utah.edu/>). These requirements include, but are not limited to:

- Attendance in lab sections each week during the Fall and Spring semesters associated with courses.
- Term GPA requirements
- Mandatory training cruises lasting 2-6 weeks during the summer
- Dress and grooming standards including wearing of uniforms
- Standards of personal conduct
- Physical fitness requirements

Course Requirements for Minor

Complete one of the following options listed below:

Navy Option (23 credit hours)

- NAVS 1010 - Introduction to Naval Science **Credits: (2)**
- NAVS 1020 - Seapower and Maritime Affairs **Credits: (3)**
- NAVS 2000 - Leadership and Management **Credits: (3)**
- NAVS 2020 - Naval Ship Systems II: Naval Engineering **Credits: (3)**
- NAVS 3010 - Navigation **Credits: (3)**
- NAVS 3020 - Naval Operations and Navigation II **Credits: (3)**
- NAVS 4000 - Naval Ship Systems I: Weapons **Credits: (3)**
- NAVS 4020 - Leadership and Ethics **Credits: (3)**

Marine Option (17 credit hours)

- NAVS 1010 - Introduction to Naval Science **Credits: (2)**
- NAVS 1020 - Seapower and Maritime Affairs **Credits: (3)**
- NAVS 2000 - Leadership and Management **Credits: (3)**
- NAVS 2110 - Evolution of Warfare **Credits: (3)**
- NAVS 3110 - Fundamentals of Maneuver Warfare **Credits: (3)**
- NAVS 4020 - Leadership and Ethics **Credits: (3)**

College of Social & Behavioral Sciences Interdisciplinary Programs

Associate of Science

Social & Behavioral Science (AS)

- **Program Prerequisite:** No special admission or application requirements are needed for this program.
- **Minor:** Not required
- **Grade Requirements:** A grade of "C" or better is required to fulfill the Major Course Requirements. A minimum WSU GPA of 2.00 is required.
- **Credit Hour Requirements:** A minimum of 60 total credit hours are required, including all General Education requirements and at least 22 credit hours from the Major Course Requirements for AS Degree. Students should complete elective courses outside of the program requirements to meet the 60-credit hour minimum.
- **Program Code:** 7064AS
- **CIPC:** 45.0101

Advisement

All Social & Behavioral Sciences (SBS) students are required to meet with a CSBS Advisor during their first semester in the program. Advising appointments can be arranged through www.weber.edu/socialscience.

Admission Requirements

No special admission or application requirements are needed for this program. Declare your Program of Study using the Program of Study app in the Wildcat Portal, and make an appointment with one of the College of Social & Behavioral Science Advisors.

General Education Breadth Requirements

Student may not duplicate department for General Education Breadth requirements (courses with HU, CA, SS, PS, LS designations). Courses taken as part of the Discipline Tracks may count for one (1) Breadth requirement at most. Courses in other departments must be taken to complete any remaining Breadth requirements. The CSBS Advisors can answer questions about General Education requirements.

Program Learning Outcomes

1. Identify how disciplines are connected using the lens of social and behavioral sciences methods and skills.
2. Compare the themes and theories used by SBS disciplines to study the realm of people, politics and society.
3. Describe how your SBS courses influenced your continuing education pathway and desired career choice.
4. Create an academic plan to achieve the desired educational credentials.

Major Course Requirements

Complete one (1) of the SBS Intro Courses OPTIONS, three (3) of the SBS Discipline TRACKS, and the SBS Capstone Course.

SBS Intro Courses (3-4 credit hours)

Complete one (1) of the following OPTIONS:

OPTION 1

- SBS 1050 - Introduction to Social & Behavioral Sciences Bridge **Credits: (3)**

OPTION 2

- SBS 1100 - Introduction to Social & Behavioral Sciences **Credits: (1)**
- FYE 1105 - Foundations of College Success **Credits: (3)**

Discipline Track Courses (18 credit hours)

Complete three (3) of the SBS Discipline TRACKS. Each TRACK is 2-3 courses.

Anthropology Track (6 hours)

- ANTH 1000 SS/CC - Introduction to Anthropology **Credits: (3)**
- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3)** Or
- ANTH 1040 HU/CC - Language and Culture **Credits: (3)** Or
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)** Or

- ANTH 2030 SS/CC - Principles of Archaeology **Credits: (3)**

Criminal Justice Track (6 hours)

- CJ 1010 SS - Introduction to Criminal Justice **Credits: (3)**
- CJ 1300 - Corrections: History, Theory and Practice **Credits: (3)** Or
- CJ 1330 - Criminal Law and Courts **Credits: (3)** Or
- CJ 2300 - Policing: History, Theory and Practice **Credits: (3)**

Geography Track (6 hours)

- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)** Or
- GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions **Credits: (3)** Or
- GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change **Credits: (3)**

History Track (6 hours)

- HIST 1600 AI/CC - The Black Experience **Credits: (3)** Or
- HIST 1610 AI - The Latinx Experience **Credits: (3)** Or
- HIST 1620 AI/CC - The LGBTQ Experience **Credits: (3)** Or
- HIST 1700 AI - American History **Credits: (3)**
- HIST 1500 SS/CC/GLB - World History to 1500 C.E. **Credits: (3)** Or
- HIST 1510 SS/CC/GLB - World History from 1500 C.E. to the Present **Credits: (3)**

Philosophy Track (6 hours)

- PHIL 1000 HU/CC - Introduction to Philosophy **Credits: (3)**
- PHIL 2050 HU - Practical Ethics **Credits: (3)** Or
- PHIL 1250 HU - Critical Thinking **Credits: (3)** Or
- PHIL 2200 - Deductive Logic **Credits: (3)**

Political Science Track (6 hours)

- POLS 1010 SS/CC - Politics, Power, and the State **Credits: (3)**
- POLS 2100 SS SUS GLB - International Politics, Organizations, and Society **Credits: (3)** Or
- POLS 2200 SS GLB - Global Governments, Politics, and Societies **Credits: (3)** Or
- POLS 2300 SS - Introduction to Political Theory **Credits: (3)** Or
- POLS 2400 SS - Introduction to Law and Courts **Credits: (3)** Or
- POLS 2700 - Introduction to Public Administration **Credits: (3)**

Psychology Track (6 hours)

- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- PSY 2000 SS/CC - The Psychology of Human Relationships **Credits: (3)** Or
- PSY 2010 - Science and Profession of Psychology **Credits: (3)** Or
- PSY 2710 - Biopsychology **Credits: (3)**

Sociology Track (6 hours)

- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)** Or

- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- SOC 2370 - Gender and Society **Credits: (3)** Or
- SOC 2400 SS/CC - Introduction to Ethnic Studies **Credits: (3)** Or
- SOC 2600 - Families in Society **Credits: (3)**

Social Work Track (6 hours)

- SW 1010 SS CEL - Introduction to Generalist Social Work **Credits: (3)**
- SW 2100 SS - Human Behavior and the Social Environment I **Credits: (3)** Or
- SW 2200 SS/CC - Issues in Diversity **Credits: (3)**

SBS Capstone Course (1 credit hour)

Complete the following course.

- SBS 2950 - SBS Capstone: A Current Events View **Credits: (1)**

Minor

Queer Studies Minor/BIS

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisites:** A student's program of study for the Queer Studies Minor must be approved by the Queer Studies Coordinator.
- **Grade Requirements:** A grade of "C" or better is required for all courses used toward the minor (a grade of "C-" is not acceptable.)
- **Credit Hour Requirements:** A total of 18 credit hours is required for this minor, 9 credits from core courses and 9 from electives.
- **Program Code:** 7054
- **CIPC:** 050299

Queer Studies (QS) is a minor program, and Bachelor of Integrated Studies area of emphasis, which offers interdisciplinary, scholarly perspectives on the formation of sexuality and gender identity. Instead of conceptualizing these topics as unchangeable and only biologically driven, QS approaches these topics as they relate to the social construction of and their critical intersections with other relations of power such as race, ethnicity, class, nationality, religion, and age.

Faculty and students address questions within the context of a transnational world and from different disciplines, such as, but not limited to, history, literature, sociology, communication, psychology, social work, political science, and cultural studies.

Advisement

Use Grad MAPs to plan your degree

Core Courses (9 credit hours)

- WGS 1500 SS/CC - Introduction to Women, Gender, and Queer Studies **Credits: (3)**

- QS 3050 - Queer Theories **Credits: (3)**
- QS 4150 - Research Methods in Queer Studies **Credits: (3)** or
- QS 4860 - Internship in Queer Studies **Credits: (3)**

Elective Courses (9 credit hours)

- FAM 3660 - LGBTQ Families **Credits: (3)**
- HIST 1620 AI/CC - The LGBTQ Experience **Credits: (3)**
- HLTH 3500 - Human Sexuality **Credits: (3)**
- NEUR 4949 - The Neuroscience of Sex, Romance, and Gender **Credits: (3)**
- POLS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)**
- POLS 3400 - LGBTQ Politics **Credits: (3)**
- QS 2900 - Topics in Queer Studies **Credits: (3)**
- QS 3100 - LGBTQ America Since 1945 **Credits: (3)**
- QS 4830 - Directed Readings **Credits: (1-3)**
- QS 4900 - Topics in Queer Studies **Credits: (3)**
- SOC 2370 - Gender and Society **Credits: (3)**

If other courses relating specifically to Queer Studies, either of an experimental or permanent nature, are added to the curriculum, these courses will be accepted as electives for the QS Minor Program.

Women & Gender Studies Minor/BIS

This program has been suspended pending formal discontinuance and is no longer accepting new students.

Coordinator: Dr. Melina Alexander

Location: Lindquist Hall Room 336

Telephone Contact: Roe Schoof 801-626-7627

Women & Gender Studies is a minor program, and Bachelor of Integrated Studies area of emphasis, which offers interdisciplinary, scholarly perspectives on the formation of gender and its critical intersections with other relations of power such as sexuality, race, ethnicity, class, nationality, religion, and age.

Faculty and students address questions within the context of a transnational world and from different disciplines, such as, but not limited to, history, literature, sociology, communication, psychology, criminal justice, social work, political sciences, and cultural studies.

- **Program Prerequisite:** A student's program of study for the Women & Gender Studies Minor must be approved by the Women & Gender Studies Coordinator.
- **Grade Requirements:** A grade of "C" or better is required for all courses used toward the minor (a grade of "C-" is not acceptable.)
- **Credit Hour Requirements:** A total of 18 credit hours is required for this minor, 12 credits from core courses and 6 from electives.
- **Program Code:** 7048
- **CIPC:** 050207

Program Learning Outcomes

- Students will demonstrate knowledge of foundational and contemporary research and theoretical literature in the field of Women and Gender Studies.
 - Read, understand, and evaluate feminist theories and scholarship.
 - Identify, compare, and evaluate culturally and historically specific constructions of gender.
 - Articulate the ways in which systems of power, privilege, and oppression shape our experiences as individuals and members of communities.
- Students will apply their knowledge of women and gender studies.
 - Apply knowledge of women and gender studies by analyzing current social and political situations from those perspectives.

Course Requirements for Minor

Women and Gender Studies Courses Required (12 credit hours)

- WGS 1500 SS/CC - Introduction to Women, Gender, and Queer Studies **Credits: (3)**
- WGS 2500 SS/CC/GLB - Human Rights in the World **Credits: (3)**
- WGS 3050 - Introduction to Feminist Theories 1700 -- Present **Credits: (3)**
- WGS 4150 - Research Methodologies **Credits: (3)** or
- WGS 4250 INT - Community-Based Research/Internship **Credits: (3)**

Electives (6 credit hours)

A total of 6 credit hours of electives chosen in consultation with the Women and Gender Studies Coordinator. Electives may include up to 3 credit hours of Directed Readings.

- COMM 3090 - Gender and Communication **Credits: (3)**
- ENGL 2710 HU/CC - Perspectives on Women's Literature **Credits: (3)**
- GERT 3320 - Ethnicity and Older Women in the American Society **Credits: (3)**
- WGS 2000 - Risk, Resilience and Rock Climbing **Credits: (3)**
- HIST 3070 - Women in American History: 1600 to Present **Credits: (3)**
- PSY 2370 - Psychology of Women and Gender **Credits: (3)**
- PSY 3100 - Psychology of Diversity **Credits: (3)**
- WGS 4170 GLB - Gender, Power, and Global Politics **Credits: (3)**
- SOC 2370 - Gender and Society **Credits: (3)**
- WGS 2900 - Topics in Women's Studies **Credits: (1-3)** or
- WGS 4900 - Topics in Women's Studies **Credits: (1-3)**
- WGS 4830 - Directed Readings **Credits: (1-3)**

Note:

Should other courses relating specifically to Women or Gender Studies, either of an experimental or of a permanent nature, be added to the curriculum, these courses will be accepted as electives for the Women and Gender Studies Minor Program.

Dumke College of Health Professions

Dr. Yasmen Simonian, Dean

The Weber State University Dr. Ezekiel R. Dumke College of Health Professions, in cooperation with affiliated clinical facilities and other departments on the campus, offers an expanding program for the education and training of health care professionals. The programs emphasize an integration of the sciences, discipline-specific skills and knowledge, clinical experiences, and liberal arts which enable the graduate to make a maximum contribution to patient care as a member of the health care team.

All of the health and medical science education programs in the Dumke College of Health Professions share a common core curriculum. Students have the unique opportunity to meet and work together in their semesters of study, learning to apply the biomedical sciences and foster the team concept of health care to patient needs.

Associate Dean: Dr. Ken Johnson

Location: Marriott Allied Health Bldg., Suite 401

Telephone Contact: Ann Gessel, 801-626-7117

Admissions and Advisement: 801-626-6128

Department Chairs

Athletic Training: Dr. Valerie Herzog	801-626-7656
Dental Hygiene: Frances McConaughy	801-626-6829
Emergency Healthcare: Dr. William Robertson	801-626-8705
Health Sciences: Dr. Travis Price	801-626-6505
Health Administrative Services: Dr. Darcy Carter	801-626-7242
Medical Laboratory Sciences: Dr. Matthew Nicholaou	801-626-6118
School of Nursing: Dr. Rieneke Holman	801-626-6134
Radiologic Sciences: Dr. Tanya Nolan	801-626-8172
Respiratory Therapy: Dr. Mich Oki	801-626-7071

Certifications are offered in Medical Laboratory Assistant, Diagnostic Medical Sonography, Emergency Medical Technician, Nuclear Medicine, Athletic Training, Radiation Therapy and Radiologic Sciences (including emphases listed under Advanced Radiography and other Emphases program.)

Annie Taylor Dee School of Nursing

Chair: Rieneke Holman, PhD, RN

Location: Marriott Allied Health Building, Rm 437

Telephone Contact: Maleesa Morris (801) 626-6134

Graduate Programs Director: Melissa Neville-Norton, DNP, APRN, CPNP-PC

Location: Marriott Allied Health Building, Rm 438

Telephone Contact: (801) 626-7833

RN to BSN Director: Amy Buckway, EdD, RN

Location: Marriott Allied Health Building, Rm 432

Telephone Contact: Tiffany Bennett (801) 626-6122

Associate Degree Director: Tressa Quayle, MSN, RN

Location: Marriott Allied Health Building, Rm 435

Telephone Contact: (801) 626-7452

Enrollment Director: Robert Holt, MS

Telephone Contact: (801) 626-7774, prompt 6

Nursing Sim Lab Operations Manager: Kristine Bouwhuis, MSRT, RRT, NPS, ACCS

Telephone Contact: Ogden (801) 626-6646, Davis (801) 395-3483

WSU/B Tech Contractual Program Campus Facilitator:

Yvonne Manning, MSN Ed, RN

Location:

Logan, UT

Program Contact:

Jake Angell, (435) 798-1234

WSU/Davis Tech Contractual Program Campus Facilitator:

Leslie Mock, MSN, RN

Location:

Kaysville, UT

Program Contact:

Renee Magnussen, (435) 798-1234

WSU/O Tech Contractual Program Campus Facilitator:

Cherie Crezee, MSN Ed, RN

Location:

Ogden, UT

Program Contact:

Judith Rodriguez, (435) 798-1234

Professors: Valerie Gooder, PhD, MS, RN; London Draper Lowe, PhD, RN; Melissa Neville-Norton, DNP, APRN, CPNP-PC; Kristiann Williams, DNP, APRN; **Associate Professors:** Kristy Baron, PhD, RN; Tamara Berghout, EdD, RN; Amy Buckway, EdD, RN; Kathleen Cadman, PhD, RN; Heather Clark, DNP, RN; Diane Leggett Fife, PhD, RN; Rieneke Holman, PhD, RN; Jon Kelly, MNA, RN; Mary Anne Reynolds, PhD, RN, ACNS-BC; Elizabeth Rocha, PhD, RN; Holli Sowerby, EdD, RN; Jamie Wankier, MSN, RN; **Assistant Professors:** Rachel Ardern, DHSc, RN; Cynthia Beynon, PhD, RN; Jaylynn Gold, MSN, RN; Catherine Harmston, DNP, FNP-BC, RN; Susan Heugly, FNP, RN; Tiffany Hood, MSN, RN, CNE; Carrie Jeffrey, MSN, RN; Anne Kendrick, MSN, RN; Constance Merrill, MSN, RN; Tressa Quayle, MSN, RN; Kelley Trump, DNP, RN; **Instructors:** Suzanne Ballingham, MSN-FNP, RN; Joyce Barra, PhD, MS, RN; Eric Bottelberghe, MSN, RN, CHPN; Monica Bottelberghe, MSN, RN; Lisa Carver, MSN, APRN, ACNP, BC; Kaylene Chalmers, MSN, RN; Amber Fowler, DNP, RN; Kasey Grubb, MSN, RN; Vicky Hansen, MSN, RN; Janelle Harvey, MSN, RN; Benjamin Johnson, MSN, RN; Michael Johnson, MSN, RN; Laura Jones, MSN, RN; Michele Morrill, MSN, RN; Kyra Neeley, MSN, RN; Deon Openshaw, MSN, RN; Angela Page, MSN, APRN; Tyandra Perez, MSN, RN; Chelsea Pike, MSN, RN; Autumn Rafford, MSN, RN, FNP-C; Trisha Small, MSN, RN; JoAnn Spencer, MSN, RN; Mitchell Standing, MSN, RN; Marlene Summers, MSN, RN; JoAnn Tolman, MSN, RN; Jodi Waddoups, MSN, RN, NPD-BC, RN-BC; Nancy Weston, MSN, RN; Stephanie Wheatley, MSN, FNP-C

Program History

Founded in 1953, nursing at Weber State University offers students career progression from Associate RN Degree to Associate of Science (PN to RN) or Associate of Applied Science Degree Nursing (AAS) (PN to RN), to Baccalaureate Nursing (BSN), to Master of Science in Nursing via a ladder curriculum. The curriculum model enables student

progression through various preparation levels in accordance with individual ability, aspirations, career goals and changing life circumstances. The program ensures entry level practitioners by providing a foundation from the physical, biological, behavioral and nursing sciences for application in caring for clients in a variety of nursing environments.

The nursing program embraces three levels of preparation for nursing practice: Associate's Degree Nursing (ADN), RN to BSN (BS), and Master of Science in Nursing (MSN). Educational offerings provide distinctive purposes and expectations for each level of nursing preparation while recognizing common areas of achievement within each level. Competency standards define graduate characteristics at each preparation level.

Four entry options are available for students. Two of these lead to licensure by examination at AS/AAS levels. The third option leads to a baccalaureate degree in nursing. The fourth option leads to a master of science in nursing with either a concentration in nursing administration or nursing education.

Entry Options

Registered Nurse (RN) [AS]: Two years are required for students entering this option. Students selecting this option must complete nursing major credits plus fulfill university general education credits required for graduation with an associate of science degree. Students selected for an associate of science degree in nursing may take the NCLEX-PN through the equivalency clause in the Utah Nurse Practice Act at completion of the first year. An additional year of course work entitles graduates to take the National Examination for licensure as a registered nurse.

PN to RN Program (RN Completion) [AS/AAS]: This entry option is open to PN's and those eligible to take the NCLEX-PN. Students selecting this option must complete one additional year of nursing major credits plus fulfill university general education credits required for graduation with an associate of applied science / associate of science degree.

Registered Nurse to BSN (RN-to-BSN) [BS]: The BSN Option is available to registered nurses who have completed an AS degree in nursing. Potential students must have an active unencumbered Utah license or plan to successfully pass the NCLEX-RN exam within the first semester of the BSN program.

Previous graduates of an AAS degree will need to complete the WSU general education requirements for the AS Degree prior to requesting admission to the RN to BSN program.

Admission is dependent upon program space availability.

Master of Science in Nursing (MSN): The MSN program is designed to prepare 1) nurse administrators, 2) college-level nursing faculty, and 3) nurse educators employed within healthcare institutions. The concentrations of nursing educator and nurse administrator will prepare students for advanced careers in nursing. Both concentrations are specifically intended for individuals with nursing experience who want to advance their careers as nurse administrators or college faculty.

Please refer to Master of Science in Nursing (MSN) for requirements.

Licensure

Applicants who have been convicted of a felony, treated for serious mental illness or substance abuse should discuss their eligibility status with the Utah State Board of Nursing. Acceptance to the nursing program does not assure eligibility for a RN license. The Utah Board of Nursing makes final decisions on issuance of professional licensure.

Accreditation

The School of Nursing programs (AAS/AS, BSN, and MSN) are accredited by:

Accreditation Commission for Education in Nursing (ACEN)
3343 Peachtree Road NE, Suite 850
Atlanta, GA 30326
P. 404.975.5000
F. 404.975.5020
www.acenursing.org

Admission Process For Entry Options

Admission is competitive; therefore, the listed criteria for admission should be considered as minimum standards.

Associate of Science Degree Nursing (RN)

DCHP Admission Office (801) 626-6136

Applicants for admission must first apply for admission to Weber State University. Applicants must also apply for admission to the Associate of Science Degree Nursing program. Dr. Ezekiel R. Dumke College of Health Professions Admissions Advisement Office in the Marriott Allied Heath Building (MAH108B) or complete application information and forms are available on the School of Nursing website at <http://weber.edu/nursing>. Applications must be completed and on file by the admission cycle application deadline. An application fee must be paid at the time the application is submitted. Admission applications are reviewed by the School of Nursing Admissions and Advancement Committee. Applicants are notified of committee decision by mail.

All prerequisite courses must be successfully completed with a "C" grade or better in order to advance into the first semester of the nursing program. Admission requirements are outlined on the admissions application available at <http://weber.edu/nursing>.

Associate of Science/Associate of Applied Science Degree (PN-to-RN)

Enrollment Director (801) 626-7774, prompt 6

Applicants for admission must first apply for admission to Weber State University. Applicants must also apply for admission to the Associate Degree Nursing program. Applications are available on the School of Nursing website at <http://weber.edu/nursing>. Applications must be completed and on file by the admission cycle application deadline. An application fee must be paid at the time the application is submitted. Admission applications are reviewed by the School of Nursing Admissions and Advancement Committee. Applicants are notified of committee decision by mail. Applicants to this program must have an LPN license or be eligible for testing for the NCLEX-PN exam.

All prerequisite courses must be successfully completed with a "C" grade or better in order to advance into fall the third semester of the nursing program. Admission requirements are outlined on the admissions application available at <http://weber.edu/nursing>.

Bachelor of Science Degree (RN-to-BSN)

School of Nursing Enrollment Director (801) 626-7774, prompt 6

Applicants must first apply for admission to, or be a current matriculated student of, Weber State University. Applicants must also apply for admission to the Bachelor of Science Degree Nursing program.

Applications must be completed and on file by the admission cycle application deadline. An application fee must be paid at the time the application is submitted. Admission applications are reviewed by the School of Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by mail. Admission requirements are outlined at <http://weber.edu/nursing>.

Master of Science in Nursing (MSN)

Enrollment Director (801) 626-7774, prompt 6

Minimum Admission Requirements:

Applicants should apply for admission to Weber State University or be a current matriculated student of Weber State University.

The online process for application to the MSN program becomes available in October of each year at weber.edu/MSN. The priority application deadline is March 1. *Admission is for fall each year. Applicants will need to make a choice between the Administrative or Education Concentration on their application.*

An application fee must be paid at the end of the online application process. Admission applications are reviewed and evaluated by the Nursing Program Admissions and Advancement Committee. For more information please contact School of Nursing Enrollment Director at (801) 626-7774, prompt 6.

Please refer to Master of Science in Nursing (MSN) for requirements.

Associate of Applied Science

Nursing, PN-to-RN [RN Completion] (AAS)

The AAS Degree is one of two options for RN Completion (PN-to-RN)

- **Grade Requirements:** A minimum grade of "B-" in all Nursing courses in addition to a grade of "C" in each prerequisite and support course.
- **Credit Hour Requirement:** A minimum of 63 credit hours is required for the AAS. This includes Practical Nursing Program nursing courses (18 hours), 20 credit hours of RN curriculum, and 25-29 credit hours of non-nursing, made up of pre-requisites, General Education, and required support courses.
- **Program Code:** 2009AAS
- **CIPC:** 513801

Advisement

Admission Requirements

School of Nursing Enrollment Director at (801) 626-7774, prompt 6.

Admission is competitive; therefore, the criteria listed on the application form should be considered as minimum standards.

Applicants for admission must first apply for admission to Weber State University. Applicants must also apply for admission to the Associate Degree Nursing Program. Applications may be obtained on the School of Nursing website. Applications must be completed and on file by the admission cycle application deadline. An application fee must be paid at the time the application is submitted. Admission applications are reviewed by the School of Nursing Admissions and Advancement Committee. Applicants are notified of committee decision by mail. Applicants to this program must have an LPN license or be eligible for testing for the NCLEX-PN exam. Accepted applicants must have their PN license prior to the end of their third semester.

All prerequisite courses must be successfully completed with a "C" grade or better in order to advance into the third semester of the nursing program. Admission requirements are outlined on the admissions application.

Program Learning Outcomes

- Patient Centered Care: Use nursing knowledge to include the patient in all care processes and decisions. Design and implement care which is adapted and centered on the unique wholeness of the individual patient and their family.
- Teamwork and Collaboration: Promote collaborative clinical decision making with nursing and interdisciplinary colleagues through implementation of effective communication and team building skills.
- Evidence-based Practice: Make judgments in practice substantiated with evidence that integrates nursing science and knowledge to provide competent care to individuals and families.
- Quality Improvement: Monitor patient care outcomes to measure the effectiveness of patient care processes. Suggest and implement changes to improve the quality and safety of patient care.
- Patient Safety: Incorporate patient safety goals into the plan of care for all patients.
- Informatics: Use information and technology to communicate, manage knowledge, mitigate error, and support decision making when providing direct patient care.

Major Course Requirements for PN-to-RN (RN Completion) AAS Option

Nursing Courses Required

The following courses must be taken in sequence. PN to RN students start in the 3rd semester of the associate degree program.

Third Semester

- NRSG 2500 - Patient-Centered Nursing Care II **Credits: (3)**
- NRSG 2551 INT/CEL - Patient-Centered Nursing Care Experience II **Credits: (4.5)**
- NRSG 3100 - Pharmacology for Nurses III **Credits: (3)**

Fourth Semester

- NRSG 3200 - Complex Patient Centered Nursing Care **Credits: (3)**
- NRSG 3300 - Entry Into Nursing Professional Practice **Credits: (3.5)**
- NRSG 3350 INT/CEL - Entry Into Nursing Professional Practice Capstone **Credits: (3)**

Prerequisite/Support Courses Required

The following courses must be taken in sequence listed or earlier. Prerequisite and support courses must be completed and passed with a "C" or better prior to progression to the next semester.

Nursing Prerequisite

- ***Licensed as a Licensed Practical Nurse (LPN) or Utah PN-NCLEX eligible with passing LPN Boards during semester three.***

- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
OR
- CHEM 1130 PS - Introduction to General, Organic & Biochemistry **Credits: (4)** and
- CHEM 1135 - Introduction to General, Organic & Biochemistry Lab **Credits: (1)**
- WSU Math QL Requirement
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
OR
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

Additional Education Prerequisites

- CHF 1500 SS/CC - Human Development **Credits: (3)** or
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**

Third Semester

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**

Fourth Semester

- HU or CA Humanities or Creative Arts (3)

Associate of Science

Nursing (AS)

- **Grade Requirements:** A minimum grade of "B-" in all Nursing courses in addition to a grade of "C" in each support course.
- **Credit Hour Requirement:** The AS in Nursing is approximately 76-80 credit hours. This includes 38-42 credit hours of General Education and 38 Nursing credit hours. Twenty residency hours are also required.
- **Program Code:** 2009AS
- **CIPC:** 513801

Advisement

Contact the DCHP Admissions Office at (801) 626-6136 for admission advisement.

Admission Requirements

Admission is competitive; therefore, the criteria listed on the application form should be considered as minimum standards.

Applicants for admission must first apply for admission to Weber State University. Applicants must also apply for admission to the Associate of Science Degree Nursing Program. Dr. Ezekiel R. Dumke College of Health Professions Admissions Advisement Office in the Marriott Allied Health Building (MAH108B) or complete application information and forms are available on the School of Nursing website. Applications must be completed and on file by the admission cycle application deadline. An application fee must be paid at the time the application is submitted. Admission applications are reviewed by the School of Nursing Admissions and Advancement Committee. Applicants are notified of committee decisions by mail. Applicants to this program must have a current CNA or EMT certificate in order to apply.

All prerequisite courses must be successfully completed with a "C" grade or better in order to advance into the first semester of the nursing program. Admission requirements are outlined on the admissions application.

Program Learning Outcomes

- Patient Centered Care: Use nursing knowledge to include the patient in all care processes and decisions. Design and implement care which is adapted and centered on the unique wholeness of the individual patient and their family.
- Teamwork and Collaboration: Promote collaborative clinical decision making with nursing and interdisciplinary colleagues through implementation of effective communication and team building skills.
- Evidence-based Practice: Make judgments in practice substantiated with evidence that integrates nursing science and knowledge to provide competent care to individuals and families.
- Quality Improvement: Monitor patient care outcomes to measure the effectiveness of patient care processes. Suggest and implement changes to improve the quality and safety of patient care.
- Patient Safety: Incorporate patient safety goals into the plan of care for all patients.
- Informatics: Use information and technology to communicate, manage knowledge, mitigate error, and support decision making when providing direct patient care.

Major Course Requirements for AS Degree

Nursing Courses Required

The following courses must be taken in sequence.

First Semester

- NRSG 2100 - Pharmacology for Nurses I **Credits: (1.5)**
- NRSG 2200 - Nursing Foundations **Credits: (3)**
- NRSG 2251 INT/CEL - Foundations of Nursing Lab and Clinical **Credits: (4.5)**

Second Semester

- NRSG 2300 - Patient-Centered Nursing Care I **Credits: (3)**
- NRSG 2351 INT/CEL - Patient-Centered Nursing Care Experience I **Credits: (4.5)**
- NRSG 2700 - Pharmacology for Nurses II **Credits: (1.5)**

Third Semester

- NRSG 2500 - Patient-Centered Nursing Care II **Credits: (3)**
- NRSG 2551 INT/CEL - Patient-Centered Nursing Care Experience II **Credits: (4.5)**
- NRSG 3100 - Pharmacology for Nurses III **Credits: (3)**

Fourth Semester

- NRSG 3200 - Complex Patient Centered Nursing Care **Credits: (3)**
- NRSG 3300 - Entry Into Nursing Professional Practice **Credits: (3.5)**
- NRSG 3350 INT/CEL - Entry Into Nursing Professional Practice Capstone **Credits: (3)**

Prerequisite/Support Courses Required

The following courses must be taken in the sequence listed or earlier. Prerequisite and support courses must be completed and passed with a "C" or better prior to progression to the next semester.

- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
OR
- CHEM 1130 PS - Introduction to General, Organic & Biochemistry **Credits: (4)** and
- CHEM 1135 - Introduction to General, Organic & Biochemistry Lab **Credits: (1)**
- WSU Math QL Requirement
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
OR
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

Additional General Education and Support Courses

American Institution (AI), Humanities (HU), and Social Science (SS) General Education Requirements must be completed before the third semester.

- CHF 1500 SS/CC - Human Development **Credits: (3)** or
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- Additional WSU Gen Ed Courses for Core, Breadth, and Degree Requirements for Associate of Science Degree

Nursing PN-to-RN [RN Completion] (AS)

The AS Degree is one of two options for PN-to-RN (RN Completion)

- **Grade Requirements:** A minimum grade of "B-" in all Nursing courses in addition to a grade of "C" in each support course.
- **Credit Hour Requirement:** The AS for RN Completion is approximately 76-80 credit hours. This includes Practical Nursing Program nursing courses (18 hours), 20 credit hours of RN curriculum, 38-42 credit hours required of non-nursing, made up of pre-requisites, General Education, and required support courses.

- **Program Code:** 2009AS
- **CIPC:** 513801

Advisement

Admission Requirements

Contact the School of Nursing Enrollment Director at (801) 626-7774, prompt 6, for admission advisement.

Admission is competitive; therefore, the criteria listed on the application form should be considered as minimum standards.

Applicants must first apply for admission to Weber State University. Applicants must also apply for admission to the PN to RN (RN Completion) Program. Admission times and deadlines vary according to campus location. For applications and deadline information, please contact the School of Nursing Enrollment Director. Admission applications are reviewed and evaluated by School of Nursing Admissions and Advancement Committee. Applicants are notified of committee decision by mail. Admission requirements are outlined on the admissions application. Applicants to this program must have an LPN license or be eligible for testing for the NCLEX-PN exam. Accepted applicants must have their PN license prior to the end of their third semester.

All prerequisite courses must be successfully completed with a "C" grade or better in order to advance into the third semester of the nursing program. Admission requirements are outlined on the admissions application.

Program Learning Outcomes

- **Patient Centered Care:** Use nursing knowledge to include the patient in all care processes and decisions. Design and implement care which is adapted and centered on the unique wholeness of the individual patient and their family.
- **Teamwork and Collaboration:** Promote collaborative clinical decision making with nursing and interdisciplinary colleagues through implementation of effective communication and team building skills.
- **Evidence-based Practice:** Make judgments in practice substantiated with evidence that integrates nursing science and knowledge to provide competent care to individuals and families.
- **Quality Improvement:** Monitor patient care outcomes to measure the effectiveness of patient care processes. Suggest and implement changes to improve the quality and safety of patient care.
- **Patient Safety:** Incorporate patient safety goals into the plan of care for all patients.
- **Informatics:** Use information and technology to communicate, manage knowledge, mitigate error, and support decision making when providing direct patient care.

Major Course Requirements for PN-to-RN (RN Completion) AS Option

Nursing Courses Required

The following courses must be taken in sequence. PN to RN students start in the 3rd semester of the associate degree program.

Third Semester

- NRSG 2500 - Patient-Centered Nursing Care II **Credits: (3)**
- NRSG 2551 INT/CEL - Patient-Centered Nursing Care Experience II **Credits: (4-5)**

- NRSG 3100 - Pharmacology for Nurses III **Credits: (3)**

Fourth Semester

- NRSG 3200 - Complex Patient Centered Nursing Care **Credits: (3)**
- NRSG 3300 - Entry Into Nursing Professional Practice **Credits: (3.5)**
- NRSG 3350 INT/CEL - Entry Into Nursing Professional Practice Capstone **Credits: (3)**

Prerequisite/Support Courses Required

The following courses must be taken in sequence listed or earlier. Prerequisite and support courses must be completed and passed with a "C" or better prior to progression to the next semester.

Nursing Prerequisite

- Licensed as a Licensed Practical Nurse (LPN) or Utah PN-NCLEX eligible with passing LPN Boards during semester three.
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
OR
- CHEM 1130 PS - Introduction to General, Organic & Biochemistry **Credits: (4)** and
- CHEM 1135 - Introduction to General, Organic & Biochemistry Lab **Credits: (1)**
- WSU Math QL Requirement
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
OR
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

Additional Prerequisites

- CHF 1500 SS/CC - Human Development **Credits: (3)** or
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- Additional WSU Gen Ed Courses for Core, Breadth and Degree Requirements to meet an Associate of Science Degree

Third Semester

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**

Fourth Semester

- Gen Ed HU or CA Humanities or Creative Arts (3)
- Gen Ed IL Information Literacy (1)
- Gen Ed CA Creative Arts (3)

Bachelor of Science

Nursing, RN-to-BSN (BS)

- **Admission Requirements:** Graduate of an Accreditation Commission for Education in Nursing (ACEN) Program or equivalent program. A challenge examination may be required for those graduating from an equivalent program. Current licensure as a registered nurse in the State of Utah without restrictions is required.
- **Minor:** Not required.
- **Grade Requirements:** A minimum grade of "B-" or better is required in all upper division nursing courses, and a grade of "C" or better is required for all support courses.
- **Credit Hour Requirements:** A total of 120 credit hours is required for a Bachelor of Science Degree. Of the 120 hours, 40 must be upper division level. The BSN nursing curriculum provides 28 upper division hours.
- **Program Code:** 2009BS
- **CIPC:** 513801

Advisement

Admission Requirements

Contact the School of Nursing Enrollment Director at (801) 626-7774, prompt 6, for admission advisement.

Admission is competitive; therefore, the criteria listed on the application form should be considered as minimum standards.

Applicants must first apply for admission to, or be a current matriculated student of, Weber State University. Applicants must also apply for admission to the Bachelor of Science Degree Nursing program. Applications may be obtained through the School of Nursing Enrollment Director.

Applications must be completed and on file by the admission cycle application deadline. An application fee must be paid at the time the application is submitted. Admission applications are reviewed by the School of Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by mail. Admission requirements are outlined on the applicant website available at <http://weber.edu/nursing>.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Program Learning Outcomes

- **Patient Centered Care:** Integrate nursing expertise to include the patient in all care processes and decisions. Collaborate with patients, families, and communities to design unique and dynamic patient centered care environments.
- **Teamwork and Collaboration:** Evaluate the ability to use effective communication and collaboration skills when working with patients, families, and colleagues. Adapt communication, leadership, and teambuilding skills, to promote quality, competent and successful decision-making by nursing and collaborative interdisciplinary teams.

- Evidence-based Practice: Make judgments in practice substantiated with evidence that synthesizes nursing science and knowledge and integrate in the provision of competent care to individuals, families, and communities.
- Quality Improvement: Monitor outcomes to apply evidence-based interventions to improve the quality of health care systems.
- Patient Safety: Generate patient safety plan based on patient safety goals.
- Informatics: Use information and technology to communicate, manage knowledge, mitigate error, and support decision making in a variety of patient care and community settings.

Prerequisites

Students must have completed the following courses or equivalents.

- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
OR
- CHEM 1130 PS - Introduction to General, Organic & Biochemistry **Credits: (4)** and
- CHEM 1135 - Introduction to General, Organic & Biochemistry Lab **Credits: (1)**

Human Anatomy and Human Physiology (8 cr)*

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
**previous course numbers 111, 112, and 113 are acceptable equivalents.*

- PSY 1010 SS - Introductory Psychology **Credits: (3)** or
- CHF 1500 SS/CC - Human Development **Credits: (3)**
- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**

WSU Quantitative Literacy Requirement

- MATH 1030 QL - Contemporary Mathematics **Credits: (3)** or
- MATH 1050 QL - College Algebra **Credits: (4)** or
- MATH 1080 QL - Pre-calculus **Credits: (5)**

Major Course Requirements for BS Degree (RN to BSN)

Nursing Courses Required (25 credit hours)

Complete the following courses:

- NRSG 4100 - Care Coordination and Interdisciplinary Collaboration for Safe Patient Outcomes **Credits: (3)**
- NRSG 4200 SUS - Scholarship for Evidence-Based Practice **Credits: (3)**
- NRSG 4300 - Healthcare Policy and Decision Making **Credits: (3)**
- NRSG 4400 SUS/CEL - Population Health in Nursing **Credits: (4)**
- NRSG 4500 - Nursing Management and Leadership **Credits: (3)**
- NRSG 4600 - Communication, Collaboration, and Information Management in Healthcare **Credits: (3)**

Select six (6) credit hours from the following courses:

- NRSG 4045 - ELNEC: End-of-Life Nursing Education Consortium **Credits: (3)**
- NRSG 4050 - Nursing Assessment Across the Life Span **Credits: (3)**
- NRSG 4060 - Oncology Nursing **Credits: (3)**
- NRSG 4070 - Disaster Nursing **Credits: (3)**
- NRSG 4080 - Adult Critical Care **Credits: (3)**
- NRSG 4090 - Nursing: High Risk OB/Pediatric Patient **Credits: (3)**
- NRSG 4700 - Forensic Nursing **Credits: (3)**
- HAS 3240 - Human Resource Development in Healthcare **Credits: (3)**
- NRSG 3400 - Mental Health: The Complex Role **Credits: (3)**
- NRSG 4022 - Nursing Care of the Trauma Patient **Credits: (3)**

Upper Division Elective (3 credit hours)

Complete 3 hours of upper division credits from any department.

Post Baccalaureate Certificate

Occupational Health Nursing Post Baccalaureate Certificate

The graduate certificate in Occupational Health Nursing (OHN) provides BSN level nurses to obtain education and training that will prepare the student for the certifying board examination and to enter and excel in the exciting world of occupational health. The graduate certificate will satisfy 2000 of the required 3000 hours of work experience to be eligible to take the certifying board examination. A Certified Occupational Health Nurse (COHN) is qualified to work in private companies, hospitals, clinics, labor organizations, consulting, academia, government, and many other settings. COHNs perform nursing, health promotion, health and safety assessments, safety program management, case management, counseling and crisis management, legal and regulatory compliance and nearly any activity related to managing the health of a workforce.

- **Grade Requirements:** All courses in the program must be completed with a grade of "B-" or higher and maintain an overall program GPA of 3.0 or higher.
- **Program Code:** 2095PBC
- **CIPC:** 513815

Required Courses

- NRSG 6010 - Fundamentals of Occupational Health Nursing **Credits: (3)**
- NRSG 6020 - Occupational Health Nursing Role Development **Credits: (3)**
- OEHS 6370 - Occupational Epidemiology **Credits: (3)**
- OEHS 6750 - Fundamentals of Industrial Hygiene **Credits: (3)**
- OEHS 6760 - Management and Administration of Occupational Environmental and Safety Programs **Credits: (3)**

Department of Athletic Training and Occupational Therapy

Department Chair: Valerie Herzog, EdD, LAT, ATC

Location: Reed K. Swenson Building, Room 224

Telephone Contact: Margarita Lopez 801-626-8631 **Professor:** Valerie Herzog; **Associate Professor:** Matthew Donahue; **Assistant Professors:** Conrad Gabler, Robyn Thompson; **Instructor:** Rhonda Roth, Joshua Sponbeck, Hannah Stedje

The Department of Athletic Training (AT) in the Dr. Ezekiel R. Dumke College of Health Professions, offers programs that educate students in the prevention, evaluation, management, and rehabilitation of injuries and illnesses.

The variety of teaching environments and facilities are supported by faculty with diverse expertise and offer graduate and undergraduate students exceptional educational, clinical, and research experiences. The state-of-the-art facilities, including fully equipped laboratory classrooms, research labs, and hydrotherapy pool provide outstanding opportunities for student instruction and research. With curriculums designed to develop professional knowledge and skills, graduates from the department are prepared for careers in athletic training (via the MS in Athletic Training), or professional graduate programs in athletic training, physical therapy, occupational therapy, physician's assistant, and medicine (via the BS in Athletic Therapy).

The department of Athletic Training offers a Master of Science degree in athletic training, and Bachelor of Science degrees in athletic therapy and athletic training. *Note that the BS in Athletic Training is being phased out and is no longer accepting students.*

The department also supports the efforts of undergraduates seeking the bachelor of integrated studies degree, offering sports medicine as an emphasis for the BIS Program.

See also Master of Science in Athletic Training (MS).

Courses

Course Descriptions - RHS

Bachelor of Science

Occupational Therapy Assistant (BS)

The Occupational Therapy Assistant (OTA) program at Weber State University will prepare students to become certified, licensed OTAs equipped to assist occupational therapists in supporting individuals who face challenges in performing daily activities due to illness, injury, or disability. This program emphasizes both theoretical knowledge and practical skills, combining classroom instruction with hands-on fieldwork to ensure students are prepared to meet the diverse needs of clients across the lifespan—from pediatrics to geriatrics. OTAs work closely with occupational therapists to help clients acquire or regain essential daily living skills, such as dressing, eating, and meal preparation, using evidence-based practices to improve quality of life through meaningful and therapeutic activities.

Graduates of Weber State's OTA program will be qualified to sit for the National Board for Certification in Occupational Therapy (NBCOT) exam, enabling them to obtain licensure to practice in Utah and other states within the US. The program also lays a foundation for students interested in pursuing further education in occupational therapy, providing the essential skills and experience needed for graduate studies.

- **Grade Requirements:** Students must achieve a B- or higher in all prerequisite and major classes
- **Credit Hour Requirements:** Total Degree Credits: 122-125 Total Upper Division Credits: 61
- **Program Code:** 2099BS
- **CIPC:** 510803

Advisement

Students will receive advising from existing academic advisors in Dumke College of Health Professions and the Department of Athletic Training at Weber State University.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Most general education requirements for the BS degree are taken as prerequisites to the program. However, students must complete all Bachelor of Science general education requirements to earn the degree in Occupational Therapy Assistant.

Admission Requirements

Students must apply to and be accepted into the OTA program to be admitted into any of the courses offered by and required for a degree in Occupational Therapy Assistant. Occupational therapy assistant students will progress through the curriculum as a cohort. Students will apply to the OTA program the spring of their sophomore year. Students will begin the OTA program as a cohort in the fall of their junior year. The science and all prerequisite courses are listed below and must be completed with a minimum GPA of 2.5 prior to being admitted into the program. These basic science courses must have been taken within five years of the date of anticipated enrollment in the Occupational Therapy Assistant program.

Selective Admissions requirements will include:

1. Completion of OTA program prerequisites with a B- or above
2. Performance scores as measured by rubric on prompted questions on a proctored essay.

Program Learning Outcomes Program Learning Outcomes for the Occupational Therapy Assistant Program at Weber State University:

1. **Develop Foundational Knowledge and Competence:** Demonstrate a comprehensive understanding of occupational therapy principles and acquire entry-level competence to practice as a generalist in both emerging and traditional practice settings, addressing the diverse needs of individuals, groups, and communities.
2. **Apply the Occupational Therapy Process:** Integrate the core elements of the occupational therapy process, as defined by the Occupational Therapy Practice Framework (OTPF), to deliver client-centered, therapeutic interventions that enhance meaningful participation in daily life.
3. **Utilize Evidence-Based Practice:** Synthesize scientific evidence, theories, models, and frameworks to implement evidence-based, innovative, and effective occupational therapy interventions that advance health, well-being, and quality of life.
4. **Embrace Professional Ethics and Cultural Sensitivity:** Uphold the ethical standards, values, and attitudes of the occupational therapy profession by demonstrating sensitivity, equity, and responsiveness to the unique cultural and personal needs of clients.
5. **Commit to Lifelong Learning and Professional Growth:** Demonstrate a dedication to lifelong learning by actively engaging in professional development, scholarship, and reflective practice to enhance occupational therapy service delivery.
6. **Advocate for Collaborative Practice and Professional Roles:** Advocate for the distinct yet collaborative roles of occupational therapy assistants and occupational therapists, fostering intra and interprofessional partnerships to improve service delivery and contribute to the advancement of the profession.
7. **Foster Leadership and Community Impact:** Develop leadership skills to engage in advocacy, education, and community partnerships that promote health equity, inclusion, and participation for diverse populations.

Prerequisite Courses (42-45 credit hours)

- OTA 1010 - Introduction to Occupational Therapy **(3)**
- HTHS 1101 - Medical Terminology **(2)**
- RHS 1550 - Introduction to Rehabilitation Sciences **(2)**
- RHS 1300 - First Aid: Responding to Emergencies **(2)**
- PSY 1010 SS - Introductory Psychology **(3)**
- PSY 3010 - Psychopathology **(3)**
- ZOOL 1610 LS - Principles of Zoology **(4)**
- CHF 1500 SS/CC - Human Development **(3)**

Either

- ENGL 2010 EN2 - Intermediate College Writing **(3)**
- ENGL 2015 EN2 - Intermediate College Writing & Research **(4)**

Either

- MATH 1040 QL - Introduction to Statistics **(3)**
- MATH 1050-MATH 1080 Another Gen Ed Math Course (4-5)

Either

- COMM 1020 HU - Principles of Public Speaking **(3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **(3)**

Either

- SOC 1010 SS/CC - Introduction to Sociology **(3)**
- ANTH 1000 SS/CC - Introduction to Anthropology **(3)**

Either

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **(4)** and HTHS 2111 - Integrated Human Anatomy and Physiology II **(4)**
- ZOOL 2320 - Human Anatomy **(4)** and ZOOL 2420 LS - Human Physiology **(4)**

Major Course Requirements

Required Courses (61 credit hours)

- OTA 3000 - Foundations of Theory and Practice in Occupational Therapy **Credits: (2)**
- OTA 3100 - Occupational Therapy and Physical Dysfunction Lecture **Credits: (3)**
- OTA 3105 - Occupational Therapy and Physical Dysfunction Lab **Credits: (3)**
- ESS 3450 - Structural Kinesiology **Credits: (3)**
- OTA 3200 - Essential Components of Function and Movement for the Occupational Therapy Practitioner **Credits: (3)**
- OTA 3400 - Pediatric and Adolescent Occupational Therapy Practice Lecture **Credits: (3)**
- OTA 3405 - Pediatric/Adolescent Occupational Therapy Skills Lab **Credits: (3)**
- OTA 3500 - Pediatric Occupational Therapy Practicum/Fieldwork 1 **Credits: (2)**
- OTA 3600 - Research Methods in Occupational Therapy **Credits: (2)**
- OTA 3700 - Patient Interaction and Professional Issues I **Credits: (2)**
- OTA 3800 - Leadership and Management in Occupational Therapy **Credits: (3)**
- OTA 4000 - Psychosocial Issues and Occupational Therapy Practice Lecture **Credits: (3)**
- OTA 4005 - Psychosocial Issues and Occupational Therapy Practice Lab **Credits: (3)**
- OTA 4100 - Geriatric Practice in Occupational Therapy **Credits: (2)**

- OTA 4200 - Geriatric-Psychosocial Practicum-Fieldwork 1 **Credits: (2)**
- OTA 4300 - Patient Interaction and Professional Issues II **Credits: (2)**
- OTA 4500 - Fieldwork IIA **Credits: (6)**
- OTA 4600 - Fieldwork IIB **Credits: (6)**
- OTA 4800 - Baccalaureate Project I **Credits: (3)**
- OTA 4801 - Baccalaureate Project II **Credits: (3)**

Rehabilitation Sciences (BS)

The Department of Athletic Training (AT) offers an undergraduate program in Rehabilitation Sciences. This program is designed for students preparing to enter professional graduate programs in athletic training, physical therapy, occupational therapy, physician's assistant programs, and/or medicine. Students who graduate from this major only will NOT BE ELIGIBLE TO SIT FOR THE BOARD OF CERTIFICATION (BOC) EXAM TO BECOME A CERTIFIED ATHLETIC TRAINER OR ANY OTHER PROFESSIONAL MEDICAL CERTIFICATION EXAM.

- **Program Prerequisites:** Make application and be accepted to Weber State University. Formally declare Rehabilitation Sciences as an intended major with the College of Health Professions (CHP) advisement coordinator. (See Admission Requirements below.)
- **Minor:** Not required.
- **Grade Requirements:** Grade of "B-" or better in all Rehabilitation Sciences major courses and grade of "C" or better in all support courses and electives in addition to a Weber State University GPA of 3.00 or higher in all courses required for this major.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 40 of which must be upper division (courses numbered 3000 and above).
- **Program Code:** 2081BS
- **CIPC:** 511199

Advisement

Advisors are available to the student for counseling on grades and progress toward graduation. The CHP advisors serve as the academic advisors prior to admission to the program, and the AT department advisor will assume control of advisement after admission into the program. The Rehabilitation Sciences Program Director serves as the graduate school advisor to students. Rehabilitation Sciences majors are encouraged to meet with an advisor at least once within the first four weeks of each semester.

Admission Requirements

- A. Before a student can be considered for the Rehabilitation Sciences program, the following application requirements must be met:
 1. Admission to Weber State University.
 2. Declare Rehabilitation Sciences as a major
 3. Submit a Rehabilitation Sciences Student Application which demonstrates the following:
 - a. Completion of 25 credit hours with a minimum 3.00 Weber State University GPA. Of these 25 credits, the students must demonstrate completion of
 1. HTHS 2110 and HTHS 2111; or ZOOL 2320 and ZOOL 2420
 2. HTHS 1101
 3. RHS 1550
 4. RHS 2175
 5. RHS 2890
 6. RHS 1300; or RHS 2300; or PAR 1000 and PAR 1001 (lab)

- b. Grade "B-" or better in all courses and "C" or better in all support courses within the program.
- B. Applications may be obtained from the Rehabilitation Sciences Program website at <https://www.weber.edu/athletic-training/rehabsciadmission.html>.
- C. Students are accepted on a rolling basis, but they are encouraged to submit their application by the fourth week of the new semester (after the admission requirements have been completed and met). Students who fail to meet admission requirements will not be allowed to enroll in RHS 3080; RHS 3200; RHS 3301; RHS 4150; RHS 4250; RHS 4650; RHS 4800 or RHS 4890.

Retention Requirements

- A. After students are selected into the Rehabilitation Sciences program, retention in the program will be based on the following criteria:
 1. Grade "B-" or better in all core courses within the program.
 2. Grade "C" or better in all the support courses within the program.
 3. Students must maintain a Weber State University GPA of 3.0 or higher.
- B. Students who fail to meet the retention criteria will be placed on probation in the Rehabilitation Sciences program for one semester. If standards are not met by the end of the probationary period, the student may be dismissed from the program at the discretion of the program director.
 1. Students who receive any grade below a "B-" in a core course must repeat that course and receive a grade of "B-" or higher to remain in the major.
 2. Students who receive any grade below a "C" in a support course must repeat that course and receive a grade of "C" or higher to remain in the major.
 3. Failure to repeat the course (when offered) will result in dismissal from the program at the discretion of the program director.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. These courses also fulfill General Education or degree requirements: CHEM 1010, CHEM 1110, CHEM 1210, HTHS 2110, MICR 2054, NUTR 1020, PHYS 1010, PHYS 2010, PSY 1010, ZOOL 1010, ZOOL 1020, ZOOL 1610, ZOOL 2420.

Program Learning Outcomes

- Educating participants and managing risk for safe performance and function.
- Implementing standard evaluation techniques and formulating a clinical impression for the determination of a course of action.
- Employing standard care procedures and communicating outcomes for efficient and appropriate care of the injured.
- Reconditioning participants for optimal performance and function.
- Understanding and adhering to approved organizational and professional practices and guidelines to ensure individual and organizational well-being.

Major Course Requirements for BS Degree (57-66 credit hours)

It is the responsibility of the student and academic advisors to determine which courses to take when an "OR" option is noted. This is largely determined by the prerequisite coursework of the student's prospective graduate program(s).

Core Courses (26-30 credit hours)

- RHS 1550 - Introduction to Rehabilitation Sciences **Credits: (2)**
- RHS 2175 - Introduction to Sports Medicine **Credits: (3)**
- RHS 1300 - First Aid: Responding to Emergencies **Credits: (2)**
or
- RHS 2300 - Emergency Response **Credits: (3)**
or
- PAR 1000 INT - Emergency Medical Technician **Credits: (4)** and
- PAR 1001 - Emergency Medical Technician Lab **Credits: (2)**
- RHS 2890 - Introduction to Cooperative Work Experience **Credits: (1)**
- RHS 3300 - Evaluation and Care of Musculoskeletal Injuries: Lower Extremities **Credits: (3)**
- RHS 3301 - Evaluation and Care of Musculoskeletal Injuries: Upper Extremities **Credits: (3)**
- RHS 4150 - Therapeutic Modalities for Rehabilitation Sciences majors **Credits: (3)**
- RHS 4250 - Rehabilitation for Rehabilitation Sciences majors **Credits: (3)**
- RHS 4650 - Management for Rehabilitation Sciences Majors **Credits: (3)**
- RHS 4890 INT - Cooperative Work Experience **Credits: (1-6)** Minimum of 3 credits required

Some students will be required to complete an FBI background check and drug test prior to completing the work experience (RHS 2890 and RHS 4890). The expenses will be paid for by the student. Some students may also be required to secure additional immunizations, including a hepatitis B vaccination, depending on the cooperative work experience site. The expenses will be paid by the students.

Support Courses (28-33 credit hours)

Chemistry (choose one of the following)

- CHEM 1010 PS - Introductory Chemistry **Credits: (3)**
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- CHEM 1200 - Preparation for College Chemistry **Credits: (3)**
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**

Physics (choose one of the following):

- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- PHYS 2010 PS - College Physics I **Credits: (5)**

Biology (choose one of the following):

- ZOOL 1010 LS - Animal Biology **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**

Human Anatomy & Physiology (choose one of the following series):

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
or
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

Other support courses:

- HTHS 1101 - Medical Terminology **Credits: (2)**
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- ESS 3450 - Structural Kinesiology **Credits: (3)**

Program Electives (120 credits needed for BS degree, with 40 being upper-division credits)

Choose One of the Following:

Rehabilitation Sciences majors are required to take ONE of the following 3-credit RHS elective courses:

- RHS 3080 - Evidence Based Practice for Rehabilitation Sciences **Credits: (3)**
- RHS 3200 - Psychology of Sport, Injury & Rehabilitation **Credits: (3)**
- RHS 3505 - Standardized Patient Training **Credits: (3)**
- RHS 4999 - Special Topics in Rehabilitation Sciences **Credits: (3)**

It is recommended that a student's remaining elective coursework be based on the pre-requisite coursework of the graduate programs they plan to apply to. This coursework tends to vary somewhat from program to program, and it is the student's responsibility to ensure that their pre-professional (undergraduate) coursework fulfills the entrance requirements of the graduate programs that they are applying to. A list of suggested pre-professional pre-requisite courses can be found on the applicant checklist.

Optional RHS Elective Course:

- RHS 2431 - Taping, Wrapping, Bracing, Padding, and Splinting **Credits: (1)**
- RHS 4800 CRE - Individual Projects **Credits: (1-4)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Sports Medicine (BIS)

Bachelor of Integrated Studies

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A minimum grade of "C" (2.0) in each of the courses taken for the three emphases.
- **Credit Hour Requirements:** The student must take a minimum of 18 credit hours each from at least three (3) different academic departments or recognized disciplines. A student has numerous possibilities in developing a BIS degree using the academic disciplines both in HPER and campus wide.
- **Program Code:** 2059
- **CIPC:** 510913

The course of study in each discipline must be approved by the appropriate program director.

BIS Possible Options

These are only recommendations; many combinations and options for potential careers are possible.

Health Education & Health Promotion Emphasis

Program Code: 5013

CIPC: 512207

Community Health Promotion
Occupational Health Education
Clinical Health Education (*See School of Health Administrative Services in the Dr. Ezekiel R. Dumke College of Health Professions*)
Family Life Health Promotion
Gerontological Health Promotion
Drug Abuse Prevention Education

Nutrition Emphasis

Dietary Analysis
Dietary Prescription
Nutrition Education
Weight Management
Nutritional Ergogenics

Exercise Science Emphasis

Program Code: 5019

CIPC: 310505

Coaching Sport
Corporate Fitness
Community Fitness
Sports Medicine
Sport Communication
Commercial/Facility Management
Sport Psychology

BIS Requirements

Also refer to individual minor programs.

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Sports Medicine Emphasis Option 1

This course of study is recommended for students who have chosen Exercise Science as one of their three areas of emphasis.

Suggested coursework (see AT Program Director to develop an individualized plan)

Course Requirements for emphasis: Upper Division 12, Total Hours 23

Recommended Courses

- ZOOL 2320 - Human Anatomy **Credits: (4)**
And
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
Or
- RHS 2175 - Introduction to Sports Medicine **Credits: (3)**
And
- RHS 3200 - Psychology of Sport, Injury & Rehabilitation **Credits: (3)**
- RHS 3300 - Evaluation and Care of Musculoskeletal Injuries: Lower Extremities **Credits: (3)**
- RHS 3301 - Evaluation and Care of Musculoskeletal Injuries: Upper Extremities **Credits: (3)**

Elective Courses

Sports Medicine Emphasis Option 2

This course of study is recommended for students who have NOT chosen Exercise Science as one of their three areas of emphasis.

Course Requirements for emphasis: Upper Division 18, Total Hours 23

Recommended Courses

- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

- RHS 2300 - Emergency Response **Credits: (3)**
- RHS 3300 - Evaluation and Care of Musculoskeletal Injuries: Lower Extremities **Credits: (3)**
- RHS 3301 - Evaluation and Care of Musculoskeletal Injuries: Upper Extremities **Credits: (3)**

Elective Courses

- ESS 3500 - Biomechanics **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**

Department of Emergency Healthcare

Department Chair: William Robertson, MEd, NRP

Location: Marriott Allied Health Building, Room 409

Telephone Contact: Ana McMurtry 801-626-6521

Associate Professor: William Robertson; **Assistant Professors:** Andrea Lalumia, Christine O'Neil

Medical Advisor: Jon Apfelbaum, M.D.

A paramedic is a person who usually renders advanced life support care to persons at the site of an illness or injury or en route to a hospital facility. They function under the direct supervision of an Emergency Physician or Registered Nurse and are certified for such functioning by a state Emergency Medical Services agency.

The institutional certificate and two-year applied science degree program in Paramedic Studies are based on a national curriculum designed to provide an academic background in science, health related fields, and communication using critical thinking and assessment based management. The program prerequisites provide the general requirements and foundation that prepares the student to meet the demands of the paramedic courses.

Satisfactory completion of the prerequisite requirements are required prior to starting the paramedic sequence and include:

1. a "C" or better in ENGL 1010, MATH 0990, Anatomy and Physiology classes, and Medical Terminology; and
2. an overall GPA of 2.7 or above; and
3. Current state EMT Certification; and
4. a score of 75% or better on the departmental EMT assessment exam on no more than two attempts

The longstanding Utah Bureau of EMS policy requiring one year of EMS experience or Advanced EMT has been relaxed. Eligible students may wish to consider PAR 1005 and PAR 1006 to gain EMS field experience prior to entering the paramedic program.

This program may require more than two years for completion depending upon the timing it takes for an individual to complete the prerequisite requirements.

Weber State contracts with authorized clinical and field agencies to precept students for EMT and paramedic certification. Background criminal investigation and drug testing of students is required prior to starting PAR 2000 in the fall semester.

"The WSU Emergency Healthcare Department's paramedic program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP)."

The paramedic program will "prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains," with or without exit points at the Emergency Medical Responder, Emergency Medical Technician, and Advanced Intermediate levels.

Acceptance to the paramedic program does not assure eligibility for a state or National Registry certification. Utah or a related state Office of EMS makes the final decisions on the issuance of professional licensure or certification. For

students that may have a disability or testing accommodation concerns you must contact the Utah Bureau of EMS or National Registry of EMT's. See health.utah.gov/ems and nremt.org.

Associate of Applied Science

Paramedic Studies (AAS)

- **Program Prerequisite:** Acceptance to the program via application process. See the Admission Requirements listed below.
- **Grade Requirements:** "C" or better in all prerequisite and support courses, with a minimum GPA of 2.7. All courses with the PAR prefix must be passed with a "B-" or better in order for a student to progress through the paramedic program sequence and be awarded an institutional certificate and/or the AAS degree.
- **Credit Hour Requirements:** A total of 60-63 credit hours is required for graduation; 36 of these are required within the program. Three upper division credit hours (HLTH 3400) are required within the program.
- **Program Code:** 2046AAS
- **CIPC:** 510904

Advisement

Paramedic Studies students must meet with the Dumke College of Health Professions academic advisor prior to application. Call 801-626-6136 for more information or to schedule an appointment.

Admission Requirements

Students are eligible to apply for admission to the Paramedic Studies program upon completion of the following:

1. Making application to Weber State University
2. Obtaining admissions counseling by a Dumke College of Health Professions advisor
3. Satisfactory completion of the prerequisite requirements
4. Completion of the Paramedic program application form by designated date:
 - a. Successful completion of the program EMT written assessment exam with a minimum score of 75% on no more than two attempts
 - b. Payment of the \$25 application fee
 - c. Entrance testing and application must be completed by May 15th for confirmed fall acceptance. Applications received between May 15 and August 1 will be approved on a "space available basis."
5. Current Utah or appropriate state EMT certification

General Education

Refer to Degree Requirements for Associate of Applied Science Degree requirements. The following courses required for this program will also fulfill general education requirements: Biomedical core courses (see below), COMM 2110, PSY 1010 and SOC 1020. MATH 1010 and ENGL 2010 are required.

Major Course Requirements for AAS Degree

Paramedic Courses Required

All courses with the PAR prefix must be passed with a "B-" or better in order for a student to progress through the paramedic program sequence and be awarded an institutional certificate and/or AAS degree.

- PAR 1000 INT - Emergency Medical Technician **Credits: (4)**
- PAR 1001 - Emergency Medical Technician Lab **Credits: (2)**
- PAR 2000 - Introduction to Paramedic Practice **Credits: (4)**
- PAR 3010 - Cardiac and Medical Emergencies **Credits: (6)**
- PAR 2020 - Traumatic Emergencies **Credits: (3)**
- PAR 2030 - Special Populations in Paramedic Practice **Credits: (3)**
- PAR 2040 - Paramedic Skills and Simulation Lab **Credits: (4)**
- PAR 2100 - Capstone Course in Paramedic Practice **Credits: (4)**
- PAR 2110 INT - Paramedic Clinical Experience **Credits: (3)**
- PAR 2120 INT - Paramedic Field Internship **Credits: (9)**

Note:

For students that may have a disability or testing accommodation concerns you must contact the Utah Bureau of EMS or the National Registry of EMT. See health.utah.gov/ems and nremt.org

Biomedical core courses required (or acceptable equivalent)

- HTHS 1101 - Medical Terminology **Credits: (2)**

Must be taken in sequence

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)**
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**

Acceptable Equivalent to completing the anatomy and physiology requirement

- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

AAS Support Courses Required (15 credit hours)

All support courses must be passed with a "C" or better.

- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- HLTH 3400 - Substance Abuse Prevention **Credits: (3)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**

Institutional Certificate

Paramedic Certificate of Completion

- **Program Prerequisite:** Applications for an institutional certificate of completion in Paramedic are open to all students prepared with the following prerequisites. See the Admission Requirements listed in the Paramedic Studies (AAS) program.
- **Grade Requirements:** "C" or better in all prerequisite courses, with a minimum GPA of 2.7. All courses with the PAR prefix must be passed with a "B-" or better in order for a student to progress through the paramedic program sequence and be awarded an institutional certificate and/or the AAS degree.
- **Credit Hour Requirements:** The Institutional Certificate of Completion in Paramedic requires a minimum of 36 core paramedic credits for completion. Dependent upon what method a student completes the required prerequisites, up to an additional 30 credit hours may be required.
- **Gainful Employment Disclosure**
- **Program Code:** 2045CC
- **CIPC:** 510904

Admission Requirements

Students are eligible to apply for admission to the Institutional Certificate of Completion in Paramedic program upon completion of the following:

1. Making application to Weber State University
2. Obtaining admissions counseling by a Dumke College of Health Professions advisor
3. Satisfactory completion of the prerequisite requirements
4. Completion of the Paramedic program application form by designated date:
 - a. Successful completion of the program EMT-B written assessment exam with a minimum score of 75% on no more than two attempts
 - b. Payment of the \$25 application fee
 - c. Entrance testing and application must be completed by May 15th for confirmed fall acceptance.
 - d. Applications received between May 15 and August 1 will be approved on a "space available basis."
5. Current Utah or appropriate state EMT certification

Courses Required for the Institutional Certificate of Completion in Paramedic

Prerequisite Courses

- HTHS 1101 - Medical Terminology **Credits: (2) ***
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4) *** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4) ***
or
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- ENGL 1010 EN1 - Introductory College Writing **Credits: (3) ***
- MATH 0990 ND - Beginning Algebra **Credits: (4)** or equivalent

Note:

** These classes can be taken through independent study. Call 801-626-6785.*

Paramedic Courses Required

All courses with the PAR prefix must be passed with a "B-" or better in order for a student to progress through the paramedic program sequence and be awarded an institutional certificate and/or AAS degree.

- PAR 1000 INT - Emergency Medical Technician **Credits: (4)**
- PAR 1001 - Emergency Medical Technician Lab **Credits: (2)**
- PAR 2000 - Introduction to Paramedic Practice **Credits: (4)**
- PAR 3010 - Cardiac and Medical Emergencies **Credits: (6)**
- PAR 2020 - Traumatic Emergencies **Credits: (3)**
- PAR 2030 - Special Populations in Paramedic Practice **Credits: (3)**
- PAR 2040 - Paramedic Skills and Simulation Lab **Credits: (4)**
- PAR 2100 - Capstone Course in Paramedic Practice **Credits: (4)**
- PAR 2110 INT - Paramedic Clinical Experience **Credits: (3)**
- PAR 2120 INT - Paramedic Field Internship **Credits: (9)**

Note:

For students that may have disability or testing accommodation concerns you must contact the Utah Bureau of EMS or the National Registry of EMT. See health.utah.gov/ems and nremt.org

Bachelor of Science

Emergency Healthcare Sciences (BS)

This degree builds on the Institutional Certificate in Paramedic and AAS in Paramedic Studies using additional upper division program (PAR) courses, support and general education courses. A strong core of Health Administration Services (HAS) and Health Information Management (HIM) courses will be utilized to provide a more diverse healthcare background. The degree in Emergency Healthcare Sciences was designed to be broad enough to enhance those working in medical education, QA/QI, supervision, human resources, air medical services, public health and mobile integrated healthcare.

In response to the needs of working fire and EMS, with the exception of five on-campus days for PAR 3110, Critical Care Transport, the entire degree can be completed online. Curriculum maps will provide projected timelines and department recommended, online general education courses.

Admission Requirements: Minimum GPA accepted is 2.7. Also required is a current National Registry or State certification or license as a paramedic without restrictions. After formal degree advisement by the Dumke College of Health Professions, an departmental degree application process is initiated.

Minor: Not required.

Grade Requirements: A minimum grade of "C" or better is required in all program (PAR) courses, general education and support courses.

Credit Hour Requirements: A total of 120 credit hours is required for a Bachelor of Science Degree. Of the 120 hours, 40 must be upper division level. The BS in EHS curriculum provides 35 upper division hours with 6 credits coming from the Cardiac and Medical Emergency section in the Institutional Certificate. (Any General Education course may be utilized, however, courses below feature online delivery)

- **Program Code:** 2052BS
- **CIPC:** 519999

Advisement: Contact the Dumke College of Health Professions Advisor (801) 626-6136.

Program Learning Outcomes

- Demonstrate terminal competency by passing the National Registry paramedic certification exam
- Demonstrate predicted National Registry paramedic certification utilizing the HESI predictive exam with a minimum score of 650.
- Demonstrate clinical and field readiness by achieving the "3" competent score.
- Demonstrate affective domain employment traits by achieving Satisfactory in the 11 categories of professionalism as defined by the 2010 EMS Education Standards.
-

Prerequisites

The Institutional Certificate in Paramedic and AAS in Paramedic Studies (or equivalent) is needed to progress into the Bachelor's degree program.

- PAR 1000 INT - Emergency Medical Technician **Credits: (4) ***
- PAR 1001 - Emergency Medical Technician Lab **Credits: (2) ***
- HTHS 1101 - Medical Terminology **Credits: (2) ***
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4) ***
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4) ***
- MATH 0990 ND - Beginning Algebra **Credits: (4) ***
- MATH 1010 - Intermediate Algebra **Credits: (4-5) ****
- MATH 1030 QL - Contemporary Mathematics **Credits: (3) ^**
- ENGL 1010 EN1 - Introductory College Writing **Credits: (3) ***
- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3) ****
- PAR 2000 - Introduction to Paramedic Practice **Credits: (4) *, ****
- PAR 2040 - Paramedic Skills and Simulation Lab **Credits: (4) *, ****
- PAR 2110 INT - Paramedic Clinical Experience **Credits: (3) *, ****
- PAR 3010 - Cardiac and Medical Emergencies **Credits: (6) *, ****
- PAR 2020 - Traumatic Emergencies **Credits: (3) *, ****
- PAR 2030 - Special Populations in Paramedic Practice **Credits: (3) *, ****
- PAR 2120 INT - Paramedic Field Internship **Credits: (9) *, ****
- PAR 2100 - Capstone Course in Paramedic Practice **Credits: (4) *, ****
- HLTH 3400 - Substance Abuse Prevention **Credits: (3)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- SOC 1020 SS/CC - Contemporary Social Issues **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
(Will accept COMM 1020 Public Speaking)

** Paramedic Certificate; **AAS Degree; ^QL for BS Degree*

Bachelor of Science in Emergency Healthcare Sciences

(Courses selected for online delivery)

- WEB 1701 - Document Creation
- QL 1030/1040/ or 1050 - QL Mathematics
- General Education - AI/PS/CA/SI
- HTHS 2240 - Introduction to Pharmacology **Credits: (3)**
- HAS 3000 - The Healthcare System **Credits: (3)**
- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)**
- PUBH 3500 - Biomedical Research Support **Credits: (2)**

- HAS 3240 - Human Resource Development in Healthcare **Credits: (3)** or
- HAS 3230 - Health Communication **Credits: (3)**

- HAS 3260 - Healthcare Leadership and Management **Credits: (3)** or
- HIM 3300 - Introduction to Quality Improvement in Healthcare **Credits: (3)** or
- MICR 1153 LS - Public Health: Sex, Travel, Food, & Drugs **Credits: (3)**

- HAS 4400 - Legal and Ethical Aspects of Health Administration **Credits: (3)**
- PAR 3110 - Critical Care Transport Course **Credits: (6)**
- PAR 3130 - Mobile Integrated Healthcare **Credits: (2)**
- PAR 4110 - Emergency Medical Services Management Topics **Credits: (3)**
- PAR 4120 - Emergency Medical Service Teaching Topics **Credits: (3)**
- PAR 4130 - Capstone Seminar in Emergency Medicine Research **Credits: (3)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Emergency Healthcare Sciences (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Code: 2052**
- **CIPC: 519999**

18 hours of Emergency Healthcare courses selected in consultation with an advisor and approved by the department chair

Certification

Emergency Medical Technician EMT and Advanced Certification

Basic

Basic life support, patient assessment and treatment modalities comprise this EMT curriculum. US Department of Transportation (DOT) and Utah State Department of Health standards for certification are met. For students 18 years

or older, state certification is optional with an additional fee. For students that may have disability or testing accommodation concerns you must contact the Utah Bureau of EMS. See health.utah.gov/ems.

Required Course (no prerequisites are required)

- PAR 1000 INT - Emergency Medical Technician **Credits: (4)** and
- PAR 1001 - Emergency Medical Technician Lab **Credits: (2)**

Advanced EMT (Formerly EMT-Intermediate)

Utah State Department of Health and Department of Transportation Standards for Advanced EMT certification are utilized to provide advanced life support to the sick and injured.

Required Courses

The following can be taken in addition to the above courses and are offered at the Davis Area Technology College.

Exercise and Nutrition Sciences Department

Department Chair: David Aguilar-Alvarez

Location: Reed K. Swenson Building, Room 302

Telephone Contact: Marrisela Lopez 801-626-6741

Professor: Jennifer Turley; **Associate Professor:** David Aguilar-Alvarez; **Assistant Professors:** Bryan Dowdell, Saori Hanaki, Damon Joyner, Sachini Kodithuwakku Arachchige, Stacie Wing-Gaia; **Instructors:** Samantha Hill, Jamie Stein

Exercise and Nutrition Sciences (ENS) in the Jerry & Vickie Moyes College of Education offers programs that teach skills and knowledge needed to maintain and enhance human performance and well-being through exercise, fitness, sport, and optimal nutrition. We offer undergraduate students exceptional educational experiences in a variety of teaching environments supported by faculty with diverse expertise. Our state-of-the-art facilities - including fully equipped laboratories (biomechanics, human performance, nutritional biochemistry, and foods), a networked computer lab, and ample indoor and outdoor fitness and activity arenas - provide outstanding areas for student instruction and research. With a curriculum designed to develop professional knowledge and skills, our graduates enter the workforce as fitness and nutrition professionals in a variety of educational, health and fitness settings, and are prepared to pursue graduate studies in their respective career fields.

Through instruction, scholarship and service, our department offers Bachelor of Science degrees in Exercise and Sport Science (Fitness Professional and Exercise Science emphases) and Nutrition Education (Integrative Nutrition and Sports Nutrition emphases) and a Nutrition Education minor. We also support the efforts of undergraduates seeking the Bachelor of Integrated Studies degree, offering Exercise Science and Nutrition Education and as emphases for the BIS Program.

Mission Statement

The Department of Exercise and Nutrition Sciences (ENS) supports and enhances the mission of the University through learning, access, and community partnerships in exercise and nutrition sciences. We provide effective instruction, exploratory research, and engaged service to prepare exercise, fitness, and nutrition professionals for the workforce and graduate studies and to promote optimal health, human performance, and overall well-being.

Bachelor of Science

Exercise and Sport Science (BS)

The Department of Exercise and Nutrition Sciences within the Moyes College of Education offers an undergraduate program in Exercise and Sport Science with three emphasis options: Strength & Conditioning, Clinical Exercise Physiology, and Exercise Science. Students may declare one or more emphases. The Exercise and Sport Science major program prepares students for a variety of career options, several national certifications, and for entering graduate and professional schools.

Graduates will have demonstrated competence and knowledge in anatomy, physiology, fitness assessment, kinesiology, biomechanics, exercise physiology, exercise programming and implementation, exercise leadership and client education, nutrition, health, strength and conditioning, weight lifting, aerobic activities, and more.

- **Program Prerequisite:** Not required.
- **Minor:** Not required.
- **Grade Requirements:** A GPA of 2.75 or higher in all courses required for this major. The overall GPA must be 2.00 or better. No more than one "D" is acceptable.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. Eleven to 15 credit hours of required support courses maybe used as general education credit. A total of 40 upper division credit hours is required for graduation with 21 - 41 upper division hours possible within the required courses for this major.
- **Program Code:** 5049BS with one of the following emphasis codes Strength & Conditioning (5066), Clinical Exercise Physiology(5067), or Exercise Science(5051).
- **CIPC:** 310505

Advisement

All Exercise and Sport Science students are encouraged to meet with a faculty advisor or the department advisement coordinator each semester for course and program advisement. Call 801-626-6696 or email the ENS Department Advisor matthewsmith20@weber.edu for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Make application with the ENS Department and declare program of study (see Student Access and Success, Services and Information).

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Program Learning Outcomes

1. Reflective and empirical thinking

Students will problem solve and/or make decisions based on deep reflection and empirical, logical, thinking.

2. Quantitative literacy

Students will demonstrate the comprehension of quantitative data and the ability to reason using quantitative analysis.

3. Effective communication

Students will practice effective communication using scientific writing, active listening, and verbal and nonverbal communication.

4. Cultural competency

Students will describe the impact of values and cultures of their own and of others on health literacy, health risks, and physical activity and other lifestyle behaviors related to health and wellness.

5. Exercise physiology knowledge

Students will accurately apply exercise physiology concepts in conducting and evaluating health and fitness assessments, developing exercise programs, and prescribing exercise for health and performance improvement.

6. Kinesiology & biomechanics knowledge

Students will effectively use muscle mechanics and biomechanical concepts to evaluate musculoskeletal movements, thereby facilitating performance enhancement and mitigating potential injury risks.

7. Health & fitness assessment

Students will independently conduct health and fitness assessments and interpret results based on the standards established by American College of Sports Medicine, National Strength and Conditioning Association, and other relevant organizations.

8. Exercise program design

Students will design exercise prescription programs appropriate to the target populations using sound scientific principles and reasoning.

Major Course Requirements for BS Degree

Required Core Courses for all Emphases (22 credit hours, 13 UD)

- RHS 2300 - Emergency Response **Credits: (3)**
- ESS 2200 - Exploring Exercise Science Professions **Credits: (3)**
- ESS 2300 - Health/Fitness Evaluation and Exercise Prescription **Credits: (3)**
- ESS 3450 - Structural Kinesiology **Credits: (3)**
- ESS 3500 - Biomechanics **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**
- ESS 3600 - Measurement and Statistics in Exercise Science **Credits: (3)**
- ESS 4990 - Senior Seminar **Credits: (1)**

Professional Areas of Emphasis

A student must complete the required and support courses in either the Strength & Conditioning, the Clinical Exercise Physiology, or the Exercise Science Emphasis.

Strength & Conditioning Emphasis (52-54 credit hours, at least 25 UD possible)

The Strength & Conditioning Emphasis Provides competencies needed for strength and conditioning and fitness professionals.

Required Emphasis Courses (32-33 credit hours, 26 UD possible)

- PE 1080 - Strength Training, Level I **Credits: (1)** Or
- PE 1081 - Strength Training, Level II **Credits: (1)** Or
- PE 1082 - Strength Training, Level III **Credits: (1)**

- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**

- HLTH 3000 - Foundations of Health Promotion **Credits: (3)** Or
- HLTH 3200 - Methods in Health Education **Credits: (3)**

- NUTR 2320 - Food Values, Diet Design and Health **Credits: (3)**
- NUTR 3020 - Sports Nutrition **Credits: (3)**
- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)**
- OCRE 3700 - Recreation and Sports Facilities and Events Management **Credits: (3)**
- ESS 4890 INT - Cooperative Work Experience **Credits: (1-6)**
(5 credit hours Required)

- ESS 4280 - Advanced Strength and Conditioning **Credits: (3)** Or
- GSE 6402 - Strength & Conditioning/Injury Prevention **Credits: (3)**

Skill Development: Select any PE prefix Credits: (2 required)

Elective Courses (at least 9 credit hours, 0-9 UD possible)

- ESS 2890 INT - Cooperative Work Experience **Credits: (1-6)**
- ESS 4320 - Special Topics **Credits: (3)**
- ESS 4370 - Exercise Physiology for Special Populations **Credits: (3)**
- ESS 4800 CRE - Directed Undergraduate Exercise Science Research **Credits: (1-4)**
- ESS 4830 - Directed Readings in Exercise Science **Credits: (1-3)**
- PEP 3100 - Principles of Motor Learning and Motor Development **Credits: (3)**

- BSAD 3000 - Small Business Management **Credits: (3)** Or
- PS 3203 - Customer Service Techniques **Credits: (3)** Or
- PS 3563 - Principles of Sales Supervision **Credits: (3)** Or

Select two from the following courses:

- ENTR 2002 - Marketing Strategy for Small Business **Credits: (1)**
- ENTR 2004 - Branding for Small Business **Credits: (1)**
- ENTR 2008 - Legal Foundations for Small Business **Credits: (1)**
- ENTR 2010 - Funding For Small Business **Credits: (1)**
- ENTR 2011 - Results-Focused Leadership **Credits: (1)**
- ENTR 2012 - People Management for Small Business **Credits: (1)**

Required Support Courses (18-20 credit hours, 0 UD possible)

Human Andatomy and Physiology. Select one of these pairs:

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)** Or
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)** or higher-level math
- CHEM 1010 PS - Introductory Chemistry **Credits: (3)** Or
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)** Or
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**

Clinical Exercise Physiology Emphasis (55-57 credit hours, 16-29 UD possible)

The Clinical Exercise Physiology Emphasis Provides competencies needed for exercise physiologist in the cardiac rehabilitation setting.

Required Emphasis Courses (22 credit hours, 11-14 UD possible)

- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**
- HLTH 3000 - Foundations of Health Promotion **Credits: (3)** Or
- HLTH 3200 - Methods in Health Education **Credits: (3)**
- NUTR 2320 - Food Values, Diet Design and Health **Credits: (3)**
- NUTR 3020 - Sports Nutrition **Credits: (3)** Or
- NUTR 4440 - Advanced Human Nutrition **Credits: (3)**
- ESS 4370 - Exercise Physiology for Special Populations **Credits: (3)**
- ESS 4470 - Electrocardiography and Cardiac Rehabilitation **Credits: (2)**
- ESS 2890 INT - Cooperative Work Experience **Credits: (1-6)** and/or
- ESS 4890 INT - Cooperative Work Experience **Credits: (1-6)**
(3credit hours required)

Skill Development: Select one from the list below and 1 additional PE prefix.

- PE 1080 - Strength Training, Level I **Credits: (1)**
- PE 1010 - Aerobics, Level I **Credits: (1)**
- PE 1040 - Walking for Fitness, Level I **Credits: (1)**
- PE 1043 - Jogging, Level I **Credits: (1)**
- PE 1070 - Cross Training For Fitness, Level I **Credits: (1)**
- PE 1098 - Fitness for Life **Credits: (1)**
- PE 1300 - Swimming, Level I **Credits: (1)**

- PE 1310 - Water Aerobics, Level I **Credits: (1)**

Elective Courses (at least 15 credit hours, 5-15 UD possible)

- ESS 4320 - Special Topics **Credits: (3)**
- ESS 4800 CRE - Directed Undergraduate Exercise Science Research **Credits: (1-4)**
- ESS 4830 - Directed Readings in Exercise Science **Credits: (1-3)**
- NUTR 3220 - Foundations in Diet Therapy **Credits: (3)**
- NUTR 3040 - Nutrition Assessment **Credits: (3)**
- NUTR 4440 - Advanced Human Nutrition **Credits: (3)**
- PEP 3100 - Principles of Motor Learning and Motor Development **Credits: (3)**
- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)**
- HTHS 3328 - Pathophysiology of Cells and Tissues **Credits: (2)**
- HTHS 3329 - Pathophysiology of Organs and Systems **Credits: (2)**

Completing the following RADT courses and HTHS 2110 & HTHS 2111 will prepare for Limited Practical Technologist (LPT) in Radiologic Science.

- RADT 1012 - Cardiographic Technician **Credits: (3)**
- RADT 1013 - Rhythm Analysis **Credits: (3)**
- RADT 1014 - Basic Cardiac Imaging **Credits: (3)**
- RADT 1025 - Limited Patient Care and Assessment **Credits: (2)**

Required Support Courses (18-20 credit hours, 0 UD possible)

Human Anatomy and Physiology. Select one of these pairs:

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)** or
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)** or higher-level math
- CHEM 1010 PS - Introductory Chemistry **Credits: (3)** or
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)** or
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**

Exercise Science Emphasis (27-39 credit hours, 3-24 UD possible)

The Exercise Science Emphasis provides the scientific foundation in exercise and sport science while allowing students a wide range of course options needed for graduate programs.

Required Emphasis Courses (22 credit hours, 11-14 UD possible)

- ESS 4370 - Exercise Physiology for Special Populations **Credits: (3)**
- ESS 4470 - Electrocardiography and Cardiac Rehabilitation **Credits: (2)**
- ESS 2890 INT - Cooperative Work Experience **Credits: (1-6)** and/or
- ESS 4890 INT - Cooperative Work Experience **Credits: (1-6)**
- ESS 4320 - Special Topics **Credits: (3)**
- ESS 4800 CRE - Directed Undergraduate Exercise Science Research **Credits: (1-4)**
- ESS 4830 - Directed Readings in Exercise Science **Credits: (1-3)**
- NUTR 2320 - Food Values, Diet Design and Health **Credits: (3)**
- NUTR 3020 - Sports Nutrition **Credits: (3)** or
- NUTR 4440 - Advanced Human Nutrition **Credits: (3)**
- PEP 3100 - Principles of Motor Learning and Motor Development **Credits: (3)**
- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)**

Elective Courses (3-15 credit hours, 0-15 UD possible)

- HTHS 1101 - Medical Terminology **Credits: (2)**
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- CHEM 1120 - Elementary Organic Bio-Chemistry **Credits: (4)** and
- CHEM 1125 - Elementary Organic Bio-Chemistry Lab **Credits: (1)**
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)**
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- MICR 3203 - The Immune System in Health & Disease **Credits: (3)**
- PHYS 2010 PS - College Physics I **Credits: (5)**
- PHYS 2020 - College Physics II **Credits: (5)**
- PSY 3010 - Psychopathology **Credits: (3)**
- ZOOL 1610 LS - Principles of Zoology **Credits: (4)**
- ZOOL 3099 - Teaching the Human Anatomy Laboratory **Credits: (3)**
- ZOOL 3100 - Advanced Human Anatomy **Credits: (3)**

- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**

Required Support Courses (15 credit hours, 0 UD)

Human Anatomy and Physiology. Select one of these pairs:

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)** or
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)** or higher level math
- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**

Nutrition Education (BS)

The Department of Exercise and Nutrition Sciences within the Moyes College of Education offers an undergraduate program in Nutrition Education with two emphasis options: Sports Nutrition; and Integrative Nutrition. Students may declare one or both emphases. The Nutrition Education major program prepares students for a variety of career options and for graduate school to pursue advanced degrees.

The Sport's Nutrition Educator graduate will have demonstrated competence and knowledge in chemistry, anatomy, physiology, diet analysis and design, nutrition assessment, sports and fitness nutrition, diet therapy, lifespan nutrition, research, and related exercise science topics with cultural application and sensitivity for individuals and athletes. Information is provided for typical graduate Registered Dietitian Nutritionist (RDN) program pre-requisites. The prerequisites vary somewhat from one graduate program to another and it is the student's responsibility to ensure that all pre-professional courses fulfill entrance requirements.

Integrative nutrition includes nutrition as it intersects with other related fields to support health and wellbeing of individuals and groups. The Integrative Nutrition Educator graduate will have demonstrated competence and knowledge in diet analysis and design, fitness nutrition, lifespan nutrition, sustainable cooking, and related exercise science, health, child and family studies, botany, microbiology, physical education, recreation, and/or psychology topics with cultural application and sensitivity.

- **Program Prerequisites:** Not required.
- **Minor:** Not required.
- **Grade Requirements:** A GPA of 2.75 or higher in all courses required for this major. The overall GPA must be 2.00 or better. No more than one "D" is acceptable.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a total of 60 credit hours for this major. This includes 12-17 credit hours of required general education requirements. A total of 40 upper division credit hours are required for graduation with 29-30 upper division hours possible within the required courses for the major track options.
- **Program Code:** 5015BS with Integrative Nutrition Emphasis (5052) or Sports Nutrition Emphasis (5053)
- **CIPC:** 190504

Advisement

All Nutrition Education students are encouraged to meet the ENS department academic advisor at least twice a year. Call 801-626-6696 or send a message to matthewsmith20@weber.edu for more information or to schedule an appointment. Also refer to the Department Advisor Referral List.

Admissions Requirements

Make application with the ENS Department and declare the program of study (see Enrollment Services and Information).

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Program Learning Outcomes

- Knowledge & Skills to solve nutrition and health related problems.
- Integrated & Applied Expertise to educate and communicate for optimal health promotion and human performance.
- Personal and Community Responsibility to optimize healthful behaviors of individuals, families, and/or communities through the life cycle with networking, resources, and. Support.
- High Impact Experiences from assimilating or engaging in research, group projects, senior capstone work, and/or community-based fieldwork.
- Diet Analysis & Design by performing accurate diet analysis and design according to dietary guidelines for Americans, for health, fitness, and/or sport performance and with comprehensive evaluation, interpretation, and application.
- Nutrient Needs & Functions by gender and activity level for various age groups and health conditions using healthy and sustainable food preparation methods.
- Nutrition Issues & Assessment across cultures and the lifespan, for fitness and sport performance, in culinary science, and for the prevention and treatment of various medical conditions.
- Human Structure and Function by understanding how nutrition intersects with living and nonliving hierarchies within the human body.

Major Course Requirements for BS Degree (60 credit hours)

Complete the Nutrition Education required core, select the Integrative Nutrition emphasis and/or Sports Nutrition emphasis and complete the required, elective, and general education and support courses in the selected emphasis.

Nutrition Education Required Core Courses (15 credit hours, 9 Upper Division credits)

- NUTR 2020 - Nutrition in the Life Cycle **Credits: (3)**
- NUTR 2320 - Food Values, Diet Design and Health **Credits: (3)**
- NUTR 3020 - Sports Nutrition **Credits: (3)**
- NUTR 3420 GLB - Multicultural Health & Nutrition **Credits: (3)**
- NUTR 4320 - Current Issues in Nutrition **Credits: (2)**
- NUTR 4990 - Senior Seminar **Credits: (1)**

INTEGRATIVE NUTRITION Emphasis

Required General Education Courses (14-17 credit hours, 0 Upper Division, 17 General Education)

- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
OR
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**

- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**

- PSY 1010 SS - Introductory Psychology **Credits: (3)** or
- CHF 1500 SS/CC - Human Development **Credits: (3)**

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 1500 - Introduction to Mass Communication **Credits: (3)** or
- COMM 2010 HU - Mass Media and Society **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**

Required Courses (5 credit hours, 2 Upper Division credits)

- NUTR 1240 SUS - Nutrition and Sustainable Cooking **Credits: (3)**
- NUTR 4860 INT - Field Experience **Credits: (1-2)** (2 credits required)

Electives (23 credit hours required, 23 Upper Division credits possible, check requirements for Upper Division)

- RHS 3080 - Evidence Based Practice for Rehabilitation Sciences **Credits: (3)**
- BTNY 2303 - Ethnobotany **Credits: (3)**
- BTNY 3583 - Medicinal Plants-Chemistry and Use **Credits: (4)**
- FAM 3150 - Consumer Rights and Responsibilities **Credits: (3)**
- FAM 4400 - The Family in Stress **Credits: (3)**

- COMM 3820 - Persuasive Communication **Credits: (3)** or
- PS 3250 - Business Communication **Credits: (3)** or
- MGMT 3200 - Managerial Communications **Credits: (3)**

- HLTH 1110 - Stress Management **Credits: (3)**
- HLTH 2400 - Mind/Body Wellness **Credits: (3)**
- HLTH 3400 - Substance Abuse Prevention **Credits: (3)**
- HLTH 4700 - Wellness Coaching **Credits: (3)**
- ESS 2300 - Health/Fitness Evaluation and Exercise Prescription **Credits: (3)**
- MICR 3203 - The Immune System in Health & Disease **Credits: (3)**
- NUTR 4440 - Advanced Human Nutrition **Credits: (3)**
- NUTR 4520 CRE - Directed Undergraduate Nutrition Research **Credits: (1-4)** (up to 6 credits allowed in degree)
- PE 1080 - Strength Training, Level I **Credits: (1)**
- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**

- PEP 3290 - Methods of Teaching Fitness for Life **Credits: (3)**
- PSY 3000 - Child Psychology **Credits: (3)** or
- PSY 3140 - Adolescent Psychology **Credits: (3)** or
- PSY 3255 - Conditioning, Learning, & Behavior Modification **Credits: (3)**
- PS 3203 - Customer Service Techniques **Credits: (3)** or
- PS 3563 - Principles of Sales Supervision **Credits: (3)**
- NUTR 3320 - Health and Nutrition in the Older Adult **Credits: (3)**
- NUTR 3040 - Nutrition Assessment **Credits: (3)**
- NUTR 4830 CRE - Directed Readings **Credits: (1-3)**
- NUTR 4420 - Nutrition and Fitness **Credits: (3)**
- NUTR 3220 - Foundations in Diet Therapy **Credits: (3)**
- NUTR 3070 - Advanced Food Science **Credits: (3)**

SPORTS NUTRITION Emphasis

Required General Education and Support Courses (16 credit hours, 12 General Education, 0 Upper Division)

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** or
- ZOOL 2320 - Human Anatomy **Credits: (4)**
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)** or
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**

Required Courses (25 credit hours, 15 Upper Division credits)

- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)**
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)**
- NUTR 3070 - Advanced Food Science **Credits: (3)**
- NUTR 3040 - Nutrition Assessment **Credits: (3)**
- NUTR 4440 - Advanced Human Nutrition **Credits: (3)**
- NUTR 3220 - Foundations in Diet Therapy **Credits: (3)**

Electives (4 credit hours required, 4 Upper Division credits possible)

- ESS 2300 - Health/Fitness Evaluation and Exercise Prescription **Credits: (3)**
- ESS 3450 - Structural Kinesiology **Credits: (3)**

- ESS 3500 - Biomechanics **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**
- ESS 3600 - Measurement and Statistics in Exercise Science **Credits: (3)**
- ESS 4370 - Exercise Physiology for Special Populations **Credits: (3)**
- NUTR 1120 - Nutrition for the Athlete **Credits: (2)**
- NUTR 1240 SUS - Nutrition and Sustainable Cooking **Credits: (3)**
- NUTR 4520 CRE - Directed Undergraduate Nutrition Research **Credits: (1-4)** (up to 6 credits allowed in degree)
- NUTR 4860 INT - Field Experience **Credits: (1-2)**
- PE 1080 - Strength Training, Level I **Credits: (1)**
- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)** or
- PSY 3010 - Psychopathology **Credits: (3)** or
- RHS 3200 - Psychology of Sport, Injury & Rehabilitation **Credits: (3)**
- NUTR 3320 - Health and Nutrition in the Older Adult **Credits: (3)**
- NUTR 4830 CRE - Directed Readings **Credits: (1-3)**
- NUTR 4420 - Nutrition and Fitness **Credits: (3)**
- BTNY 3583 - Medicinal Plants-Chemistry and Use **Credits: (4)**

Additional Suggested Courses Needed for many Graduate Registered Dietitian programs (includes General Education)

- ECON 1010 SS - Economics as a Social Science **Credits: (3)** or
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)** or
- SOC 1010 SS/CC - Introduction to Sociology **Credits: (3)** or
- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- MATH 1050 QL - College Algebra **Credits: (4)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Exercise Science (BIS)

Bachelor of Integrated Studies

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A minimum grade of "C" (2.0) in each of the courses taken for the three emphases.

- **Credit Hour Requirements:** The student must take a minimum of 18 credit hours each from at least three (3) different academic departments or recognized disciplines. A student has numerous possibilities in developing a BIS degree using the academic disciplines both in HPER and campus wide.
- **Program Code:** 2059
- **CIPC:** 510913

The course of study in each discipline must be approved by the appropriate program director.

BIS Possible Options

These are only recommendations; many combinations and options for potential careers are possible.

Health Education & Health Promotion Emphasis

Program Code: 5013

CIPC: 512207

Community Health Promotion
Occupational Health Education
Clinical Health Education (*See School of Health Administrative Services in the Dr. Ezekiel R. Dumke College of Health Professions*)
Family Life Health Promotion
Gerontological Health Promotion
Drug Abuse Prevention Education

Nutrition Emphasis

Dietary Analysis
Dietary Prescription
Nutrition Education
Weight Management
Nutritional Ergogenics

Exercise Science Emphasis

Program Code: 5019

CIPC: 310505

Coaching Sport
Corporate Fitness
Community Fitness
Sports Medicine
Sport Communication
Commercial/Facility Management
Sport Psychology

BIS Requirements

Also refer to individual minor programs.

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Exercise Science Emphasis

Upper Division Hours 13, Total Hours Required 18

- HLTH 1300 - First Aid: Responding to Emergencies **Credits: (2)**
- ESS 2300 - Health/Fitness Evaluation and Exercise Prescription **Credits: (3)**
- ESS 3450 - Structural Kinesiology **Credits: (3)**
- ESS 3500 - Biomechanics **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**
- ESS 4370 - Exercise Physiology for Special Populations **Credits: (3)**
- ESS 4990 - Senior Seminar **Credits: (1)**

Nutrition Education (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Prior departmental approval is required.
- **Grade Requirements:** A GPA of 2.5 or better in courses used toward the minor.
- **Credit Hour Requirements:** A total of 18 credit hours is required, of which a minimum of 7 credit hours must be upper division (courses numbered 3000 or higher).
- **Program Code:** 5015
- **CIPC:** 190504

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Course Requirements for BIS Emphasis

Required Core Courses (7-9 credit hours)

- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- NUTR 2320 - Food Values, Diet Design and Health **Credits: (3)**
- NUTR 4830 CRE - Directed Readings **Credits: (1-3)**

Elective Courses (9-11 credit hours)

- NUTR 1120 - Nutrition for the Athlete **Credits: (2)**
- NUTR 1240 SUS - Nutrition and Sustainable Cooking **Credits: (3)**
- NUTR 3020 - Sports Nutrition **Credits: (3)**
- NUTR 3320 - Health and Nutrition in the Older Adult **Credits: (3)**
- NUTR 3420 GLB - Multicultural Health & Nutrition **Credits: (3)**
- NUTR 4320 - Current Issues in Nutrition **Credits: (2)**
- NUTR 4420 - Nutrition and Fitness **Credits: (3)**
- NUTR 4520 CRE - Directed Undergraduate Nutrition Research **Credits: (1-4)**
- NUTR 4860 INT - Field Experience **Credits: (1-2)**
- NUTR 2020 - Nutrition in the Life Cycle **Credits: (3)**
- NUTR 3040 - Nutrition Assessment **Credits: (3)**
- NUTR 4440 - Advanced Human Nutrition **Credits: (3)**
- NUTR 3070 - Advanced Food Science **Credits: (3)**
- NUTR 3220 - Foundations in Diet Therapy **Credits: (3)**

Minor

Exercise and Sport Science Minor

- **Program Prerequisite:** Prior departmental approval is required.
- **Grade Requirements:** A GPA of 2.5 or better in courses used toward the minor.
- **Credit Hour Requirements:** Total of 16 credit hours are required with 13 upper division hours in required courses.
- **Program Code:** 5049
- **CIPC:** 310505

Course Required for Minor

Required Core Courses (7 credit hours)

- ESS 2300 - Health/Fitness Evaluation and Exercise Prescription **Credits: (3)**
- ESS 3450 - Structural Kinesiology **Credits: (3)**
- ESS 4990 - Senior Seminar **Credits: (1)**

Elective Courses (at least 9 credit hours, 0-9 UD possible)

Select three courses from the list below:

- ESS 3500 - Biomechanics **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**

- ESS 4370 - Exercise Physiology for Special Populations **Credits: (3)**
- ESS 4800 CRE - Directed Undergraduate Exercise Science Research **Credits: (1-4)**
- ESS 4830 - Directed Readings in Exercise Science **Credits: (1-3)**

Note

Please note that there are pre-requisites to the required and elective ESS courses.

Nutrition Education Minor

- **Program Prerequisite:** Prior departmental approval is required.
- **Grade Requirements:** A GPA of 2.5 or better in courses used toward the minor.
- **Credit Hour Requirements:** A total of 18 credit hours is required, of which a minimum of 7 credit hours must be upper division (courses numbered 3000 or higher).
- **Program Code:** 5015
- **CIPC:** 190504

Course Requirements for Minor

Required Core Courses (11 credit hours)

- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- NUTR 2320 - Food Values, Diet Design and Health **Credits: (3)**
- NUTR 3420 GLB - Multicultural Health & Nutrition **Credits: (3)**
- NUTR 4320 - Current Issues in Nutrition **Credits: (2)**

Elective Courses (7 credit hours)

Select 7 credit hours from the following:

- NUTR 1120 - Nutrition for the Athlete **Credits: (2)**
- NUTR 1240 SUS - Nutrition and Sustainable Cooking **Credits: (3)**
- NUTR 3020 - Sports Nutrition **Credits: (3)**
- NUTR 3220 - Foundations in Diet Therapy **Credits: (3)**
- NUTR 3320 - Health and Nutrition in the Older Adult **Credits: (3)**
- NUTR 4420 - Nutrition and Fitness **Credits: (3)**
- NUTR 4520 CRE - Directed Undergraduate Nutrition Research **Credits: (1-4)**
- NUTR 4860 INT - Field Experience **Credits: (1-2)**
- NUTR 2020 - Nutrition in the Life Cycle **Credits: (3)**
- NUTR 4440 - Advanced Human Nutrition **Credits: (3)**
- NUTR 3040 - Nutrition Assessment **Credits: (3)**
- NUTR 3070 - Advanced Food Science **Credits: (3)**

Department of Dental Hygiene

Department Chair: Frances McConaughy

Location: Allied Health, Room 475

Telephone: 801-626-6130

Professor: Frances McConaughy; **Associate Professors:** Susan Alexander, Shelly Costley, Shane Perry;

Assistant Professors: Kimberlee Caldwell, Joe Hopkin; **Instructor:** Kathren Diamond, Amanda Gonzalez, Shannon Smith

The dental hygienist is a health educator and clinician concerned with the prevention of dental disease. Dental hygienists perform their services in a variety of settings, and are members of the dental team who are licensed to provide services directly to the client. Dental hygienists provide oral health education, remove deposits from around the teeth and gums, expose dental radiographs and deliver other treatments to prevent and manage dental disease.

The dental hygiene curriculum is three years in length. The first year may be completed at any accredited college or university and consists of pre dental hygiene courses. These courses include: chemistry, anatomy, physiology, microbiology, English, public speaking, psychology, sociology and nutrition. This year of pre-dental hygiene courses is followed by two years of specialized study in dental hygiene.

The two year dental hygiene curriculum includes practical experience in the WSU Dental Hygiene Clinic. Students also rotate to off-campus sites for extended clinical experiences.

Students who successfully complete the three-year curriculum are awarded an Associate of Science degree from Weber State. A fourth year leading to a bachelor's degree is optional. To become a licensed dental hygienist, each student must successfully pass a written National Board Exam and a practical regional exam. The Dental Hygiene Program is accredited by the American Dental Association's Commission on Dental Accreditation, a specialized accrediting agency recognized by the Council on Post-secondary Accreditation and the United States Department of Education.

Associate of Science

Dental Hygiene (AS)

- **Program Prerequisite:** Completion of the prerequisite courses listed under the Admission Requirements below.
- **Grade Requirements:** Prerequisite course work must meet a standard of 2.5 GPA. All courses required for the major must be successfully completed with a grade of "C" or better (a "C-" grade is not acceptable).
- **Credit Hour Requirements:** A total of 44 credit hours of dental science course work is required for the Associate degree. Additionally, 35 hours of prerequisites are necessary. Students must also complete nine additional credit hours to meet WSU requirements for the Associate of Science Degree. Total credit hour requirements equal 88 hours.
- **Program Code:** 2002AS
- **CIPC:** 510602

Advisement

Prospective students are advised by the advisement counselors in the Dr. Ezekiel R. Dumke College of Health Professions Advisement office. The number of this office is: 1-801-626-6136. The Dr. Ezekiel R. Dumke College of Health Professions Advisement Office will send brochures and applications upon request. Individual counseling appointments can be made for direct assistance.

Admission Requirements

Students must apply to and be accepted into the program to be admitted into any of the courses offered by and required for a degree in Dental Hygiene. The science and all prerequisite courses are listed below and must be completed with a minimum GPA of 2.5 prior to being admitted into the program. These basic science courses must have been taken within seven years of the date of anticipated enrollment in the Dental Hygiene Program.

- ZOOL 2320 - Human Anatomy **(4)**
- ZOOL 2420 LS - Human Physiology **(4)**
- CHEM 1130 PS - Introduction to General, Organic & Biochemistry **(5)** **OR** CHEM 1110 PS - Elementary Chemistry **(5)**
- MICR 1113 LS - Introductory Microbiology **(3)**

Integrated Human Anatomy & Physiology I and II (HTHS 2110 and HTHS 2111) may be substituted for the four courses listed above. This core will award 4 credit hours to the General Education requirement of Life and Physical Sciences. Three more credit hours of approved Physical Science are needed to complete this category of the general education requirements.

Other prerequisite courses include:

- HTHS 2230 - Introductory Pathophysiology **(3)**
- ENGL 1010 EN1 - Introductory College Writing **(3)**
- ENGL 2010 EN2 - Intermediate College Writing **(3)**
- PSY 1010 SS - Introductory Psychology **(3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **(3)**
- Math QL - Intermediate Algebra **(4)**
- Information Literacy, part D

Either

- SOC 1010 SS/CC - Introduction to Sociology **(3)** or
- SOC 1020 SS/CC - Contemporary Social Issues **(3)**

Either

- COMM 1020 HU - Principles of Public Speaking **(3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **(3)**

Application Process

Applicants to the program must complete a specific Dental Hygiene Program application to be considered for admission into the Dental Hygiene Program. The application can be obtained online (available on the DHP website) and also requires that you submit current transcripts and verification of previous health-related work experience. The application deadline for Fall Semester enrollment is January 15 of each year. A \$25.00 application fee must be paid at the time the application is submitted.

General Education

Refer to Degree Requirements for Associate of Science requirements. The majority of general education requirements for the AS degree are taken as prerequisites to the program. However, students must complete all Associate of Science general education requirements to earn the degree in Dental Hygiene.

Major Course Requirements for Associate of Science Degree

Dental Science Courses Required

- DENT 2201 - Concepts of Community Dental Health **Credits: (1)**
- DENT 2205 - Head/Neck and Dental Anatomy **Credits: (2)**
- DENT 2206 - Clinical Dental Hygiene/Radiology **Credits: (4)**
- DENT 2207 - Dental Hygiene I **Credits: (3)**
- DENT 2208 - Radiology **Credits: (1)**
- DENT 2211 - Oral Pathology **Credits: (3)**
- DENT 2215 - Periodontology **Credits: (2)**
- DENT 2216 INT - Clinical Dental Hygiene II **Credits: (3)**
- DENT 2217 - Dental Hygiene II **Credits: (3)**
- DENT 2219 - Dental Materials **Credits: (1)**
- DENT 2235 - Dental Medicine I **Credits: (2)**
- DENT 2250 - Professional Ethics **Credits: (1)**
- DENT 3301 INT - Community Dental Health Service Learning Lab **Credits: (1)**
- DENT 3305 - Pain Control **Credits: (3)**
- DENT 3336 INT - Clinical Dental Hygiene III **Credits: (4)**
- DENT 3337 - Dental Hygiene III **Credits: (3)**
- DENT 3346 INT - Clinical Dental Hygiene IV **Credits: (5)**
- DENT 3347 - Dental Hygiene IV **Credits: (2)**

Dental Science Electives

- DENT 2800 - Individual Research **Credits: (1-3)**
- DENT 2830 - Directed Readings, Projects and Research **Credits: (1-3)**
- DENT 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- DENT 3130 - Independent Study **Credits: (1-3)**
- DENT 4405 INT - Dental Hygiene Clinical Teaching Practice **Credits: (4)**
- DENT 4410 - Dental Hygiene Needs of the Geriatric Client **Credits: (2)**
- DENT 4530 INT CRE - Principles and Application of Evidence-Based Dental Hygiene Practice **Credits: (2)**
- DENT 4780 - Baccalaureate Thesis **Credits: (3)**
- DENT 4800 - Individual Research **Credits: (1-3)**
- DENT 4810 - Summer Elective Clinic **Credits: (4)**
- DENT 4830 - Directed Readings, Projects and Research **Credits: (1-3)**
- DENT 4890 INT - Advanced Community or Clinical Work Experience **Credits: (2)**
- DENT 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- DENT 4990 - Seminar **Credits: (1-2)**

Bachelor of Science

Dental Hygiene (BS)

- **Program Prerequisite:** Successful completion of an Associate of Science Degree in Dental Hygiene, National Board Examination and a Regional or State Practical Exam. Maintenance of a current dental hygiene license
- **Minor:** Not Required.

- **Grade Requirements:** All courses required for the major must be successfully completed with a grade of "C" or better (a "C-" grade is not acceptable).
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 88 of these are taken for the AS degree and an additional 7 must be taken to complete the BS in Dental Hygiene degree. A prerequisite to the Baccalaureate Thesis course is an upper division Research and Statistics course (numbered 3000 or above, minimum of 3 cr hrs). Thirteen more upper division hours are selected by the student from a menu of elective courses. Transcripts of transfer students will be evaluated on an individual basis. Transfer students must also complete the residency requirement (30 credit hours of WSU course work).
- **Program Code:** 2002BS
- **CIPC:** 510602

Advisement

Bachelor of Science Dental Hygiene majors must complete a contract with the Dental Hygiene Department Chair. (Also refer to the Department Advisor Referral List.)

Admission Requirements

An Advanced Dental Hygiene major application and a program of study contract must be completed with the Dental Hygiene Department Chair prior to beginning any of the advanced courses.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Any general education requirements not taken as part of the Associate of Science program must be completed in order to graduate with a Bachelor of Science Degree.

Program Learning Outcomes

- Prepare qualified dental hygienists who meet professional and Department Competencies for Dental Hygiene Practice including, Professional Knowledge, Health Promotion & Disease Prevention, Professional Development & Practice, Dental Hygiene Process of Care, and Person-Centered Care.
- Maintain a curriculum that: provides relevant and current dental hygiene education, discipline knowledge, supports an inclusive learning environment, and provides skill development including technological advances for students.
- Maintain a curriculum that provides high-impact educational experiences, including but not limited to unique clinical and community health settings, education, research, and service.
- Serve as a resource of oral health knowledge and education for the community.
- Foster professional and leadership development through engagement in education, scholarship, and service to the University, our Professional Associations and our community.
- Maintain admissions standards and create an inclusive student body that reflects the community we serve.

Major Course Requirements for BS Degree

To be taken in addition to the courses required for an Dental Hygiene (AS).

Dental Science Courses Required (7 credit hours) **

- DENT 4530 INT CRE - Principles and Application of Evidence-Based Dental Hygiene Practice **Credits: (2)**
- DENT 4780 - Baccalaureate Thesis **Credits: (3)** *
- DENT 4890 INT - Advanced Community or Clinical Work Experience **Credits: (2)**

Note:

** A prerequisite to the Baccalaureate Thesis course is an upper division Research and Statistics course (numbered 3000 or above, minimum of 3 cr hrs).*

*** Each student must also select upper division course work bring the total of upper division hours to 40 credit hours.*

School of Health Administrative Services

Department Chair: Dr. Darcy Carter

Location: Interprofessional Education Building, Rm 210

Telephone Contact: Kristi Andersen 801-626-7242

Professors: Kenneth Johnson, Ann Millner; **Associate Professors:** Darcy Carter, Heather Merkley, Cory Moss;

Assistant Professors: Lindsay Garr, Miland Palmer; **Instructors:** Steven Bateman, Brian Cottle, Darin Day, Richard Martin, Jason Riegert

The Health Administrative Services Department (HAS) provides an opportunity for health practitioners, students in the health disciplines, and others to prepare themselves for healthcare management, healthcare information, and public health roles in both traditional and nontraditional health care settings. In addition, many students use the programs in the department to prepare themselves for graduate studies in health administration and other related disciplines. The curriculum is organized so that students may tailor their studies in any one of the following program options: Health Administration, Health Information Management (HIM), Public Health, and Health Information Technology. All study emphases lead to a Bachelor's Degree except for Health Information Technology, which leads to an Associate of Applied Science degree. Two Institutional Certificate programs are also housed within the HAS Department in both Healthcare Coding and Classification as well as a Post-Baccalaureate certificate program in Health Information Management. A Master's Degree (with two different formats) is also offered in Health Administration within the HAS Department. For more information on this program visit www.weber.edu/mha. The HAS Department was developed to better prepare health practitioners and others to take advantage of the challenges and opportunities facing them as vital members of the nation's health care team.

Bachelor Degrees

- **Health Administration:** Designed to provide health care practitioners and others with the skills and competencies to function as supervisors and managers in health care settings. In the changing health care environment, new and challenging demands are placed on health care personnel to expand their conventional roles to include increased administrative responsibilities. This curriculum provides a working foundation in management and interpersonal skills, while at the same time introducing the student to the health care delivery system and its many and varied issues and challenges. Graduates are not only better prepared to assume increased management responsibilities, but to do so with a better understanding of the complex system in which they work. The degree is certified by the Association of University Programs in Health Administration.
- **Health Information Management:** This profession focuses on health care data and the management of health care information resources. The profession addresses the nature and structure of health data and the translation of that data into usable forms of information which support the health care of individuals and populations. HIM professionals collect, integrate, and analyze primary and secondary collections of data and manage information resources related to the research, planning, provision, and evaluation of health care services. This emphasis provides students with the knowledge and skills necessary to become self-directed

learners who possess critical-thinking skills and problem-solving abilities, communication and interpersonal skills, a commitment to life-long learning, and important ethical values. The program fosters the acquisition of leadership abilities and systems thinking necessary for adapting careers within a changing health care environment. The HIM emphasis is accredited by the Commission on Accreditation for Health Informatics and Information Management Education, making students eligible to write the national certification exam of the AHIMA, the Registered Health Information Administrator.

Public Health

The Bachelor of Science in Public Health prepares graduates to take entry-level jobs in epidemiology and public health administration and local and state department of health. Graduates will also be prepared to fill positions supporting public health research at academic institutions, pharmaceutical companies, and private research organizations. Additionally, completion of the degree will prepare students to enter a graduate program in Public Health, Biomedical Informatics, or Health Administration.

Associate Degree

Health Information Technology: Health Information Technology is a program offered under Health Administrative Services.

Health Information Technicians perform the essential functions of maintaining health data and records in acute, long-term, and ambulatory health care settings. Opportunities also exist in related health care settings, e.g., insurance companies, medical clinics, computer software vendors, and health maintenance organizations. These functions include, but are not limited to, the coding of diseases and operations, maintaining statistics, transcribing medical reports, performing DRG and utilization review procedures, supervising employees.

In addition to classroom and laboratory course work, students participate in a supervised clinical experience in a hospital medical record department or other health information environment.

The Health Information Technology program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education.

Successful completion of the Health Information Technology two-year program leads to an associate of applied science degree and the student is then eligible to sit for the national certification exam. Students passing this national examination may use the professional designation Registered Health Information Technician.

Institutional Certificates

Healthcare Coding and Classification: This program develops the ability of students to use the International Classification of Diseases, version 10 (ICD-10-CM), and the International Classification of Diseases, version 10, Procedural Coding System (ICD-10-PCS) of the U.S. Department of Health and Human Services and the Common Procedural Terminology (CPT) of the American Medical Association. The program develops expertise for both outpatient/office practice and acute-care inpatient levels of proficiency. Students will also use and apply both coding schemes in the systems of reimbursement for healthcare services.

Associate of Applied Science

Health Information Technology (AAS)

- **Program Prerequisite:** HTHS 1101 - Medical Terminology and HTHS 2110 LS - Integrated Human Anatomy and Physiology I with a grade of "C" or better.

- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in required courses (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 63 credit hours is required for graduation.
- **Program Code:** 2025AAS
- **CIPC:** 510707

Advisement

After the student has completed all the prerequisites they should meet with a faculty advisor for course and program advisement. Call 801-626-7242 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Each student must complete a program application after successful completion (grade of C or better) of the program pre-requisites.

All students admitted to the WSU Health Administrative Services AAS and BS program may be required to comply with a departmental background check and drug screen test prior to internship or other professional practice experience. If the background check reveals a history of convicted criminal actions, or the drug test results are positive for controlled substances, the students may be dismissed from the program and will not be entitled to any refunds of tuition or other fees. Most Healthcare employers have this same requirement as a condition of employment.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements.

Program Learning Outcomes

- Unit 1: Applied Sciences
- Unit 2: Professionalism
- Unit 3: Health Law and Policy
- Unit 4: Data Management
- Unit 5: informatics and Data Analytics
- Unit 6: Clinical Coding
- Unit 7: Financial and Revenue Cycle Management
- Unit 8: Quality, Risk Management and Safety
- Unit 9: Operational Management
- Unit 10: Leadership

Major Course Requirements for AAS Degree

Program Prerequisites (6 credit hours)

- HTHS 1101 - Medical Terminology **Credits: (2)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** or
- ZOOL 2320 - Human Anatomy **Credits: (4)**

Health Information Courses Required (36 credit hours)

- HIM 2000 - Introduction to Health Information Systems and Settings **Credits: (3)**
- HIM 2250 - Health Care Privacy and Security **Credits: (3)**
- HIM 2300 - Diagnosis Coding **Credits: (3)**
- HIM 2320 - Ambulatory and Physician Office Coding **Credits: (3)**
- HIM 2330 - Healthcare Reimbursement **Credits: (2)**
- HIM 2410 - ICD-10-PCS Coding **Credits: (3)**
- HIM 2430 - Pathophysiology & Pharmacology **Credits: (3)**
- HIM 2500 - Healthcare Data Management **Credits: (3)**
- HIM 2861 INT - (2nd Year) Professional Practice Experiences **Credits: (2)**
- HIM 2862 - Professional Practice Management **Credits: (2)**
- HIM 2863 - Professional Practice Experience in Coding **Credits: (3)**
- HIM 3000 - Health Informatics **Credits: (3)**
- HIM 3300 - Introduction to Quality Improvement in Healthcare **Credits: (3)**

Support Courses Required (17.5-21 credit hours)

- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)** or
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- HAS 3000 - The Healthcare System **Credits: (3)**
- WEB 1700 - Introduction to Computer Applications **Credits: (3)**
or
- WEB 1701 - Document Creation **Credits: (1)** and
- WEB 1702 - Content, Internet Identity, and Device Management **Credits: (1)** and
- WEB 1703 - Data Manipulation, Visualization, and Presentation **Credits: (1)**
or
- WEB 1501 - Document Creation Competency Exam **Credits: (.5)** and
- WEB 1502 - Content, Internet Identity, and Device Management Competency Exam **Credits: (.5)** and
- WEB 1503 - Data Manipulation, Visualization, and Presentation Competency Exam **Credits: (.5)**
- MATH 1030 QL - Contemporary Mathematics **Credits: (3)** or
- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)** or
- MATH 1035 QL - Contemporary Mathematics with Prerequisite Topics **Credits: (6)**

Institutional Certificate

Healthcare Coding & Classification Certificate of Proficiency

- **Grade Requirements:** To receive a Healthcare Coding & Classification Certificate of Proficiency the student must complete all courses in the certificate program with a grade of "C" or higher (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** 27 credit hours as specified.

- **Gainful Employment Disclosure**
- **Program Code:** 2007CP
- **CIPC:** 510713

Program Description

This program provides training to candidates interested in the application of disease and operation codes to episodes of care in the U.S. healthcare system. There currently is a nationwide shortage of qualified healthcare coders. Qualified coders are needed at all levels of the healthcare system to provide coded clinical data for reimbursement and research purposes.

The program develops the ability of students to use the International Classification of Diseases, version 10 (ICD-10-CM), and the International Classification of Diseases, version 10, Procedural Coding System (ICD-10-PCS) of the U.S. Department of Health and Human Services and the Common Procedural Terminology (CPT) of the American Medical Association. The program develops expertise for both outpatient/office practice and acute-care inpatient levels of proficiency. Students will use and apply both coding schemes in the systems of reimbursement for healthcare services.

Completion of all courses earns the student a Healthcare Coding & Classification Certificate of Proficiency and prepares them to sit for the American Health Information Management Association's Certified Coding Associate (CCA) certification examination.

Program Learning Outcomes

- Unit 1: Applied Sciences
- Unit 2: Professionalism
- Unit 3: Health Law and Policy
- Unit 4: Data Management
- Unit 5: Informatics and Data Analytics
- Unit 6: Clinical Coding
- Unit 7: Financial and Revenue Cycle Management
- Unit 8: Quality, Risk Management and Safety
- Unit 9: Operational Management
- Unit 10: Leadership

Course Requirements for Institutional Certificate

Program Prerequisites (6 credit hours)

- HTHS 1101 - Medical Terminology **Credits: (2)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** or
- ZOOL 2320 - Human Anatomy **Credits: (4)**

Courses Required (21 credit hours)

- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)** or
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

- HIM 2300 - Diagnosis Coding **Credits: (3)**
- HIM 2320 - Ambulatory and Physician Office Coding **Credits: (3)**
- HIM 2330 - Healthcare Reimbursement **Credits: (2)**
- HIM 2410 - ICD-10-PCS Coding **Credits: (3)**
- HIM 2863 - Professional Practice Experience in Coding **Credits: (3)**
- HIM 2430 - Pathophysiology & Pharmacology **Credits: (3)**

Bachelor of Science

Health Administration (BS)

Health administration is rapidly growing, as is the demand for qualified individuals. A bachelor's degree in our Health Administration program prepares you for a leadership role in hospitals, clinics, nursing homes, health departments, rehabilitation centers, skilled nursing facilities and a variety of other organizations within the healthcare industry. As a fully certified AUPHA program, our Health Administration degree provides the skills and competencies required for supervisors and managers in a healthcare setting.

- **Program Prerequisite:** Health Administration has a set of course prerequisites which are expected to be completed prior to declaration of cohort for this major. See the list of prerequisites in the course requirements discussed below. An application for this program is required upon completion of general education and prerequisites. A cohort designation for the major will be made upon receipt and processing of the program application. Students will not be allowed to register for classes in the major without designation of this cohort.

All students admitted to the Health Administration BS program may be required to comply with a departmental background check and drug screen test prior to internship or other professional practice experience. If the background check reveals a history of convicted criminal actions, or the drug test results are positive for controlled substances, then the students may be dismissed from the program and will not be entitled to any refunds of tuition or other fees. Most healthcare employers have this same requirement as a condition of employment.

- **Minor:** Not required.
- **Grade Requirement:** A grade of "C" or better in courses required for all emphases (a grade of "C-" is not acceptable), in addition to a minimum cumulative GPA of 2.75.
- **Credit Hour Requirements:** 120 credit hours are required for graduation. Forty-(40) upper division credit hours is required (courses numbered 3000 and above). Please see requirements under emphases as discussed below.
- **Program Code:** 2078BS
- **CIPC:** 510701

Advisement

Students are encouraged to meet with a faculty advisor annually for course and program advisement. For additional information, or to schedule an appointment, call 801-626-7242.

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study. In addition, the following steps are required:

1. Schedule an appointment for academic advisement with a member of the Department of Health Administrative Services faculty.
2. Make application to the program and the Dr. Ezekiel R. Dumke College of Health Professions. Overall GPA of 2.75 is required.

General Education

All general education courses should be completed before applying to the Health Administration program. Refer to Degree Requirements for Bachelor of Science requirements. Some of the courses required by this program may also fulfill general education requirements. Check with a department advisor if you have questions.

Program Learning Outcomes

- Communication - Graduates will demonstrate professional level proficiency in written and oral communication, be able to communicate across health disciplines, prepare effective reports, and make business presentations.
- Collaboration and Teamwork - Graduates will be able to work effectively in teams and to collaborate and develop positive relationships with peers, subordinates and superiors.
- Critical and Creative Thinking - Graduates will be able to seek information using management tools to collect data and apply metrics, to analyze data, form conclusions and make recommendations even when dealing with ambiguities in the information.
- Professionalism - Graduates will have the ability to align personal and organizational conduct with ethical, legal, and professional standards and will be responsible for self direction.
- Leadership - Graduates will have an understanding of supervisory and management principles as well as the ability to effect change in teams and organizational units through positive influence on both peers and subordinates.
- Organizational Awareness and Governance - Graduates will understand the structure, governance, and functioning of health care entities and systems as well as the importance of integration across the health care spectrum.
- Community Awareness - Graduates will have the ability to investigate population health characteristics and assess population health needs in a local community. The graduate should demonstrate an awareness of the ecological and social factors that influence health behavior.
- Human Resources Management - Graduates will understand and be able to implement the human resource processes needed for staffing and operating a healthcare organization.
- Financial Management - Graduates will have the ability to examine and interpret financial and accounting documents, understand and utilize budgets, understand third party payment processes, apply variance analysis and other techniques to managerial accounting information in order to understand and improve operations.
- Information Technology Management - Graduates will have the ability to recognize critical elements of information technology and use information technology for decision support.
- Performance Improvement and Quality Management - Graduates will have the ability to use quality and systems tools to measure, promote and implement quality improvement and patient satisfaction initiatives in health service organizations while accepting shared accountability for outcomes.
- Marketing and Strategic Planning - Graduates will have the ability to conduct an external and internal environmental analysis for a health services organization, develop a marketing plan for a health services product, and understand the principles of strategy formulation.

Major Course Requirements

See department for recommended sequence of major courses.

Required Prerequisite Courses

The following prerequisite courses must be completed with a grade of "C" or higher (a grade of "C-" is not acceptable) prior to enrollment in required courses of the program.

- HAS 3000 - The Healthcare System **Credits: (3)**
- HTHS 1101 - Medical Terminology **Credits: (2)**

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
OR
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
OR
- ZOOL 1020 LS - Human Biology **Credits: (3)**

- ACTG 2010 - Survey of Accounting I **Credits: (3)**

- ECON 1010 SS - Economics as a Social Science **Credits: (3)** or
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**

Required Courses (50-53 credit hours)

- HAS 3010 - Professionalism in Healthcare **Credits: (3)**
- HAS 3020 - Healthcare Marketing **Credits: (3)**
- PUBH 3150 - Introduction to Public Health **Credits: (3)**
- HAS 3230 - Health Communication **Credits: (3)**
- HAS 3240 - Human Resource Development in Healthcare **Credits: (3)**
- HAS 3260 - Healthcare Leadership and Management **Credits: (3)**
- HAS 3750 - Healthcare Financial Administration **Credits: (3)**
- HAS 4320 - Healthcare Economics and Policy **Credits: (3)**
- HAS 4400 - Legal and Ethical Aspects of Health Administration **Credits: (3)**
- HAS 4525 - Post-Acute Care Operations **Credits: (3)**
- HAS 4741 - Senior Seminar Capstone **Credits: (3)**
- HAS 4860 INT - Practicum/Internship **Credits: (2-6)** (3 or 6 credit hours required)
- HIM 2330 - Healthcare Reimbursement **Credits: (2)**
- HIM 3000 - Health Informatics **Credits: (3)**
- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)**
- HIM 3300 - Introduction to Quality Improvement in Healthcare **Credits: (3)**
- HIM 3550 - Healthcare Data Analytics **Credits: (3)**

Elective Courses (6 credit hours required)

- HAS 3190 - Cultural Competency in Patient Education **Credits: (3)**
- HAS 4160 - Medical Practice Management **Credits: (3)**
- HAS 4410 - Clinical Instructional Design and Evaluation **Credits: (3)**
- HAS 4420 - Clinical Instructional Skills **Credits: (3)**
- HAS 4520 - Long-Term Care Administration **Credits: (3)**

- HAS 4620 - International Health and Healthcare **Credits: (3)**
- HAS 4800 - Individual Study **Credits: (1-3)**
- HAS 4850 - Study Abroad **Credits: (1-6)**
- HAS 4990 - Seminar **Credits: (1)**
- HIM 3610 - Advanced Principles of Revenue Cycle Management **Credits: (3)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**

Health Information Management (BS)

Health Information Management (HIM) involves the organization, protection, and analysis of health information. HIM professionals work to ensure that patient data is accurate, complete, and accessible and that it is used to provide quality patient care. HIM professionals are vital parts of healthcare organizations of all sizes from private physician offices to large hospital complexes.

Program Prerequisite: Health Information Management (BS) degree requires the following prerequisites:

- HTHS 1101 - Medical Terminology **(2)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **(4)**

An application for this program is required upon completion of these prerequisite courses. A cohort designation for the major will be made upon receipt and processing of the program application. Students will not be allowed to register for classes in the major without designation of this cohort.

All students admitted to the Health Information Management (BS) degree program will be required to comply with a departmental background check, drug screen, provide proof of immunizations prior to internship or other professional practice experience. If the background check reveals a history of convicted criminal actions, or the drug test results are positive for controlled substances, then the students may be dismissed from the program and will not be entitled to any refunds of tuition or other fees. Most healthcare employers have this same requirement as a condition of employment.

- **Minor:** Not required.
- **Grade Requirement:** A grade of "C" or better in courses required for all emphases (a grade of "C-" is not acceptable), in addition to a minimum cumulative GPA of 2.75.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation. A total of 40 upper division credit hours is required (courses numbered 3000 and above). Please see requirements under emphases as discussed below.
- **Program Code:** 2079BS
- **CIPC:** 510706

Advisement

Students are encouraged to meet with a faculty advisor annually for course and program advisement. Call 801-626-7242 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study. In addition, the following steps are required:

1. Schedule an appointment for academic advisement with a member of the Department of Health Administrative Services faculty.

2. After completing the program prerequisites, make application to the program and the Dr. Ezekiel R. Dumke College of Health Professions. Applications will be processed two times each academic year.
3. Overall GPA of 2.75 is required.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Some of the courses required by this program may also fulfill general education requirements. Check with a department advisor if you have questions.

HIM Program Learning Outcomes

- Unit 1: Applied Sciences
- Unit 2: Professionalism
- Unit 3: Health Law and Policy
- Unit 4: Data Management
- Unit 5: informatics and Data Analytics
- Unit 6: Clinical Coding
- Unit 7: Financial and Revenue Cycle Management
- Unit 8: Quality, Risk Management and Safety
- Unit 9: Operational Management
- Unit 10: Leadership
- Unit 11: Research and Scholarly Activities

Major Course Requirements

See department for recommended sequence of major courses.

Required Prerequisite Courses

The following prerequisite courses must be completed with a grade of "C" or higher (a grade of "C-" is not acceptable) prior to enrollment in required courses of the program.

- HTHS 1101 - Medical Terminology **Credits: (2)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)**

Required Courses (79 credit hours)

- HIM 2000 - Introduction to Health Information Systems and Settings **Credits: (3)**
- HIM 2250 - Health Care Privacy and Security **Credits: (3)**
- HIM 2300 - Diagnosis Coding **Credits: (3)**
- HIM 2320 - Ambulatory and Physician Office Coding **Credits: (3)**
- HIM 2330 - Healthcare Reimbursement **Credits: (2)**
- HIM 2410 - ICD-10-PCS Coding **Credits: (3)**
- HIM 2500 - Healthcare Data Management **Credits: (3)**
- HIM 2861 INT - (2nd Year) Professional Practice Experiences **Credits: (2)**
- HIM 2862 - Professional Practice Management **Credits: (2)**
- HIM 2863 - Professional Practice Experience in Coding **Credits: (3)**
- HIM 3000 - Health Informatics **Credits: (3)**

- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)**
- HIM 3300 - Introduction to Quality Improvement in Healthcare **Credits: (3)**
- HIM 3450 - Healthcare Systems Analysis and Design **Credits: (3)**
- PUBH 3500 - Biomedical Research Support **Credits: (2)**
- HIM 3550 - Healthcare Data Analytics **Credits: (3)**
- HIM 3610 - Advanced Principles of Revenue Cycle Management **Credits: (3)**
- HIM 4100 - Health Information Services Management **Credits: (3)**
- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- HAS 3000 - The Healthcare System **Credits: (3)**
- HAS 3230 - Health Communication **Credits: (3)**
- HAS 3240 - Human Resource Development in Healthcare **Credits: (3)**
- HAS 3260 - Healthcare Leadership and Management **Credits: (3)**
- HAS 3750 - Healthcare Financial Administration **Credits: (3)**
- HAS 4860 INT - Practicum/Internship **Credits: (2-6)** (3 credits required)
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
- MIS 2010 - Business Computer Skills **Credits: (1)**
- HIM 2430 - Pathophysiology & Pharmacology **Credits: (3)**

Public Health (BSPH)

Program Prerequisite: Completion of general education requirements and prerequisite courses listed below. An application for the program is required upon completion of general education and prerequisites. A cohort designation for the major will be made upon receipt and processing of the program application. Students will not be allowed to register for classes in the major without designation of this cohort.

All students admitted within the WSU Health Administrative Services department may be required to comply with a departmental background check and drug screen test prior to internship or other professional practice experience. If the background check reveals a history of convicted criminal actions, or the drug test results are positive for controlled substances, then the students may be dismissed from the program and will not be entitled to any refunds of tuition or other fees. Most Health Care and Public Health employers have this same requirement as a condition of employment.

Minor: Not required.

Grade Requirement: A grade of "C" or better in courses required for all emphases (a grade of "C-" is not acceptable), in addition to a minimum cumulative GPA of 2.75.

Credit Hour Requirements: A total of 120 credit hours are required for graduation. A total of 40 upper division credit hours is required (courses numbered 3000 and above). Please see requirements listed below.

- **Program Code:** 2053BS
- **CIPC:** 512201

Advisement

Students are encouraged to meet with a faculty advisor annually for course and program advisement. Call 801-626-7242 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study. In addition, the following steps are required:

1. Schedule an appointment for academic advisement with a member of the Department of Health Administrative Services faculty.
2. Make application to the program and the Dr. Ezekiel R. Dumke College of Health Professions.
3. Overall GPA of 2.75 is required.

General Education

All general education courses should be completed before applying to the BSPH program. Refer to Degree and General Education Requirements for Bachelor of Science requirements. Some of the courses required by this program may also fulfill general education requirements. Check with a department advisor if you have questions.

Program Learning Outcomes

- Communicate public health information in both oral and written forms and through a variety of media, to diverse audiences
- Locate, use, evaluate, and synthesize public health information
- Describe public health application of quantitative and qualitative data
- Describe implications of policies, programs, and services and advocate for the implementation
- Explain the ways public health, healthcare, and other organizations can work together to assure the health of individuals and the population

Major Course Requirements for BS Degree

Public Health

Prerequisite Courses Required (20 credit hours)

- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
- MICR 1113 LS - Introductory Microbiology **Credits: (3)**
- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ECON 1010 SS - Economics as a Social Science **Credits: (3)**

Courses Required (60 credit hours)

- HAS 3000 - The Healthcare System **Credits: (3)**
- HAS 3020 - Healthcare Marketing **Credits: (3)**
- PUBH 3150 - Introduction to Public Health **Credits: (3)**
- HAS 3010 - Professionalism in Healthcare **Credits: (3)**
- HAS 3190 - Cultural Competency in Patient Education **Credits: (3)**
- HAS 3230 - Health Communication **Credits: (3)**
- HAS 3240 - Human Resource Development in Healthcare **Credits: (3)**
- HAS 3260 - Healthcare Leadership and Management **Credits: (3)**

- HAS 3750 - Healthcare Financial Administration **Credits: (3)**
- HAS 4320 - Healthcare Economics and Policy **Credits: (3)**
- HAS 4400 - Legal and Ethical Aspects of Health Administration **Credits: (3)**
- PUBH 4500 - Grant Writing **Credits: (2)**
- PUBH 4700 - Public Health Capstone **Credits: (3)**
- HAS 4860 INT - Practicum/Internship **Credits: (2-6)** (3 credit hours required)
- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)**
- PUBH 3210 - Advanced Epidemiology & Population Health **Credits: (3)**
- PUBH 3500 - Biomedical Research Support **Credits: (2)**
- HIM 3550 - Healthcare Data Analytics **Credits: (3)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**
- MICR 3012 GLB - Microbiology and Global Public Health **Credits: (2)** or
- MICR 3502 SUS - Environmental Health **Credits: (2)**
- HLTH 3000 - Foundations of Health Promotion **Credits: (3)**

Elective Courses (6 credit hours)

- RHS 3600 - Ergonomics for Health and Safety **Credits: (2)**
- HLTH 1110 - Stress Management **Credits: (3)**
- HLTH 1300 - First Aid: Responding to Emergencies **Credits: (2)**
- HLTH 2300 - Emergency Response **Credits: (3)**
- HLTH 3160 - Principles of Health Behavior **Credits: (3)**
- HLTH 3500 - Human Sexuality **Credits: (3)**
- HLTH 4250 - Contemporary Health Issues of Adolescents **Credits: (2)**
- HTHS 1101 - Medical Terminology **Credits: (2)**
- HAS 4620 - International Health and Healthcare **Credits: (3)**
- MICR 1153 LS - Public Health: Sex, Travel, Food, & Drugs **Credits: (3)**

Minor

Health Administrative Services Minor/BIS

Health Administrative Services Minor

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better in courses used toward the minor.
- **Credit Hour Requirements:** Between 16 and 24 credit hours depending on emphasis. BIS students should only do the required courses for 18 credits.
- **Program Code:** 2004
- **CIPC:** 510701

Course Requirements for Health Services Administration Emphasis

Required Courses (18 credit hours)

- HAS 3000 - The Healthcare System **Credits: (3)**
- HAS 3020 - Healthcare Marketing **Credits: (3)**
- HAS 3230 - Health Communication **Credits: (3)**
- HAS 3240 - Human Resource Development in Healthcare **Credits: (3)**
- HAS 3260 - Healthcare Leadership and Management **Credits: (3)**
- HAS 4400 - Legal and Ethical Aspects of Health Administration **Credits: (3)**

Elective Courses (5 credit hours required)

- HAS 3010 - Professionalism in Healthcare **Credits: (3)**
- PUBH 3150 - Introduction to Public Health **Credits: (3)**
- HAS 3190 - Cultural Competency in Patient Education **Credits: (3)**
- HAS 3750 - Healthcare Financial Administration **Credits: (3)**
- HAS 4320 - Healthcare Economics and Policy **Credits: (3)**
- HAS 4620 - International Health and Healthcare **Credits: (3)**
- HAS 4740 - Senior Seminar **Credits: (1)**
- HAS 4800 - Individual Study **Credits: (1-3)**
- HAS 4850 - Study Abroad **Credits: (1-6)**
- HAS 4990 - Seminar **Credits: (1)**
- HIM 3000 - Health Informatics **Credits: (3)**
- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)**
- HIM 3300 - Introduction to Quality Improvement in Healthcare **Credits: (3)**
- HIM 3550 - Healthcare Data Analytics **Credits: (3)**
- HIM 3610 - Advanced Principles of Revenue Cycle Management **Credits: (3)**

Post Baccalaureate Certificate

Health Information Management Post Baccalaureate Certificate (PBC)

- **Program Prerequisite:** Applicants must possess a bachelor's degree from a regionally accredited institution and be accepted into the certificate program.
- **Grade Requirements:** To receive a Health Information Management Certificate of Proficiency the student must complete all courses in the certificate program with a grade of "C" or higher (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** 30 credit hours as specified below.
- **Gainful Employment Disclosure**
- **Program Code:** 2006PBC
- **CIPC:** 510706

Program Description

This program focuses on the management of health care data and information resources. The program addresses the nature and structure of health data and the translation of that data into usable forms of information which support the health care of individuals and populations. HIM professionals collect, integrate, and analyze primary and secondary collections of data and manage information resources related to the research, planning, provision, and evaluation of health care services. This certificate provides students that already have a bachelor's degree the ability to build on previous education to develop the skills necessary to be an effective leader in health information management.

Course Requirements for Certificate of Proficiency

Courses Required (30 credit hours)

- HIM 5000 - Clinical Foundations in HIM **Credits: (3)**
- HIM 5010 - Health Data Management **Credits: (3)**
- HIM 5020 - Diagnosis and Procedure Coding **Credits: (3)**
- HIM 5030 - Clinical Data Management for Quality Care & Revenue Cycle Integrity **Credits: (3)**
- HIM 5040 - Privacy, Security and Confidentiality in Health Care **Credits: (3)**
- HIM 5050 - Health Information Systems & Technology **Credits: (3)**
- HIM 5080 - Health Information Management Issues **Credits: (3)**
- HIM 5090 INT - HIM Internship **Credits: (3)**
- HAS 3240 - Human Resource Development in Healthcare **Credits: (3)**
- HAS 3750 - Healthcare Financial Administration **Credits: (3)**

Regulatory Affairs Post Baccalaureate Certificate

The Post Baccalaureate Certificate in Regulatory Affairs program prepares individuals to manage the regulatory process for companies innovating and developing cutting-edge products in science, biotechnology, pharmaceuticals, and medicine. Such programs includes instruction in regulatory affairs, clinical documentation, human and animal subject protection, Food and Drug Administration (FDA) regulations, data management and analysis, good manufacturing practices, and quality management.

Admissions Requirements

- Completed application
- 3.0 GPA or higher
- Bachelor's degree (official transcripts)
- Resume/CV
- Essay
- Two letters of recommendation
- Healthcare experience preferred

Program Requirements

- **Grade Requirement:** To receive a Post Baccalaureate Certificate in Regulatory Affairs, the student must complete all courses in the program with a grade of "C" or higher, and maintain an overall program GPA of 3.0 or higher.

- **Program Code: 2083PBC**
- **CIPC: 510702**

Course Requirements

Required Courses

- MHA 6000 - Health Systems & the Healthcare Economy **Credits: (3)**
- MHA 6100 - Leading & Managing People in Healthcare **Credits: (3)**
- MENG 6140 - Foundations of Professional and Technical Writing **Credits: (3)**
- RGAF 6000 - Introduction to Regulatory Affairs **Credits: (3)**
- RGAF 6100 - Biostatistics Applied to Research **Credits: (3)**
- RGAF 6200 - Regulatory Drugs & Biologics **Credits: (2)**
- RGAF 6230 - Regulatory Devices and Diagnostics **Credits: (2)**
- RGAF 6250 - Regulatory Clinical Evidence **Credits: (2)**
- RGAF 6300 - Compliance in Regulatory Affairs **Credits: (3)**

Elective Course

- RGAF 6500 - Internship **Credits: (3)**

Department of Health, Physical Education, and Recreation

Department Chair: Dr. Ryan Zimmerman

Location: Reed K. Swenson Building, Room 307B

Telephone Contact: Marcia Kawa 801-626-6691

Professors: Chris Eisenbarth, Michael Olpin, James Zagrodnik; **Associate Professors:** Cass Griffith, Eddie Hill, Chad Smith, Ryan Zimmerman; **Assistant Professors:** Mandy King, Linnette Wong; **Instructors:** Christina Aguilar, Jonathan Griffith, Jeffery Kurt Ward

The Department of Health, Physical Education, and Recreation (HPER) in the Jerry and Vickie Moyes College of Education offers programs that promote lifelong wellness from a variety of disciplines. The teaching environment, supported by faculty with diverse expertise, creates quality learning communities that offer undergraduates exceptional educational experiences. The state-of-the-art facilities - including 6-lane swimming pool, ample indoor and outdoor recreational, fitness, sport and activity areas, and indoor climbing wall - provide an outstanding arena for student instruction. With a curriculum designed to develop professional knowledge and skills, graduates from the department are prepared to work in a variety of educational, health and recreational settings.

Through instruction, scholarship and service, the department of Health, Physical Education, and Recreation offers Bachelor of Science degrees in health promotion, outdoor and community recreation, and physical education. Minors include coaching sport, health promotion and health promotion teaching, physical education/coaching, and recreation. In addition, the department offers undergraduate and graduate programs for the department of teacher education, the master of education program, and supports Weber State University and community wellness related activities.

The department also supports the efforts of under graduates seeking the bachelor of integrated studies degree, offering health promotion, physical education/coaching, and recreation/leisure services as emphases for the BIS Program.

Mission Statement

The Department of Health, Physical Education, and Recreation inspires future professionals by providing high quality education through an innovative, engaged learning experience.

Associate of Applied Science

Outdoor Leadership (AAS)

The Outdoor & Community Recreation Education (OCRE) program at Weber State University offers students the opportunity to develop the skills, abilities, and knowledge necessary for a career in the outdoor recreation industry. The expressed goal of the OCRE program is to prepare students to effectively utilize and leverage the recreation industry to promote personal growth, health and wellness, and economic and environmental sustainability. Upon completion of the program, students may pursue front-line and leadership positions in: outdoor retail, outdoor education and/or adventure centers; guiding/outfitting companies; not-for-profit and private camps; resorts, spas and wellness centers; state and national parks; campus recreation; therapeutic programs; youth development programs; municipal parks and recreation departments; and public and private education.

- **Prerequisite:** Before beginning this program, a student must see the department advisor in Swenson.
- **Grade Requirements:** A cumulative OCRE (major) GPA of 2.75 or higher is required for this major. No more than one "D" is acceptable for OCRE-required courses. The overall university GPA must be 2.00 or higher.
- **Credit Hour Requirements:** A minimum of 63 credit hours is required for an associate of applied science degree; 45 of these credits are major requirements.
- **Program Code:** 5061AAS
- **CIPC:** 310601

Advisement

Students must follow the Department of Health, Physical Education and Recreation Advisement procedures. Contact the department advisor located in the Swenson building (also refer to the Department Advisor Referral List).

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). Sign a Program of Study Contract with the Health, Physical Education and Recreation department. Contact the department advisor.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements.

Program Learning Outcomes

1. Students will identify how to effectively integrate educational components and situational variables to make and implement quality decisions in outdoor settings.

- 2. Students will demonstrate proficiency in specific outdoor skills that are essential to individual and group sustainability in the backcountry.
- 3. Students will demonstrate the knowledge, skills, and abilities to design, implement, and prepare outdoor expedition trips a minimum of 7 days long.
- 4. Students will demonstrate the ability to accurately self-assess as well as those essential skills concerning or involving relationships between people; the ability to effectively implement a decision.
- 5. Students will demonstrate a structured approach to managing actual risk, emotional risk, and perceived risk through risk assessment, utilization of management and instructional resources, and development and execution of emergency protocols.
- 6. Students will comprehend and identify foundational concepts that embody ecological and cultural literacy along with the cooperative planning and management skills needed to ensure the preservation of resources, through personal connections, for past, present, and future generations.
- 7. Students will identify foundational theories and practices related to teaching, processing, and transference in outdoor/adventure settings.

Required General Education Courses

- BTNY 1403 LS SUS - Principles of Environmental Science **Credits: (4)**
- ECON 1100 SS - Environmental Issues and Economic Policy **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**

Major Course Requirements for AAS Degree (29 credits)

- GEOG 1002 - GPS, Map Reading and Navigation **Credits: (1)**
- OCRE 2300 - Wilderness Medicine **Credits: (3)**
- OCRE 2500 - Introduction to Outdoor Adventure Recreation **Credits: (4)**
- OCRE 2550 - Leadership and Safety Management for Outdoor Pursuits **Credits: (4)**
- OCRE 2860 - Outdoor Leadership Practicum **Credits: (2)** taken twice for 4 credits
- OCRE 2890 INT - Cooperative Work Experience **Credits: (1-9)** 2 credits are required
- PAR 1000 INT - Emergency Medical Technician **Credits: (4)**
- PAR 1001 - Emergency Medical Technician Lab **Credits: (2)**
- REC 1241 - Mountain Biking, Level I **Credits: (1)**
- REC 1307 - Avalanche Level I **Credits: (1)**
- REC 1310 - Whitewater Paddling, Level I **Credits: (1)** or
- REC 1316 - Stand-Up Paddleboard **Credits: (1)**
- REC 1527 - Rock Climbing, Level I **Credits: (1)**
- REC 1535 - Leave No Trace Trainer **Credits: (1)**
- REC 1610 - Skiing, Level I **Credits: (1)** or
- REC 1620 - Snowboarding, Level I **Credits: (1)**

Select 5 Additional Elective credit hours from REC (5 credits)

Select 5 additional credit hours from courses with a REC prefix. Any REC courses that are not already required above will fulfill this requirement.

Suggested Electives (9 credits)

The following suggested electives are provided in order to assist students wishing to pursue an AAS degree with the Outdoor & Community Recreation Education program.

- BTNY 1203 LS - Plant Biology **Credits: (3)**
- BTNY 2413 - Introduction to Natural Resource Management **Credits: (3)**
- CHF 1500 SS/CC - Human Development **Credits: (3)**
- ESS 2300 - Health/Fitness Evaluation and Exercise Prescription **Credits: (3)**
- GEO 1130 PS - Introduction to Meteorology **Credits: (3)**

- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)** and
- GEOG 1005 - Planet Earth: Local Field Studies **Credits: (1)**

- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**
- HLTH 1110 - Stress Management **Credits: (3)**
- HLTH 2400 - Mind/Body Wellness **Credits: (3)**
- PSY 2400 - Positive Psychology **Credits: (3)**
- WSU 1560 SS/HU - Perspectives in Social Science and Humanities **Credits: (3-5)**

Bachelor of Science

Health Promotion (BS)

- **Program Prerequisite:** Acceptance into the program (see Admission Requirements below).
- **Minor:** Not Required.
- **Grade Requirement:** A grade of "C" or better in all major coursework, in addition to a minimum cumulative GPA of 2.50.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 53-55 of these are required within the major. A total of 40 upper division credit hours is required (courses number 3000 and above); a minimum of 37 of these is required within the major.
- **Program Code:** 5013BS
- **CIPC:** 512207

Advisement

The Academic Advisor for the Department of Health, Physical Education, and Recreation (HPER), Brittnei Strickland, assists HPER students with advisement prior to admission to the Health Promotion program, and through completion of their program of study. Brittnei can be contacted by phone (801-626-7425), email (BrittneiStrickland@weber.edu) or online (through the Department Advisor Referral List) for more information or to schedule an appointment. Students also are encouraged to meet with program faculty for additional course and program advisement.

Admission Requirements

Before a student can be considered for the Health Promotion program, the following application requirements must be met:

1. Admission to Weber State University.
2. Completion of 25 credit hours with a minimum 2.50 Weber State University GPA. Of these 25 credits, the students must demonstrate completion of: HLTH 1030, and, HTHS 2110 or ZOOL 1020.
3. Grade "C" or better in all major coursework.
4. Declare your program of study with the HPER Academic Advisor.

Retention Requirements

- A. After students are selected into the Health Promotion major, retention in the program will be based on the following criteria:
 1. Grade "C" or better in all major coursework.
 2. Students must maintain a GPA of 2.5 or higher in all courses required for this major.
- B. Students who fail to meet the retention criteria will be placed on probation in the Health Promotion major for one semester. If standards are not met by the end of the probationary period, the student may be dismissed from the major at the discretion of the Program Director.
 1. Students who receive any grade below a "C" in a course counting toward the Health Promotion major must repeat that course and receive a grade of "C" or higher to remain in the major.
 2. Failure to repeat the course (when offered) will result in dismissal from the program at the discretion of the Program Director.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Graduates of the program are eligible to sit for the Certified Health Education Specialist (CHES) examination with a minimum of 25 semester hours in health courses.

Program Learning Outcomes

- Responsibilities
 - Assess needs, resources, and capacity for health education/promotion
 - Plan health education/promotion
 - Implement health education promotion
 - Conduct evaluation and research related to health education/promotion
 - Administer and manage health education/promotion
 - Serve as a health education/promotion resource person
 - Communicate, promote, and advocate for health, health education/promotion, and the profession.
- Standards
 - Students will comprehend concepts related to health promotion and disease prevention to enhance health.
 - Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
 - Students will demonstrate the ability to access valid information, products, and services to enhance health.
 - Students will demonstrate the ability to use interpersonal communication skills to enhance health or reduce health risks.
 - Students will demonstrate the ability to use decision-making skills to enhance health.
 - Students will demonstrate the ability to use goal-setting skills to enhance health.
 - Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

- Students will demonstrate the ability to advocate for personal, family, and community health.

Major Course Requirements for BS Degree

Prerequisite Courses Required (6-7 credit hours)

- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** or
- ZOOL 1020 LS - Human Biology **Credits: (3)**

Courses Required (35 credit hours)

- HLTH 3000 - Foundations of Health Promotion **Credits: (3)**
- HLTH 3100 - Applications of Technology in Health Promotion **Credits: (3)**
- HLTH 3200 - Methods in Health Education **Credits: (3)** *
- HLTH 4013 - Health Promotion Research and Assessment **Credits: (3)**
- HLTH 4150 - Needs Assessment & Planning Health Promotion Programs **Credits: (4)**
- HLTH 4860 INT - Field Experience **Credits: (1-6)** (3 credit hours required)
- HLTH 4990 - Senior Seminar **Credits: (1)**
- HAS 3000 - The Healthcare System **Credits: (3)**
- PUBH 3150 - Introduction to Public Health **Credits: (3)**
- HAS 3190 - Cultural Competency in Patient Education **Credits: (3)** or
- NUTR 3420 GLB - Multicultural Health & Nutrition **Credits: (3)**
- HAS 3230 - Health Communication **Credits: (3)**
- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)**

Professional Block

Minimum of 9 credit hours, must be approved by advisor. These courses may also be used as electives.

- HLTH 2400 - Mind/Body Wellness **Credits: (3)**
- HLTH 2700 - Consumer Health **Credits: (3)**
- HLTH 3160 - Principles of Health Behavior **Credits: (3)**
- HLTH 4700 - Wellness Coaching **Credits: (3)**
- HAS 3020 - Healthcare Marketing **Credits: (3)**
- HAS 3260 - Healthcare Leadership and Management **Credits: (3)**
- HAS 4320 - Healthcare Economics and Policy **Credits: (3)**

Elective Courses (15 credit hours)

- RHS 3600 - Ergonomics for Health and Safety **Credits: (2)**
- HLTH 1110 - Stress Management **Credits: (3)**
- RHS 1300 - First Aid: Responding to Emergencies **Credits: (2)**
- RHS 2300 - Emergency Response **Credits: (3)**

- HLTH 3050 - School Health Program **Credits: (3)**
- HLTH 3400 - Substance Abuse Prevention **Credits: (3)**
- HLTH 3500 - Human Sexuality **Credits: (3)**
- HLTH 4220 - Women's Health Issues **Credits: (3)**
- HLTH 4250 - Contemporary Health Issues of Adolescents **Credits: (2)**
- NUTR 3320 - Health and Nutrition in the Older Adult **Credits: (3)**
- HLTH 4800 - Individual Projects **Credits: (1-3)**
- HLTH 4860 INT - Field Experience **Credits: (1-6)** (3 credit hours required)
- HLTH 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)** (1 credit hour required)
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HAS 3240 - Human Resource Development in Healthcare **Credits: (3)**
- HAS 4400 - Legal and Ethical Aspects of Health Administration **Credits: (3)**
- HAS 4410 - Clinical Instructional Design and Evaluation **Credits: (3)** *
- HAS 4420 - Clinical Instructional Skills **Credits: (3)**
- PUBH 4500 - Grant Writing **Credits: (2)**
- HTHS 1101 - Medical Terminology **Credits: (2)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**
- GERT 3000 - Death and Dying **Credits: (3)**
- NUTR 2320 - Food Values, Diet Design and Health **Credits: (3)**
- NUTR 4420 - Nutrition and Fitness **Credits: (3)**
- OCRE 3100 - Recreation Leadership and Group Facilitation **Credits: (3)**
- OCRE 3600 - Administration and Management of Outdoor and Community Recreations Services **Credits: (3)**
- ESS 2300 - Health/Fitness Evaluation and Exercise Prescription **Credits: (3)**

Note:

**HAS 4410 may be substituted for HLTH 3200.*

Outdoor and Community Recreation Education (BS)

- **Program Prerequisite:** Not required.
- **Minor:** Not required.
- **Grade Requirements:** A cumulative OCRE (major) GPA of 2.75 or higher is required for this major. No more than one "D" is acceptable for OCRE-required courses. The overall university GPA must be 2.00 or higher.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a total of 62 credit hours for this major. Nine to 10 credit hours of required support courses may be used as general education credit. A total of 40 upper division credit hours is required with 36-39 upper division hours possible within the required courses for this major.
- **Program Code:** 5046BS with Emphasis 5069 (Adventure Recreation & Tourism) or 5070 (Youth Sports Administration) or 5055 (Outdoor Recreation Entrepreneurship)
- **CIPC:** 310601 with 310601 (Adventure Recreation & Tourism) or 310301 (Youth Sports Administration) or 310301 (Outdoor Recreation Entrepreneurship)

Advisement

All Outdoor and Community Recreation Education students are encouraged to meet with a faculty advisor or the department academic advisor each semester for course and program advisement. Call 801-626-7425 or send a message to BrittniStrickland@weber.edu for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information) with the program advisor. There are no special admission or application requirements.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Program Learning Outcomes

- Outcome 1: Comprehend/Recognize the historical, philosophical, and theoretical foundations within recreation services.
- Outcome 2: Identify and analyze contemporary professional issues and trends impacting recreation programs and services
- Outcome 3: Assess elements of personal style, prejudices, projections, and habits of mind that both shape and impede opportunities for professional, personal and group growth.
- Outcome 4: Articulate a personal philosophy of recreation that defines how the student plans to provide recreation services.
- Outcome 5: Apply theory and field techniques to assess, design and evaluate outcome-based programs that address a range of relevant personal, social, economical, and/or environmental objectives.
- Outcome 6: Develop, practice and demonstrate effective technical, facilitation, teaching and risk management skills across a range of recreation experiences.
- Outcome 7: Investigate and practice essential administrative functions necessary to conduct effective and ethical recreation programs.
- Outcome 8: Identify and apply relevant local, state, and federal legislation and regulations, along with industry standards, to management practices necessary within recreation programs.

Major Requirements for BS Degree

Required Core Courses (42 credit hours)

- OCRE 2500 - Introduction to Outdoor Adventure Recreation **Credits: (4)**
- OCRE 2890 INT - Cooperative Work Experience **Credits: (1-9)** 2 credits are required
- OCRE 2050 - Recreation, Parks, and Wellness **Credits: (3)**
- OCRE 3100 - Recreation Leadership and Group Facilitation **Credits: (3)**
- OCRE 3300 - Inclusive and Adaptive Recreation **Credits: (3)**
- OCRE 3320 - Adventure Programming **Credits: (3)**
- OCRE 3520 - Risk Management and Legal Issues in Recreation Services **Credits: (3)**
- OCRE 3600 - Administration and Management of Outdoor and Community Recreations Services **Credits: (3)**
- OCRE 4205 - Research and Program Evaluation in Parks& Recreation Services **Credits: (3)**
- OCRE 4500 - Grant and Proposal Writing for Recreation Professionals **Credits: (3)**
- OCRE 4890 INT - Cooperative Work Experience **Credits: (1-6)** 6 credits are required
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**

- MIS 2010 - Business Computer Skills **Credits: (1)**
- 2 Elective credit hours from REC
Select 2 credit hours from courses with a REC prefix. Any REC courses will fulfill this requirement.

Professional Areas of Emphasis

A student must complete the required and support courses in one of the three emphases: Adventure Recreation and Tourism, Youth Sports Administration, or Outdoor Recreation Entrepreneurship.

Adventure Recreation and Tourism Emphasis

Required Courses (15 credit hours)

- OCRE 2300 - Wilderness Medicine **Credits: (3)**
- OCRE 3400 - Outdoor Equipment Production and Retailing **Credits: (3)**
- OCRE 3450 - Adventure Travel and Sustainable Tourism **Credits: (3)**
- OCRE 3900 - Commercial Outdoor Recreation and Tourism **Credits: (3)**
- OCRE 4550 - Outdoor Education Philosophies & Principles **Credits: (3)**

Elective Courses (3 credit hours)

Choose 3 credits from any combination of OCRE courses and/or the list of specific REC courses below.

- OCRE 2550 - Leadership and Safety Management for Outdoor Pursuits **Credits: (4)**
- OCRE 2860 - Outdoor Leadership Practicum **Credits: (2)**
- GEOG 1002 - GPS, Map Reading and Navigation **Credits: (1)**
- OCRE 3500 - Community Recreation and Park Planning **Credits: (3)**
- OCRE 4000 - Recreation Programming for Youth Development **Credits: (3)**
- OCRE 3700 - Recreation and Sports Facilities and Events Management **Credits: (3)**
- REC 1307 - Avalanche Level I **Credits: (1)**
- REC 1308 - Avalanche Rescue **Credits: (1)**
- REC 1309 - Avalanche Level 2 **Credits: (1)**
- REC 1313 - Swiftwater Rescue **Credits: (1)**
- REC 1530 - Rock Climbing for Instructors, Level I **Credits: (1)**
- REC 1531 - Rock Climbing for Instructors, Level II **Credits: (1)**
- REC 1535 - Leave No Trace Trainer **Credits: (1)**
- REC 1640 - Skiing for Instructors **Credits: (1)**
- REC 1641 - Skiing for Instructors II **Credits: (1)**
- REC 1642 - Skiing for Instructors III **Credits: (1)**
- REC 1650 - Snowboarding for Instructors, Level I **Credits: (1)**
- REC 1651 - Snowboarding for Instructors, Level II **Credits: (1)**
- REC 1652 - Snowboarding for Instructors, Level III **Credits: (1)**
- OCRE 2000 - Risk, Resilience and Rock Climbing **Credits: (3)**
- BTNY 2413 - Introduction to Natural Resource Management **Credits: (3)**

Youth Sports Administration Emphasis

Required Courses (15 credit hours)

- OCRE 3700 - Recreation and Sports Facilities and Events Management **Credits: (3)**
- OCRE 4000 - Recreation Programming for Youth Development **Credits: (3)**
- PEP 2100 - Introduction to Coaching Sport **Credits: (3)**
- PEP 2500 - Sport Pedagogy **Credits: (3)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)**

Elective Courses (3 credit hours)

Choose 3 credits from any combination of OCRE courses and/or the list of specific REC courses below.

- REC 1307 - Avalanche Level I **Credits: (1)**
- REC 1308 - Avalanche Rescue **Credits: (1)**
- REC 1309 - Avalanche Level 2 **Credits: (1)**
- REC 1313 - Swiftwater Rescue **Credits: (1)**
- REC 1530 - Rock Climbing for Instructors, Level I **Credits: (1)**
- REC 1531 - Rock Climbing for Instructors, Level II **Credits: (1)**
- REC 1535 - Leave No Trace Trainer **Credits: (1)**
- REC 1640 - Skiing for Instructors **Credits: (1)**
- REC 1641 - Skiing for Instructors II **Credits: (1)**
- REC 1642 - Skiing for Instructors III **Credits: (1)**
- REC 1650 - Snowboarding for Instructors, Level I **Credits: (1)**
- REC 1651 - Snowboarding for Instructors, Level II **Credits: (1)**
- REC 1652 - Snowboarding for Instructors, Level III **Credits: (1)**
- GEOG 1002 - GPS, Map Reading and Navigation **Credits: (1)**
- OCRE 2000 - Risk, Resilience and Rock Climbing **Credits: (3)**
- OCRE 2300 - Wilderness Medicine **Credits: (3)**
- OCRE 2860 - Outdoor Leadership Practicum **Credits: (2)**
- OCRE 3400 - Outdoor Equipment Production and Retailing **Credits: (3)**
- OCRE 3450 - Adventure Travel and Sustainable Tourism **Credits: (3)**
- OCRE 3500 - Community Recreation and Park Planning **Credits: (3)**
- OCRE 3900 - Commercial Outdoor Recreation and Tourism **Credits: (3)**
- OCRE 4550 - Outdoor Education Philosophies & Principles **Credits: (3)**
- PEP 2700 SS - Sociohistorical Aspects of Sport **Credits: (3)**
- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**
- PEP 4860C INT - Field Experience Coaching **Credits: (3)**
- BTNY 2413 - Introduction to Natural Resource Management **Credits: (3)**

Outdoor Recreation Entrepreneurship Emphasis

Required Courses (18 credit hours)

- OCRE 3400 - Outdoor Equipment Production and Retailing **Credits: (3)**

Select a minimum of 15 credit hours from any of the following courses:

- ENTR 1002 - Startup Innovation **Credits: (3)**
- ENTR 2003 - Marketing Execution for Small Business **Credits: (1)**
- ENTR 2002 - Marketing Strategy for Small Business **Credits: (1)**
- ENTR 2004 - Branding for Small Business **Credits: (1)**

- ENTR 2005 - Product to Market **Credits: (1)**
- ENTR 2006 - E-Commerce for Small Business **Credits: (1)**
- ENTR 2007 - Product Design & Prototyping for Small Business **Credits: (1)**
- ENTR 2008 - Legal Foundations for Small Business **Credits: (1)**
- ENTR 2009 - Money Management for Small Business **Credits: (1)**
- ENTR 2010 - Funding For Small Business **Credits: (1)**
- ENTR 2011 - Results-Focused Leadership **Credits: (1)**
- ENTR 2012 - People Management for Small Business **Credits: (1)**
- ENTR 4680 - Consulting Essentials **Credits: (3)**

Physical Education (BS)

The non-teaching track has been suspended pending formal discontinuance and is no longer accepting new students.

Physical Education Major

The Department of Health, Physical Education, and Recreation offers an undergraduate degree in Physical Education. The Physical Education Non-teaching Track is designed to prepare students to work in a physical activity venue. The Physical Education Teaching Track is designed to prepare students to teach physical education in a K-12 school system. A teaching minor is to be selected in addition to the teaching major to prepare students to enter the Teacher Education program and to become licensed to teach in a K-12 school system.

Physical Education Teaching Track students must meet all requirements for the Physical Education Teaching Track and those requirements needed for Teacher Licensure (27).

Physical Education Non-teaching Track students must meet all requirements for the Physical Education Teaching Track except those needed for Teacher Licensure and an additional 12 credits listed below. *This program has been suspended pending formal discontinuance and is no longer accepting new students.*

- **Program Prerequisite:** Students selecting the Physical Education Teaching Track, must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).
- **Minor:** Physical Education Teaching Track requires a teaching minor.
- **Grade Requirements:** A combined GPA of 3.0 is required for all courses used toward the major. No grade lower than a "C" is acceptable.
- **Credit Hour Requirements:** Physical Education Non-teaching Track-Total minimum credit hours required in the Major (48). Physical Education Teaching Track-Total minimum credit hours required in the Major (36). Any Physical Education Professional course older than 8 years will not be accepted toward degree requirements.
- **Program Code:** Physical Education Non-Teaching (5017BS), Physical Education Teaching (5012BS)
- **CIPC:** Physical Education Non-Teaching (310599), Physical Education Teaching (131314)

Advisement

All Physical Education students are encouraged to meet with a faculty mentor or the department academic advisor each semester for course and program advisement. Call 801-626-7425 or send a message to BrittniStrickland@weber.edu for more information or to schedule an appointment. Teaching majors are encouraged to also consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269). (Also refer to the Department Advisor Referral List.)

Admission Requirements

Students must meet with Academic Advisor to declare PEP Major. In addition, students applying for the Teaching Track must also meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog). Students will not be allowed to register for PEP 3520, PEP 3520L, PEP 3630, PEP 3660, PEP 4700, PEP 4710, PEP 4860C, PEP 4830, or PEP 4990 until admission requirements have been met.

Admission requirements include:

1. Declared major or minor or BIS in a Physical Education or Coaching Education program.
2. Minimum cumulative GPA of 2.75.
3. Students may transfer a maximum of 12 physical education professional course credits from another institution per the Physical Education Program Director approval.
4. Fingerprinting/background check must be cleared prior to admission to the program. Provisional admission is granted for one semester only until the check is completed.

Program Retention Requirements

After admission into the Physical Education major/minor programs, students will be retained based on the following:

1. Minimum cumulative GPA of 3.0.
2. Earned grade of "C" or above for each required course.
3. Clear fingerprinting/background check.
4. Retention/improvement of sport specific and fitness skills.
5. Student Disposition score above 20 in each course.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

General Education courses required for the Physical Education major are:

NUTR LS SUS 1020 Science and Application of Human Nutrition (3)

HTHS LS 2110 BioMed Core

See major and minor course prerequisites for additional General Education recommendation/requirements. Also see Teacher Education Requirements for recommended and required General Education courses for Physical Education Teaching Track Majors.

Program Learning Outcomes

- Know and apply discipline-specific scientific and theoretical concepts critical to the development of physically educated individuals.
- Are physically educated individuals with the knowledge and skills necessary to demonstrate competent movement performance and health enhancing fitness as delineated in the SHAPE K - 12 Standards.
- Plan and implement developmentally appropriate learning experiences aligned with local, state, and national standards to address the diverse needs of all students.
- Use effective communication and pedagogical skills and strategies to enhance student engagement and learning.
- Utilize assessments and reflection to foster student learning and inform instructional decisions.
- Practice dispositions essential to becoming effective professionals.

Major Course Requirements for BS Degree

Professional Knowledge (18 credit hours)

- PEP 2000 - Foundations of Physical Education **Credits: (3)**
- PEP 3100 - Principles of Motor Learning and Motor Development **Credits: (3)**
- ESS 3450 - Structural Kinesiology **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**
- PEP 3520 - Curriculum and Assessment **Credits: (3)**
- PEP 3660 - Adapted Physical Education **Credits: (3)**

Field Experience (3 credit hours)

- PEP 4990 INT - Field Experience/Senior Seminar **Credits: (3)**

Methods of Teaching Courses (15 credit hours)

- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**
- PEP 3290 - Methods of Teaching Fitness for Life **Credits: (3)**
- PEP 3630 - Methods of Teaching Elementary School Physical Education **Credits: (3)**
- PEP 4700 - Methods of Teaching Junior High School Physical Education **Credits: (3)**
- PEP 4710 - Methods of Teaching High School Physical Education **Credits: (3)**

Students choosing the Non-teaching Physical Education Track are required to take an additional 12 credits of the following courses:

- PEP 2100 - Introduction to Coaching Sport **Credits: (3)**
- PEP 2500 - Sport Pedagogy **Credits: (3)**
- PEP 2700 SS - Sociohistorical Aspects of Sport **Credits: (3)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)**
- ESS 4620 - Leadership Concepts for Human Performance Management **Credits: (3)**
- PEP 4830 - Directed Readings **Credits: (1-3)**
- OCRE 2050 - Recreation, Parks, and Wellness **Credits: (3)**
- OCRE 3600 - Administration and Management of Outdoor and Community Recreations Services **Credits: (3)**
- OCRE 3100 - Recreation Leadership and Group Facilitation **Credits: (3)**
- NUTR 3020 - Sports Nutrition **Credits: (3)**
- NUTR 4420 - Nutrition and Fitness **Credits: (3)**

Physical Education Teaching (BS)

Physical Education Major

The Department of Health, Physical Education, and Recreation offers an undergraduate degree in Physical Education. The Physical Education Non-teaching Track is designed to prepare students to work in a physical activity venue. The Physical Education Teaching Track is designed to prepare students to teach physical education in a K-12 school system. A teaching minor is to be selected in addition to the teaching major to prepare students to enter the Teacher Education program and to become licensed to teach in a K-12 school system.

Physical Education Teaching Track students must meet all requirements for the Physical Education Teaching Track and those requirements needed for Teacher Licensure (27).

Physical Education Non-teaching Track students must meet all requirements for the Physical Education Teaching Track except those needed for Teacher Licensure and an additional 12 credits listed below. *This program has been suspended pending formal discontinuance and is no longer accepting new students.*

- **Program Prerequisite:** Students selecting the Physical Education Teaching Track, must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).
- **Minor:** Physical Education Teaching Track requires a teaching minor.
- **Grade Requirements:** A combined GPA of 3.0 is required for all courses used toward the major. No grade lower than a "C" is acceptable.
- **Credit Hour Requirements:** Physical Education Non-teaching Track-Total minimum credit hours required in the Major (48). Physical Education Teaching Track-Total minimum credit hours required in the Major (36). Any Physical Education Professional course older than 8 years will not be accepted toward degree requirements.
- **Program Code:** Physical Education Non-Teaching (5017BS), Physical Education Teaching (5012BS)
- **CIPC:** Physical Education Non-Teaching (310599), Physical Education Teaching (131314)

Advisement

All Physical Education students are encouraged to meet with a faculty mentor or the department academic advisor each semester for course and program advisement. Call 801-626-7425 or send a message to BrittniStrickland@weber.edu for more information or to schedule an appointment. Teaching majors are encouraged to also consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269). (Also refer to the Department Advisor Referral List.)

Admission Requirements

Students must meet with Academic Advisor to declare PEP Major. In addition, students applying for the Teaching Track must also meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog). Students will not be allowed to register for PEP 3520, PEP 3520L, PEP 3630, PEP 3660, PEP 4700, PEP 4710, PEP 4860C, PEP 4830, or PEP 4990 until admission requirements have been met.

Admission requirements include:

1. Declared major or minor or BIS in a Physical Education or Coaching Education program.
2. Minimum cumulative GPA of 2.75.
3. Students may transfer a maximum of 12 physical education professional course credits from another institution per the Physical Education Program Director approval.
4. Fingerprinting/background check must be cleared prior to admission to the program. Provisional admission is granted for one semester only until the check is completed.

Program Retention Requirements

After admission into the Physical Education major/minor programs, students will be retained based on the following:

1. Minimum cumulative GPA of 3.0.
2. Earned grade of "C" or above for each required course.
3. Clear fingerprinting/background check.
4. Retention/improvement of sport specific and fitness skills.
5. Student Disposition score above 20 in each course.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

General Education courses required for the Physical Education major are:

NUTR LS SUS 1020 Science and Application of Human Nutrition (3)

HTHS LS 2110 BioMed Core

See major and minor course prerequisites for additional General Education recommendation/requirements. Also see Teacher Education Requirements for recommended and required General Education courses for Physical Education Teaching Track Majors.

Program Learning Outcomes

- Know and apply discipline-specific scientific and theoretical concepts critical to the development of physically educated individuals.
- Are physically educated individuals with the knowledge and skills necessary to demonstrate competent movement performance and health enhancing fitness as delineated in the SHAPE K - 12 Standards.
- Plan and implement developmentally appropriate learning experiences aligned with local, state, and national standards to address the diverse needs of all students.
- Use effective communication and pedagogical skills and strategies to enhance student engagement and learning.
- Utilize assessments and reflection to foster student learning and inform instructional decisions.
- Practice dispositions essential to becoming effective professionals.

Major Course Requirements for BS Degree

Professional Knowledge (18 credit hours)

- PEP 2000 - Foundations of Physical Education **Credits: (3)**
- PEP 3100 - Principles of Motor Learning and Motor Development **Credits: (3)**
- ESS 3450 - Structural Kinesiology **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**
- PEP 3520 - Curriculum and Assessment **Credits: (3)**
- PEP 3660 - Adapted Physical Education **Credits: (3)**

Field Experience (3 credit hours)

- PEP 4990 INT - Field Experience/Senior Seminar **Credits: (3)**

Methods of Teaching Courses (15 credit hours)

- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**
- PEP 3290 - Methods of Teaching Fitness for Life **Credits: (3)**
- PEP 3630 - Methods of Teaching Elementary School Physical Education **Credits: (3)**
- PEP 4700 - Methods of Teaching Junior High School Physical Education **Credits: (3)**
- PEP 4710 - Methods of Teaching High School Physical Education **Credits: (3)**

Students choosing the Non-teaching Physical Education Track are required to take an additional 12 credits of the following courses:

- PEP 2100 - Introduction to Coaching Sport **Credits: (3)**
- PEP 2500 - Sport Pedagogy **Credits: (3)**
- PEP 2700 SS - Sociohistorical Aspects of Sport **Credits: (3)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)**
- ESS 4620 - Leadership Concepts for Human Performance Management **Credits: (3)**
- PEP 4830 - Directed Readings **Credits: (1-3)**
- OCRE 2050 - Recreation, Parks, and Wellness **Credits: (3)**
- OCRE 3600 - Administration and Management of Outdoor and Community Recreations Services **Credits: (3)**
- OCRE 3100 - Recreation Leadership and Group Facilitation **Credits: (3)**
- NUTR 3020 - Sports Nutrition **Credits: (3)**
- NUTR 4420 - Nutrition and Fitness **Credits: (3)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Health Promotion (BIS)

Bachelor of Integrated Studies

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A minimum grade of "C" (2.0) in each of the courses taken for the three emphases.
- **Credit Hour Requirements:** The student must take a minimum of 18 credit hours each from at least three (3) different academic departments or recognized disciplines. A student has numerous possibilities in developing a BIS degree using the academic disciplines both in HPER and campus wide.
- **Program Code:** 2059
- **CIPC:** 510913

The course of study in each discipline must be approved by the appropriate program director.

BIS Possible Options

These are only recommendations; many combinations and options for potential careers are possible.

Health Education & Health Promotion Emphasis

Program Code: 5013

CIPC: 512207

Community Health Promotion
Occupational Health Education
Clinical Health Education (*See School of Health Administrative Services in the Dr. Ezekiel R. Dumke College of Health Professions*)
Family Life Health Promotion
Gerontological Health Promotion
Drug Abuse Prevention Education

Nutrition Emphasis

Dietary Analysis
Dietary Prescription
Nutrition Education
Weight Management
Nutritional Ergogenics

Exercise Science Emphasis

Program Code: 5019

CIPC: 310505

Coaching Sport
Corporate Fitness
Community Fitness
Sports Medicine
Sport Communication
Commercial/Facility Management
Sport Psychology

BIS Requirements

Also refer to individual minor programs.

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Health Promotion Emphasis

21 Credit Hours Total Required

Required Courses (13 credits)

- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)** * OL
- HLTH 3000 - Foundations of Health Promotion **Credits: (3)** ** OL
- HLTH 4013 - Health Promotion Research and Assessment **Credits: (3)** *** OL
- HLTH 4150 - Needs Assessment & Planning Health Promotion Programs **Credits: (4)** *** OL

Elective Courses (8-9 credits)

- HLTH 1110 - Stress Management **Credits: (3)** OL & IS
- HLTH 2400 - Mind/Body Wellness **Credits: (3)**
- HLTH 2700 - Consumer Health **Credits: (3)** OL
- HLTH 3100 - Applications of Technology in Health Promotion **Credits: (3)**
- PUBH 3150 - Introduction to Public Health **Credits: (3)** IS
- HLTH 3160 - Principles of Health Behavior **Credits: (3)**
- HLTH 3200 - Methods in Health Education **Credits: (3)** ***
- HLTH 3400 - Substance Abuse Prevention **Credits: (3)** OL
- HLTH 3500 - Human Sexuality **Credits: (3)** OL
- HLTH 4250 - Contemporary Health Issues of Adolescents **Credits: (2)** OL
- HLTH 4700 - Wellness Coaching **Credits: (3)**

Notes:

OL = Online option available some semesters

IS = Independent Study option available some semesters

**If this pre-requisite course is used to fulfill the Social Science General Education requirement, the three credit hours cannot be counted in the BIS Health Promotion emphasis 21 credit hour requirements.*

***This course can be taken after completing the HLTH 1030 pre-requisite.*

****This course can be taken after completing the HLTH 1030 and HLTH 3000 pre-requisite.*

Outdoor Leadership (BIS)

The Outdoor Leadership BIS provides students with basic foundational skills needed for living and leading others in the outdoors.

- **Grade Requirements:** A minimum grade of "C" (2.0) in each of the courses used toward the BIS.
- **Credit Hour Requirements:** Complete a minimum of 18 credit hours selected and approved from among the below options.
- **Program Code:** 5061
- **CIPC:** 310601

Course Requirements for Minor

Required Core Courses (17 credit hours)

- OCRE 2500 - Introduction to Outdoor Adventure Recreation **Credits: (4)**
- OCRE 2050 - Recreation, Parks, and Wellness **Credits: (3)**
- OCRE 2300 - Wilderness Medicine **Credits: (3)**
- REC 1535 - Leave No Trace Trainer **Credits: (1)**
- OCRE 2550 - Leadership and Safety Management for Outdoor Pursuits **Credits: (4)**
- OCRE 2860 - Outdoor Leadership Practicum **Credits: (2)**

Elective Courses

Minimum of one Credit from the following list of electives:

- GEOG 1002 - GPS, Map Reading and Navigation **Credits: (1)**
- REC 1307 - Avalanche Level I **Credits: (1)**
- REC 1308 - Avalanche Rescue **Credits: (1)**
- REC 1309 - Avalanche Level 2 **Credits: (1)**
- REC 1313 - Swiftwater Rescue **Credits: (1)**
- REC 1530 - Rock Climbing for Instructors, Level I **Credits: (1)**
- REC 1531 - Rock Climbing for Instructors, Level II **Credits: (1)**
- REC 1640 - Skiing for Instructors **Credits: (1)**
- REC 1650 - Snowboarding for Instructors, Level I **Credits: (1)**
- REC 1641 - Skiing for Instructors II **Credits: (1)**
- REC 1651 - Snowboarding for Instructors, Level II **Credits: (1)**

Physical Education (BIS)

Bachelor of Integrated Studies

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A minimum grade of "C" (2.0) in each of the courses taken for the three emphases.
- **Credit Hour Requirements:** The student must take a minimum of 18 credit hours each from at least three (3) different academic departments or recognized disciplines. A student has numerous possibilities in developing a BIS degree using the academic disciplines both in HPER and campus wide.
- **Program Code:** 2059
- **CIPC:** 510913

The course of study in each discipline must be approved by the appropriate program director.

BIS Possible Options

These are only recommendations; many combinations and options for potential careers are possible.

Health Education & Health Promotion Emphasis

Program Code: 5013

CIPC: 512207

Community Health Promotion
Occupational Health Education
Clinical Health Education (*See School of Health Administrative Services in the Dr. Ezekiel R. Dumke College of Health Professions*)
Family Life Health Promotion
Gerontological Health Promotion
Drug Abuse Prevention Education

Nutrition Emphasis

Dietary Analysis
Dietary Prescription
Nutrition Education
Weight Management
Nutritional Ergogenics

Exercise Science Emphasis

Program Code: 5019

CIPC: 310505

Coaching Sport
Corporate Fitness
Community Fitness
Sports Medicine
Sport Communication
Commercial/Facility Management
Sport Psychology

BIS Requirements

Also refer to individual minor programs.

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Physical Education Emphasis

27 Credit Hours Total Required

Complete the following Required Courses (15 credit hours)

- PEP 2000 - Foundations of Physical Education **Credits: (3)**
- PEP 3100 - Principles of Motor Learning and Motor Development **Credits: (3)**
- PEP 3290 - Methods of Teaching Fitness for Life **Credits: (3)**
- PEP 3520 - Curriculum and Assessment **Credits: (3)**
- PEP 3520L - Curriculum and Assessment Lab **Credits: (1)**
- PEP 4990 INT - Field Experience/Senior Seminar **Credits: (3) ***

Note:

**May not be taken until all other requirements have been met.*

In addition, four of the following courses are required. (12 Credit hours)

- PEP 3630 - Methods of Teaching Elementary School Physical Education **Credits: (3)**
- PEP 3660 - Adapted Physical Education **Credits: (3)**
- PEP 4700 - Methods of Teaching Junior High School Physical Education **Credits: (3)**
- PEP 4710 - Methods of Teaching High School Physical Education **Credits: (3)**
- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**

Admission Requirements

Students must meet with Academic Advisor to review requirements for BIS in PEP. In addition, students applying for the Teaching Track must also meet the Teacher Education admission and licensure requirements (see Department of Teacher Education in this catalog). Students will not be allowed to register for PEP 3520, PEP 3520L, PEP 3630, PEP 3660, PEP 4700, PEP 4710, PEP 4860C, PEP 4830, or PEP 4990 until admission requirements have been met.

Admission requirements include:

1. Declared major or minor or BIS in a Physical Education or Coaching Education program.
2. Minimum cumulative GPA of 2.75.
3. Students may transfer a maximum of 12 physical education professional course credits from another institution per the Physical Education Program Director approval.
4. Fingerprinting/background check must be cleared prior to admission to the program. Provisional admission is granted for one semester only until the check is completed.
5. Student must adhere to the Health, Physical Education, and Recreation Department 'Student Conduct Policy' available online at <http://www.weber.edu/wsuiimages/HPER/StudentCode/HPERStudentCode.pdf>

Program Retention Requirements

After admission into the Physical Education major/minor programs, students will be retained based on the following:

1. Minimum cumulative GPA of 2.85.
2. Earned grade of C- or above for each required course.
3. Clear fingerprinting/background check.
4. Retention/improvement of sport specific and fitness skills.
5. Student Disposition score above 20 in each course.

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements.

A General Education course required for all Physical Education minors is:

NUTR LS SUS 1020 Science and Application of Human Nutrition (3)

HTHS LS 2110 BioMed Core (4)

See major and minor course prerequisites for additional General Education recommendation/requirements.

Sport Coaching Education (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Code:** 5040
- **CIPC:** 131314

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

20 credits/8 upper division

Contact-Dr. Brian McGladrey, SB 125C, 801-626-8578

- RHS 2175 - Introduction to Sports Medicine **Credits: (3)**
- PEP 2100 - Introduction to Coaching Sport **Credits: (3)**
- PEP 2500 - Sport Pedagogy **Credits: (3)**
- PEP 2700 SS - Sociohistorical Aspects of Sport **Credits: (3)**
- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)**
- PEP 4860C INT - Field Experience Coaching **Credits: (3)**

Note

PEP 5000 fulfills the eligibility requirements for the Registered Athletic Administrator (RAA) certification through the National Interscholastic Athletic Administrators Association (NIAAA) once a bachelor's degree has been earned. Students may enroll in the course during their undergraduate or graduate studies; however, certification eligibility is granted only after completing a bachelor's degree. This course is highly recommended for those interested in athletic administration careers.

Minor

Health Promotion: (Community, Worksite, Clinical, School) Minor

- **Grade Requirements:** A grade of "C" or better in all minor coursework, in addition to a minimum GPA of 2.50 in minor coursework.
- **Credit Hours Requirements:** Minimum of 22 credit hours.
- **Program Code:** 5013
- **CIPC:** 512207

Required Courses (13 credit hours)

- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**
- HLTH 3000 - Foundations of Health Promotion **Credits: (3)**
- HLTH 4013 - Health Promotion Research and Assessment **Credits: (3)**
- HLTH 4150 - Needs Assessment & Planning Health Promotion Programs **Credits: (4)**

Electives

Select 9 credit hours from the following

- HLTH 1110 - Stress Management **Credits: (3)**
- HLTH 2400 - Mind/Body Wellness **Credits: (3)**
- HLTH 2700 - Consumer Health **Credits: (3)**
- HLTH 3100 - Applications of Technology in Health Promotion **Credits: (3)**
- HLTH 3160 - Principles of Health Behavior **Credits: (3)**
- HLTH 3200 - Methods in Health Education **Credits: (3)**
- HLTH 3400 - Substance Abuse Prevention **Credits: (3)**
- HLTH 3500 - Human Sexuality **Credits: (3)**
- HLTH 4220 - Women's Health Issues **Credits: (3)**
- HLTH 4250 - Contemporary Health Issues of Adolescents **Credits: (2)**
- HLTH 4800 - Individual Projects **Credits: (1-3)**
- HLTH 4860 INT - Field Experience **Credits: (1-6)**
- HLTH 2890 INT - Cooperative Work Experience **Credits: (1-6)**
- HLTH 4890 INT - Cooperative Work Experience **Credits: (1-6)**
- HLTH 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

Courses Required for Minors Seeking Teaching Certification

Selection/substitution of courses to meet the minimum 21 hours for minor must be approved by an advisor.

- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**
- HLTH 1110 - Stress Management **Credits: (3)**
- HLTH 2400 - Mind/Body Wellness **Credits: (3)**
- HLTH 3000 - Foundations of Health Promotion **Credits: (3)**
- HLTH 3200 - Methods in Health Education **Credits: (3)**
- HLTH 3400 - Substance Abuse Prevention **Credits: (3)**
- HLTH 3500 - Human Sexuality **Credits: (3)**

Notes:

Students are required to have a current CPR/First Aid Card. This can be obtained through multiple mechanisms, including training through the Red Cross, or by taking RHS 1300 - First Aid: Responding to Emergencies (2 credits), RHS 2175 - Introduction to Sports Medicine (through concurrent enrollment), or RHS 2300 - Emergency Response (3 credits).

Students must maintain a GPA of 3.0 or higher in minor coursework, and must obtain a "C" or higher in each course.

A teaching major and the Teaching Education Professional Knowledge courses are required for teacher certification.

Students must complete 25 semester hours of health courses to qualify to take the Certified Health Education Specialist (CHES) examination. If you are interested in taking the CHES examination, please speak with an academic advisor to ensure that you are taking courses that will satisfy CHES examination eligibility requirements. This minor is designed to meet the standards associated with the Utah State Office of Education Health Education Endorsement and not CHES examination eligibility.

Outdoor and Community Recreation Education Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A cumulative OCRE (major) GPA of 2.75 or higher is required for this major. No more than one "D" is acceptable for OCRE-required courses. The overall university GPA must be 2.00 or higher.
- **Credit Hour Requirements:** Complete a minimum of 18 credit hours selected and approved from among the following:
- **Program Code:** 5044
- **CIPC:** 310601

Course Requirements for Minor

Required Core Courses (12 credit hours)

- OCRE 2050 - Recreation, Parks, and Wellness **Credits: (3)**
- OCRE 3100 - Recreation Leadership and Group Facilitation **Credits: (3)**
- OCRE 3300 - Inclusive and Adaptive Recreation **Credits: (3)**
- OCRE 3320 - Adventure Programming **Credits: (3)**

Elective Courses (6 credit hours)

Select 6 credit hours from the following:

2 credit hours from courses with a REC or PE prefix are allowable elective credits. Any REC or PE courses will fulfill this requirement.

- OCRE 2300 - Wilderness Medicine **Credits: (3)**
- OCRE 2500 - Introduction to Outdoor Adventure Recreation **Credits: (4)**
- OCRE 2610 - Introduction to Outdoor Living Skills I **Credits: (2)**
- OCRE 2890 INT - Cooperative Work Experience **Credits: (1-9)**
- OCRE 3230 - Wilderness Nutrition & Backcountry Cooking **Credits: (4)**
- OCRE 3400 - Outdoor Equipment Production and Retailing **Credits: (3)**
- OCRE 3450 - Adventure Travel and Sustainable Tourism **Credits: (3)**

- OCRE 3500 - Community Recreation and Park Planning **Credits: (3)**
- OCRE 3520 - Risk Management and Legal Issues in Recreation Services **Credits: (3)**
- OCRE 3600 - Administration and Management of Outdoor and Community Recreations Services **Credits: (3)**
- OCRE 3700 - Recreation and Sports Facilities and Events Management **Credits: (3)**
- OCRE 3900 - Commercial Outdoor Recreation and Tourism **Credits: (3)**
- OCRE 4000 - Recreation Programming for Youth Development **Credits: (3)**
- OCRE 4020 - Nature Interpretation **Credits: (3)**
- OCRE 4300 - Trends and Ethical Issues in Recreation Services **Credits: (3)**
- OCRE 4500 - Grant and Proposal Writing for Recreation Professionals **Credits: (3)**
- OCRE 4550 - Outdoor Education Philosophies & Principles **Credits: (3)**
- OCRE 4800 - Individual Projects **Credits: (1-3)**
- OCRE 4890 INT - Cooperative Work Experience **Credits: (1-6)**
- OCRE 4930 - Outdoor Education Workshop **Credits: (2)**
- PEP 2100 - Introduction to Coaching Sport **Credits: (3)**
- PEP 2500 - Sport Pedagogy **Credits: (3)**
- PEP 2700 SS - Sociohistorical Aspects of Sport **Credits: (3)**
- PEP 3320 - Techniques for Teaching Lifeguarding **Credits: (2)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)**

Outdoor Leadership Minor

The Outdoor Leadership minor provides students with basic foundational skills needed for living and leading others in the outdoors.

- Grade Requirements: A cumulative OCRE (major) GPA of 2.75 or higher is required for this major. No more than one "D" is acceptable for OCRE-required courses. The overall university GPA must be 2.00 or higher.
- Credit Hour Requirements: Complete a minimum of 18 credit hours selected and approved from among the following:
- Program Code: 5061
- CIPC: 310601

Course Requirements for Minor

Required Courses (17 credit hours)

- OCRE 2500 - Introduction to Outdoor Adventure Recreation **Credits: (4)**
- OCRE 2050 - Recreation, Parks, and Wellness **Credits: (3)**
- OCRE 2300 - Wilderness Medicine **Credits: (3)**
- REC 1535 - Leave No Trace Trainer **Credits: (1)**
- OCRE 2550 - Leadership and Safety Management for Outdoor Pursuits **Credits: (4)**
- OCRE 2860 - Outdoor Leadership Practicum **Credits: (2)**

Elective Courses (1 credit hour)

- GEOG 1002 - GPS, Map Reading and Navigation **Credits: (1)**
- REC 1307 - Avalanche Level I **Credits: (1)**

- REC 1308 - Avalanche Rescue **Credits: (1)**
- REC 1309 - Avalanche Level 2 **Credits: (1)**
- REC 1313 - Swiftwater Rescue **Credits: (1)**
- REC 1530 - Rock Climbing for Instructors, Level I **Credits: (1)**
- REC 1531 - Rock Climbing for Instructors, Level II **Credits: (1)**
- REC 1640 - Skiing for Instructors **Credits: (1)**
- REC 1650 - Snowboarding for Instructors, Level I **Credits: (1)**
- REC 1641 - Skiing for Instructors II **Credits: (1)**
- REC 1651 - Snowboarding for Instructors, Level II **Credits: (1)**

Physical Education Minor

The Department of Health, Physical Education, and Recreation offers three undergraduate minors in Physical Education. The 1) Physical Education Non-teaching Minor is designed to prepare students to work in a physical activity venue. A major must also be selected. The 2) Physical Education Minor is designed to prepare students to teach physical education in a K-12 school system. The 3) Physical Education/Coaching Education Teaching Dual Minor is designed to prepare students to teach physical education and to coach in a K-12 school system. A teaching major is to be selected in addition to either of the teaching minors to prepare students to enter the Teacher Education program and to become licensed to teach in a K-12 school system.

Physical Education Non-teaching Minor students must meet all requirements listed below.

Physical Education Minor and Physical Education/Coaching Education Dual Teaching Minor students must meet all requirements for the Physical Education Minor or the Physical Education/Coaching Education Teaching Dual Teaching Minor and those requirements needed for Teacher Licensure (27).

- **Grade Requirements:** A combined GPA of 3.0 is required for all courses used toward the minor. No grade lower than a "C" is acceptable.
- **Credit Hour Requirements:** Physical Education Non-teaching Minor - a total of 29-30 credit hours are required. Physical Education/Coaching Education Dual Teaching Minor - a total of 46-47 credit hours are required. Physical Education Minor - a total of 27 credit hours are required. In addition to the required credit hours, Physical Education/Coaching Education Dual Teaching Minor and Physical Education Minor students must meet the requirements of their selected teaching major and the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).
- **Program Code:** 5017
- **CIPC:** 310599

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

A General Education course required for all Physical Education minors is:

NUTR LS SUS 1020 Science and Application of Human Nutrition (3)

HTHS LS 2110 BioMed Core (4)

See major and minor course prerequisites for additional General Education recommendation/requirements. Also see Teacher Education Requirements for recommended and required General Education courses for Physical Education/Coaching Education Dual Teaching Minors and Physical Education Track Minors.

Admission Requirements

Students must apply for Physical Education program admittance by November 10 or March 10 of their **first** semester of taking Physical Education Professional [PEP] courses. Applications are available from the Physical Education Program Director. In addition, students applying for the Teaching Track must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog). In addition, students applying for the Physical Education Specialization grades 1-8 *must also meet the Teacher Education* admission and licensure requirements. Students will not be allowed to register for PEP 3520, PEP 3520L, PEP 3630, PEP 3660, PEP 4700, PEP 4830, PEP 4860C, or PEP 4990 until admission requirements have been met.

Admission requirements include:

1. Declared major or minor or BIS in a Physical Education or Coaching Education program.
2. Minimum cumulative GPA of 2.75.
3. Students may transfer a maximum of 12 physical education professional course credits from another institution per the Physical Education Program Director approval.
4. Fingerprinting/background check must be cleared prior to admission to the program. Provisional admission is granted for one semester only until the check is completed.

Program Retention Requirements

After admission into the Physical Education major/minor programs, students will be retained based on the following:

1. Minimum cumulative GPA of 3.0.
2. Earned grade of "C" or above for each required course.
3. Clear fingerprinting/background check.
4. Retention/improvement of sport specific and fitness skills.
5. Student Disposition score above 20 in each course.

Course Requirements for the Physical Education Minor

Professional Knowledge (15 credit hours)

- PEP 2000 - Foundations of Physical Education **Credits: (3)**
- PEP 3100 - Principles of Motor Learning and Motor Development **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**
- PEP 3520 - Curriculum and Assessment **Credits: (3)**
- PEP 3660 - Adapted Physical Education **Credits: (3)**

Field Experiences (3 credit hours)

- PEP 4990 INT - Field Experience/Senior Seminar **Credits: (3)**

Methods of Teaching (9 credit hours)

- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**
- PEP 3290 - Methods of Teaching Fitness for Life **Credits: (3)**
- PEP 4700 - Methods of Teaching Junior High School Physical Education **Credits: (3)**

Course Requirements for the Physical Education/Sport Coaching Education Dual Teaching Minor

Professional Knowledge (26 credit hours)

- PEP 2000 - Foundations of Physical Education **Credits: (3)**
- PEP 2100 - Introduction to Coaching Sport **Credits: (3)**
- PEP 2500 - Sport Pedagogy **Credits: (3)**
- PEP 2700 SS - Sociohistorical Aspects of Sport **Credits: (3)**
- PEP 3100 - Principles of Motor Learning and Motor Development **Credits: (3)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**
- PEP 3520 - Curriculum and Assessment **Credits: (3)**

Field Experiences (6 credit hours)

- PEP 4860C INT - Field Experience Coaching **Credits: (3)**
- PEP 4990 INT - Field Experience/Senior Seminar **Credits: (3)**

Skill Development and Methods of Teaching (6 credit hours)

- PEP 3240 - Skill Development and Methods of Field Sports **Credits: (2)**
- PEP 3242 - Skill Development and Methods of Court Sports **Credits: (2)**
- PEP 3290 - Methods of Teaching Fitness for Life **Credits: (3)**

Required Support Course (2-3 credit hours)

- HLTH 1300 - First Aid: Responding to Emergencies **Credits: (2)** or
- RHS 2175 - Introduction to Sports Medicine **Credits: (3)**

Sport Coaching Education Minor

This minor cannot be counted as a teaching minor.

- Grade Requirements: A minimum grade of "C" in each of the courses, and a minimum GPA of 3.0 for all program coursework.
- Credit Hour Requirements: A total of 19-20 semester hours are required for the Sport Coaching Education minor.
- **Program Code:** 5040
- **CIPC:** 131314

Course Requirements for Minor

Required Courses (19-20 credit hours)

- HLTH 1300 - First Aid: Responding to Emergencies **Credits: (2)** or
- RHS 2175 - Introduction to Sports Medicine **Credits: (3)**
- PEP 2100 - Introduction to Coaching Sport **Credits: (3)**

- PEP 2500 - Sport Pedagogy **Credits: (3)**
- PEP 2700 SS - Sociohistorical Aspects of Sport **Credits: (3)**
- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)**
- PEP 4860C INT - Field Experience Coaching **Credits: (3)**

Note

PEP 5000 fulfills the eligibility requirements for the Registered Athletic Administrator (RAA) certification through the National Interscholastic Athletic Administrators Association (NIAAA) once a bachelor's degree has been earned. Students may enroll in the course during their undergraduate or graduate studies; however, certification eligibility is granted only after completing a bachelor's degree. This course is highly recommended for those interested in athletic administration careers.

Teaching Minor

Health Promotion Teaching Minor

- **Grade Requirements:** A grade of "C" or better in all minor coursework, in addition to a minimum GPA of 2.50 in minor coursework.
- **Credit Hours Requirements:** Minimum of 21 credit hours.
- **Program Code:** 5016
- **CIPC:** 131307

Courses Required for Minors Seeking Teaching Certification

Selection/substitution of courses to meet the minimum 21 hours for minor must be approved by an advisor.

- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**
- HLTH 1110 - Stress Management **Credits: (3)** or
- HLTH 2400 - Mind/Body Wellness **Credits: (3)**
- HLTH 3000 - Foundations of Health Promotion **Credits: (3)**
- HLTH 3200 - Methods in Health Education **Credits: (3)**
- HLTH 3400 - Substance Abuse Prevention **Credits: (3)**
- HLTH 3500 - Human Sexuality **Credits: (3)**

Notes:

Students are required to have a current CPR/First Aid Card. This can be obtained through multiple mechanisms, including training through the Red Cross, or by taking RHS 1300 - First Aid: Responding to Emergencies **(2)**, RHS 2175 - Introduction to Sports Medicine **(3)** (through concurrent enrollment), or RHS 2300 - Emergency Response **(3)**.

Students must maintain a GPA of 3.0 or higher in minor coursework, and must obtain a "C" or higher in each course. A teaching major and the Teaching Education Professional knowledge courses are required for teacher certification. Students must complete 25 semester hours of health courses to qualify to take the Certified Health Education Specialist (CHES) examination. If you are interested in taking the CHES examination, please speak with an academic advisor to ensure that you are taking courses that will satisfy CHES examination eligibility requirements. The minor is designed to meet the standards associated with the Utah State Office of Education Health Education Endorsement and not CHES examination eligibility.

Physical Education Teaching Minor

Physical Education Minor

The Department of Health, Physical Education, and Recreation offers three undergraduate minors in Physical Education. The 1) Physical Education Non-teaching Minor is designed to prepare students to work in a physical activity venue. A major must also be selected. The 2) Physical Education Minor is designed to prepare students to teach physical education in a K-12 school system. The 3) Physical Education/Coaching Education Teaching Dual Minor is designed to prepare students to teach physical education and to coach in a K-12 school system. A teaching major is to be selected in addition to either of the teaching minors to prepare students to enter the Teacher Education program and to become licensed to teach in a K-12 school system.

Physical Education Non-teaching Minor students must meet all requirements listed below.

Physical Education Minor and Physical Education/Coaching Education Dual Teaching Minor students must meet all requirements for the Physical Education Minor or the Physical Education/Coaching Education Teaching Dual Teaching Minor and those requirements needed for Teacher Licensure (27).

- **Grade Requirements:** A combined GPA of 3.0 is required for all courses used toward the minor. No grade lower than a "C" is acceptable.
- **Credit Hour Requirements:** Physical Education Non-teaching Minor - a total of 29-30 credit hours are required. Physical Education/Coaching Education Dual Teaching Minor - a total of 46-47 credit hours are required. Physical Education Minor - a total of 27 credit hours are required. In addition to the required credit hours, Physical Education/Coaching Education Dual Teaching Minor and Physical Education Minor students must meet the requirements of their selected teaching major and the Teacher Education admission and licensure requirements (see Department of Teacher Education in this catalog).
- **Program Code:** Physical Education Non-Teaching (5017), Physical Education/Coaching Education Teaching Track I (5029), Physical Education/Licensure Coaching Track II (5030)
- **CIPC:** Physical Education Non-Teaching (310599), Physical Education/Coaching Education Teaching Track I (131314), Physical Education/Licensure Coaching Track II (131314)

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

A General Education course required for all Physical Education minors is:

NUTR LS SUS 1020 Science and Application of Human Nutrition (3)

HTHS LS 2110 BioMed Core (4)

See major and minor course prerequisites for additional General Education recommendation/requirements. Also see Teacher Education Requirements for recommended and required General Education courses for Physical Education/Coaching Education Dual Teaching Minors and Physical Education Track Minors.

Admission Requirements

Students must meet with Academic Advisor to declare PEP Major. In addition, students applying for the Teaching Track must also meet the Teacher Education admission and licensure requirements (see Department of Teacher Education in this catalog). Students will not be allowed to register for PEP 3520, PEP 3520L, PEP 3630, PEP 3660, PEP 4700, PEP 4710, PEP 4860C, PEP 4830, or PEP 4990 until admission requirements have been met.

Admission requirements include:

1. Declared major or minor or BIS in a Physical Education or Coaching Education program.
2. Minimum cumulative GPA of 2.75.
3. Students may transfer a maximum of 12 physical education professional course credits from another institution per the Physical Education Program Director approval.
4. Fingerprinting/background check must be cleared prior to admission to the program.
5. Provisional admission is granted for one semester only until the check is completed.

Program Retention Requirements

After admission into the Physical Education major/minor programs, students will be retained based on the following:

1. Minimum cumulative GPA of 3.0.
2. Earned grade of "C" or above for each required course.
3. Clear fingerprinting/background check.

Course Requirements for the Physical Education Minor

Professional Knowledge (15 credit hours)

- PEP 2000 - Foundations of Physical Education **Credits: (3)**
- PEP 3100 - Principles of Motor Learning and Motor Development **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**
- PEP 3520 - Curriculum and Assessment **Credits: (3)**
- PEP 3660 - Adapted Physical Education **Credits: (3)**

Field Experiences (3 credit hours)

- PEP 4990 INT - Field Experience/Senior Seminar **Credits: (3)**

Methods of Teaching (9 credit hours)

- PEP 3280 - Methods of Teaching Strength and Conditioning **Credits: (3)**
- PEP 3290 - Methods of Teaching Fitness for Life **Credits: (3)**
- PEP 4700 - Methods of Teaching Junior High School Physical Education **Credits: (3)**

Course Requirements for the Physical Education/Sport Coaching Education Dual Teaching Minor

Professional Knowledge (26 credit hours)

- PEP 2000 - Foundations of Physical Education **Credits: (3)**
- PEP 2100 - Introduction to Coaching Sport **Credits: (3)**
- PEP 2500 - Sport Pedagogy **Credits: (3)**
- PEP 2700 SS - Sociohistorical Aspects of Sport **Credits: (3)**
- PEP 3100 - Principles of Motor Learning and Motor Development **Credits: (3)**
- PEP 3400 - Sport Psychology for Coaches **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**
- PEP 3520 - Curriculum and Assessment **Credits: (3)**

Field Experiences (6 credit hours)

- PEP 4860C INT - Field Experience Coaching **Credits: (3)**
- PEP 4990 INT - Field Experience/Senior Seminar **Credits: (3)**

Skill Development and Methods of Teaching (6 credit hours)

- PEP 3240 - Skill Development and Methods of Field Sports **Credits: (2)**
- PEP 3242 - Skill Development and Methods of Court Sports **Credits: (2)**

Required Support Course (2-3 credit hours)

- HLTH 1300 - First Aid: Responding to Emergencies **Credits: (2)** or
- RHS 2175 - Introduction to Sports Medicine **Credits: (3)**

Certification

Secondary Physical Education Teachers for Elementary School Dual Certification

For individuals holding a secondary physical education certificate who desire to work in the elementary schools, dual certification is available. See the director of physical education (see Department of Health, Physical Education, and Recreation) for more information.

Department of Health Sciences

Department Chair: Travis Price

Location: Marriott Allied Health Building, Rm 109

Telephone Contact: Chris Housley 801-626-6505

Professors: Jim Hutchins, Travis Price; **Assistant Professors:** Justin Burr, Jordan West; **Instructors:** Lyndsey Aponik Gremillion, Marvin Orrock, Pamela Silberman

The Associate of Science in Health Sciences (ASHS) prepares students for entrance into a wide variety of health professions programs currently housed in the Dumke College of Health Professions (DCHP) such as: Dental Hygiene, Emergency Care and Rescue, Nursing, Radiologic Sciences, Respiratory Therapy, Medical Laboratory Sciences, Health Information Management and Health Administrative Services. It also serves as a preparatory associate degree

for other Weber State University Bachelor of Science majors including: Anthropology, Gerontology, Athletic Training, Athletic Therapy, Health Promotion, Human Performance Management, Recreation, Sales and Service Technology, and the Bachelor of Integrated Studies (BIS).

Students can choose to complete an ASHS degree or a specific ASHS degree track to customize their academic program: Associate of Science in Health Sciences - Dental Hygiene Track, Associate of Science in Health Sciences - Nursing Track, Associate of Science in Health Sciences - Radiologic Sciences Track, Associate of Science in Health Sciences - Medical Laboratory Sciences Track, and the Associate of Science in Health Sciences - Respiratory Therapy Track. The ASHS degree tracks are designed to expose students to a health professions program as well as provide specific training for potential career opportunities.

Interdisciplinary Minors

The Health Sciences Department participates in the interdisciplinary Neuroscience Minor Program. Students who wish to enroll in this program should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Associate of Science

Health Sciences (AS)

- **Grade Requirements:** An overall GPA of 2.5 or higher is required. A course grade of "C" or higher is required for all Health Sciences and the health professions (DENT, NRSG, MLS, RADT, and REST) support courses.
- **Credit Hour Requirements:** A total of 60 credit hours is required for graduation.
- **Program Code:** Health Science (2029AS), Health Science Dental Hygiene Track (2029ASDENT), Health Science MLS Track (2029ASMLS), Health Science Nursing Track (2029ASNRSG), Health Science Respiratory Therapy Track (2029ASREST), Health Science Radiologic Science Track (2029ASRADT), Health Science Public Health (2029ASPUBH)
- **CIPC:** 510000

Advisement

Students may contact an advisor in the Dr. Ezekiel R. Dumke College of Health Professions Admissions Advisement Office (Marriott Allied Health Building, Room 108, Phone 801-626-6136, Email healthprofessions@weber.edu) for program information.

General Education

Refer to Degree Requirements for Associate of Science requirements. The following courses suggested for the AS Degree in Health Sciences will also fulfill general education requirements: CHEM 1110, CHEM 1130, COMM 1020 or COMM 2110, HTHS 2110, MICR 1113, NUTR 1020, PSY 1010, SOC 1010/SOC 1020.

Consult with Academic Advising or the Dr. Ezekiel R. Dumke College of Health Professions Admissions Advisement office regarding general education guidelines.

Program Learning Outcomes

- Students will demonstrate content knowledge of human body systems
- Students will demonstrate understanding of medical terminology and fluency in medical English
- Students will demonstrate understanding of the relationship between normal human physiology and disease
- Students will demonstrate scientific knowledge and skills in scientific reasoning
- LO1. Evaluate evidence and draw scientific conclusions about natural phenomena.
- LO2. Give examples of the integration of science across different disciplines.
- LO3. Explain specific interactions between science and society.
- LO4. Employ problem solving and data analysis tools.
- LO5. Classify levels of organization in humans.
- LO6. Diagram the ways in which human bodies obtain and use energy at the system, cellular, and molecular levels in an effort to maintain homeostasis.
- LO7. Give examples of ways in which genetic processes and evolution act on the human body.
- LO8. Cite the ecological interactions between humans and their environment, which affect human health.
- LO9. Correlate anatomical structures with their physiological functions.
- LO10. Explain how diseases disrupt anatomy and/or physiology.
- LO11. Evaluate probable causes of disease, given a case study.
- LO12. Recognize the meaning of medical words, whether written or spoken.
- LO13. Deconstruct the etymology of medical words.

Major Course Requirements for the Associate of Science in Health Sciences Degree and Degree Tracks

Health Sciences Core Courses Required (10 credit hours)

- HTHS 1101 - Medical Terminology **Credits: (2)** or
- HTHS 1104 - Introductory Human Anatomy and Physiology **Credits: (3)** and
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)** or
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

Associate of Science in Health Sciences (13 credits)

WSU General Education Requirements, Health Sciences Core Requirements, and the following support courses:

- HTHS 1103 - Introduction to Health Careers **Credits: (3)**
- HTHS 2120 - Case Studies in Health Sciences **Credits: (3)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**
- HTHS 2231 - Introductory Pathophysiology Laboratory **Credits: (1)**
- HTHS 2240 - Introduction to Pharmacology **Credits: (3)** or
- HTHS 3240 - Pharmacology Principles and Clinical Applications **Credits: (3)**

Associate of Science in Health Sciences-Dental Hygiene Track (10 credits)

WSU General Education Requirements, Health Sciences Core Requirements, and the following support courses:

- HTHS 2120 - Case Studies in Health Sciences **Credits: (3)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**
- HTHS 2231 - Introductory Pathophysiology Laboratory **Credits: (1)**
- HTHS 2240 - Introduction to Pharmacology **Credits: (3)** or
- HTHS 3240 - Pharmacology Principles and Clinical Applications **Credits: (3)**

Associate of Science in Health Sciences-Medical Laboratory Sciences (MLS) Track (11 credits)

WSU General Education Requirements, Health Sciences Core Requirements, and the following support courses:

- MLS 1113 - Introduction to Medical Laboratory Practices **Credits: (4) ***
 - MLS 1114 - Principles of Hematology and Hemostasis **Credits: (4) ***
 - HTHS 2120 - Case Studies in Health Sciences **Credits: (3)**
- * Online MLS students must have a signed affiliation agreement prior to registering for these courses.***

Associate of Science in Health Sciences-Nursing Track (10 credits)

WSU General Education Requirements, Health Sciences Core Requirements, and the following support courses:

- HTHS 2120 - Case Studies in Health Sciences **Credits: (3)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**
- HTHS 2231 - Introductory Pathophysiology Laboratory **Credits: (1)**
- HTHS 2240 - Introduction to Pharmacology **Credits: (3)** or
- HTHS 3240 - Pharmacology Principles and Clinical Applications **Credits: (3)**

Associate of Science in Health Sciences-Respiratory Therapy Track (12 credits)

WSU General Education Requirements, Health Sciences Core Requirements, and the following support courses:

- HTHS 2120 - Case Studies in Health Sciences **Credits: (3)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**
- HTHS 2231 - Introductory Pathophysiology Laboratory **Credits: (1)**
- HTHS 2240 - Introduction to Pharmacology **Credits: (3)** or
- HTHS 3240 - Pharmacology Principles and Clinical Applications **Credits: (3)**
- REST 1540 - Survey of Respiratory Therapy **Credits: (1)**
- REST 1560 - Multi-Skilled Health Care Worker **Credits: (1)**

Associate of Science in Health Sciences-Radiologic Sciences Track (10 credits)

WSU General Education Requirements, Health Sciences Core Requirements.

Choose one of the following:

Limited Radiographer Certificate (10 credits)

RADT 1021, RADT 1022, RADT 1023, RADT 1025

OR

Cardiographic Technician Certificate (10 credits)

RADT 1012, RADT 1013, RADT 1014, RADT 1025

- RADT 1021 - Limited Clinical Simulation **Credits: (1)**
- RADT 1022 - Introduction to Radiologic Technology **Credits: (2)**
- RADT 1023 - Limited Radiographic Anatomy & Positioning **Credits: (2)**
- RADT 1024 - Limited Principles of Radiographic Exposure **Credits: (3)**
- RADT 1025 - Limited Patient Care and Assessment **Credits: (2)**
- RADT 1012 - Cardiographic Technician **Credits: (3)**
- RADT 1014 - Basic Cardiac Imaging **Credits: (3)**
- RADT 1013 - Rhythm Analysis **Credits: (3)**

Associate of Science in Health Sciences-Public Health Track (15 credits)

WSU General Education Requirements, Health Sciences Core Requirements, and the following support courses:

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ECON 1010 SS - Economics as a Social Science **Credits: (3)**
- PUBH 3150 - Introduction to Public Health **Credits: (3)**
- MICR 1113 LS - Introductory Microbiology **Credits: (3)**

Recommended Elective Courses to fulfill AS degree credit-hour requirement (60 credits), if necessary:

- HTHS 1103 - Introduction to Health Careers **Credits: (3)**
- HTHS 1108 - Biocalculations for Health Professions **Credits: (5)**
- HTHS 2120 - Case Studies in Health Sciences **Credits: (3)**
- HTHS 2240 - Introduction to Pharmacology **Credits: (3)** or
- HTHS 3240 - Pharmacology Principles and Clinical Applications **Credits: (3)**
- HTHS 2830 - Health Sciences Directed Readings **Credits: (1-3)**
- HTHS 2904 - Information Resources in the Health Professions **Credits: (1)**
- HTHS 2990 - Health Sciences Seminar **Credits: (1)**
- NEUR 2950 - Introduction to Neuroscience **Credits: (3)**
- PAR 1000 INT - Emergency Medical Technician **Credits: (4)** and
- PAR 1001 - Emergency Medical Technician Lab **Credits: (2)**
- HIM 2250 - Health Care Privacy and Security **Credits: (3)**
- HIM 3000 - Health Informatics **Credits: (3)**

- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)**
- HIM 3300 - Introduction to Quality Improvement in Healthcare **Credits: (3)**
- HAS 3000 - The Healthcare System **Credits: (3)**
- HAS 4400 - Legal and Ethical Aspects of Health Administration **Credits: (3)**
- MLS 4410 SUS - Interdisciplinary Health Care Teams **Credits: (3)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Electroneurodiagnostics (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** A grade of "C" or better in courses used toward the BIS emphasis (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** Minimum of 18 credit hours in Neuroscience; minimum of 23 credit hours in Health Sciences; minimum 30 credit hours in Electroneurodiagnostics (courses taken in collaboration with the University of Utah Electroneurodiagnostics Program).
- **Program Code:** Neuroscience (END) 7051, Health Science (END) 2063, Electroneurodiagnostics (END) 2064
- **CIPC:** 51.0903

Advisement

Contact the Department of Health Sciences or Department of Neuroscience END advisor who will help you select courses. This is a predefined set of Concentrations for the BIS degree. Students cannot combine these END concentrations with other BIS concentrations.

Neuroscience (END) Concentration Courses Required

Students must complete coursework in each of the following areas (cognitive/behavioral neuroscience; cellular/molecular neuroscience; clinical/medical neuroscience).

- NEUR 2950 - Introduction to Neuroscience **Credits: (3)**
- Cognitive/Behavioral Neuroscience Area*
- NEUR 3750 - Cognitive and Behavioral Neuroscience **Credits: (3)** or
 - PSY 2710 - Biopsychology **Credits: (3)** or
 - PSY 3730 - Perception **Credits: (3)**
- Cellular/Molecular Neuroscience Area*
- NEUR 3950 - Cellular and Molecular Neuroscience **Credits: (3)** or
 - ZOOL 3200 - Cell Biology **Credits: (4)** or
 - ZOOL 3300 - Genetics **Credits: (4)** or
 - ZOOL 4100 - Vertebrate Embryology **Credits: (4)**
- Clinical/Medical Neuroscience Area*
- NEUR 3850 - Clinical Neuroscience **Credits: (3)** or

- PSY 3740 - Neuropsychopharmacology **Credits: (3)** or
- HTHS 2240 - Introduction to Pharmacology **Credits: (3)** or
- HTHS 3240 - Pharmacology Principles and Clinical Applications **Credits: (3)** or
- ZOOL 1020 LS - Human Biology **Credits: (3)** or
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

Additionally, students will complete 6 credit hours of electives in consultation with their advisor.

Health Sciences (END) Concentration Courses Required

Before applying to the University of Utah Electroneurodiagnostic Program, students should complete the following required courses:

- HTHS 1101 - Medical Terminology **Credits: (2)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
or
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- HTHS 1103 - Introduction to Health Careers **Credits: (3)**
- HTHS 2120 - Case Studies in Health Sciences **Credits: (3)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**
- HTHS 2231 - Introductory Pathophysiology Laboratory **Credits: (1)**
- HTHS 2240 - Introduction to Pharmacology **Credits: (3)** or
- HTHS 3240 - Pharmacology Principles and Clinical Applications **Credits: (3)**

University of Utah Electroneurodiagnostics (END) Program Courses Required

Students will apply for admission to the University of Utah Electroneurodiagnostics (END) Program.

- HTHS 3410 - Foundations of Health Science Technology **Credits: (3)**
- HTHS 3412 - Health Science Technology Applications **Credits: (3)**
- HTHS 3997 - Digital EEG Concepts **Credits: (3)**
- HTHS 3998 - Normal Adult EEG **Credits: (3)**
- HTHS 3999 - Artifacts in EEG **Credits: (3)**
- HTHS 4010 - Interdisciplinary Health Care Teams **Credits: (3)**
- NEUR 3998 - EEG in Epilepsy **Credits: (3)**
- NEUR 3999 - EEG in Ped Patients & Neonates **Credits: (3)**
- BIS 3850 - BIS Internship **Credits: (1-3)** (3 credits required)

Health Sciences (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Credit hour requirements:** 18 credit hours.
- **Program Code:** 2029
- **CIPC:** 510000

The course contract as well as any substitutions must be approved by the chair of the appropriate department and the BIS coordinator. HTHS 3328, HTHS 3329, and PUBH 3200 may serve as possible substitutions with approval.

Required Courses

- HTHS 1101 - Medical Terminology **Credits: (2)** or
- HTHS 1103 - Introduction to Health Careers **Credits: (3)** or
- HTHS 1104 - Introductory Human Anatomy and Physiology **Credits: (3)**

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)**
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
- HTHS 2120 - Case Studies in Health Sciences **Credits: (3)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**
- HTHS 2231 - Introductory Pathophysiology Laboratory **Credits: (1)**

- HTHS 2240 - Introduction to Pharmacology **Credits: (3)** or
- HTHS 3240 - Pharmacology Principles and Clinical Applications **Credits: (3)**

Department of Medical Laboratory Sciences

Department Chair: Matthew Nicholaou

Program Director: Janice Thomas (AAS/MLT) and Kendal Beazer (BS/MLS)

Online Program Coordinators: Cindi Kranek, Kandi Tait, Ashley Wilkinson

Practicum Coordinator: Christy Achter

Laboratory Manager: Kent Criddle

Location: Marriott Allied Health Building, Rm 208

Telephone Contact: Jaime Brown, 801-626-6118

Professor: Yas Simonian, Janice Thomas and Matthew Nicholaou; **Associate Professors:** S. Kendal Beazer, Scott Moore and Justin Rhees; **Instructor:** Chere Clawson

Medical Laboratory Scientists (MLS) and Medical Laboratory Technicians (MLT) - also known as Clinical Laboratory Scientists (CLS) and Clinical Laboratory Technicians (CLT) - perform laboratory tests on patient samples to provide information needed to diagnose or monitor treatment. These professionals do everything from providing cancer-testing results, to predicting the correct antibiotic to prescribe, to typing the correct blood for surgery. Examples of common laboratory tests include tests to detect anemia, diagnose diabetes and strep throat, and provide a transfusion to an accident victim. Doctors rely on laboratory test results to make informed patient diagnoses. Patient history along with physical signs and symptoms are vital, but most diagnoses need confirmation that only laboratory tests can provide. The laboratory professionals provide answers to life-and-death questions every day.

The MLS program follows a ladder approach from the Associates of Applied Science (AAS) degree through a Bachelor of Science (BS) degree. Students interested in applying to the campus associate level MLT program must first meet with an academic advisor and complete prerequisite courses. If accepted into the MLT program, successful completion of two academic semesters leads to an Associates of Applied Science degree, and allows graduates eligibility to national certification (ASCP MLT). Qualified students wishing to continue can apply for acceptance into the MLS BS program, which generally requires two years of study and provides eligibility to national certification (ASCP MT) upon successful completion of all academic requirements.

Students interested in the online MLS AAS Program must be employed, or have the support of, a clinical laboratory. Students will receive the didactic (lecture) portion of each course online, while completing specific laboratory competencies in the clinical laboratory under the supervision of qualified clinical laboratory mentors where they work. Please refer to the employer support information on the MLS Department web site: <http://www.weber.edu/mls> (online DEGREES/PROGRAMS).

Accreditation

*The Medical Laboratory Sciences Programs are nationally accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS) 5600 N. River Rd. Suite 720, Rosemont, IL 60018-5119.
<http://www.naacls.org>.*

Associate of Applied Science

Medical Laboratory Sciences (AAS)

- **Program Prerequisite:** Completion of the support courses listed under the Admission Requirements.
- **Grade Requirements:** A grade of "B-" or better in all MLS courses, and a grade of "C" or better in all support courses.
- **Credit Hour Requirements:** A total of 67-68 credit hours is required for graduation, 34 of these are required MLS courses, 22 are required support courses, and 12 are required general education courses.
- **Program Code:** 2098AAS
- **CIPC:** 511004

Advisement

Students interested in the MLS program are required to meet with an MLS advisor. To schedule an advising appointment, contact the MLS office at 801-626-6118 or email mls@weber.edu to request an appointment.

Admission Requirements

Campus students:

1. Applicants must have a minimum cumulative GPA of 3.0 and meet with an advisor.
2. Complete MLS 1113 and MLS 1114 and most or all of the MLS support courses by April 1 of the year of application (student may be enrolled in those courses that spring semester). For the list of support courses, see Course Requirements for the AAS Degree.
3. Apply for the AAS program and include a non-refundable \$25 fee by April 1st for fall semester acceptance. Applications can be found online. For more information, call the MLS office at 801-626-6118.
4. Complete a federal background check and drug screen by the end of fall semester after acceptance into the program.
5. Students for whom English is not their native language need to submit documentation of proficiency in English. Please refer to the MLS website for more details.

Online students:

1. Applicants must have a minimum cumulative GPA of 2.7.

2. Must be currently employed by an accredited (TJC/CAP/COLA/CLIA) laboratory that can provide a multidisciplinary laboratory experience. Contact the AAS MLS online academic advisor, Ashley Wilkinson for advising.
3. Have employer read and sign a Statement of Support form.
4. Apply to WSU for general admissions.
5. Send all official transcripts from other institutions to the WSU admissions office.
6. Complete an MLS AAS online application. Submit a completed Statement of Support along with the application. A \$95 non-refundable departmental application fee is also required.
7. Complete a federal background check and drug screen, if required by employer.

Once supporting documents listed above are received and reviewed, students are notified of acceptance and enrolled the following semester.

For more information about the online application requirements and process contact Ashley Wilkinson at 801-626-6120 for advising.

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. The following required courses will fulfill both program requirements and general education requirements in the Life and Physical Sciences areas: CHEM 1110/1115, CHEM 1210/1215, HTHS 2110, MICR 1113, MICR 2054, and PHYS 1010. Remaining general education requirements can be fulfilled by taking the required 12 credit hours from each of the following areas:

- 6 credit hours Composition
- 3 credit hours Creative Arts & Humanities
- 3 credit hours Social Sciences

Some requirements may be met by ACT, CLEP, and/or AP scores as designated by the University (contact the Admissions Office for more information).

Credit Policy

MLS Obsolete Credit AAS: Medical Laboratory Sciences credits earned more than five (5) years prior to application or re-application to the AAS program (MLT) will not be accepted toward major requirement.

Program Learning Outcomes

- Knowledge Goal: Demonstrate knowledge of theory underlying laboratory testing using analytical, interpretive, and problem solving skills.
- Knowledge Goal: Apply mathematical calculations to laboratory situations.
- Laboratory Skill: Perform laboratory procedures from simple to complex, including specimen collection and processing, analysis, interpretation, and use of quality assurance procedures.
- Laboratory Skill: Correlate laboratory theory and terminology to practical laboratory work.
- Laboratory Skill: Gather additional laboratory data and apply problem solving skills to solve problems/discrepancies.
- Diagnostic Skill: Relate laboratory findings to common disease processes.
- Professionalism and Ethics: Demonstrate professional conduct and ethical behavior.
- Communication Skill: Demonstrate effective communication skills and behaviors with colleagues in the program and in a laboratory setting for the best new technologies to integrate organization's business processes.

Major Course Requirements for AAS Degree

MLS Courses Required (34 credit hours)

- MLS 1001 - Online Orientation for AAS Degree **Credits: (1)**
- MLS 1113 - Introduction to Medical Laboratory Practices **Credits: (4)**
- MLS 1114 - Principles of Hematology and Hemostasis **Credits: (4)**
- MLS 2210 - Principles of Immunohematology **Credits: (5)**
- MLS 2211 - Principles of Clinical Chemistry I **Credits: (4)**
- MLS 2212 - Principles of Clinical Microbiology I **Credits: (5)**
- MLS 2213 - Principles of Clinical Chemistry II **Credits: (4)**
- MLS 2214 - Principles of Clinical Microbiology II **Credits: (5)**
- MLS 2256 INT - Supervised Clinical Experience I **Credits: (1)**
- MLS 2257 INT - Supervised Clinical Experience II **Credits: (1)**

Support Courses Required (19-25 credit hours)

- CHEM 1110 PS - Elementary Chemistry **Credits: (4)**
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- CHEM 1120 - Elementary Organic Bio-Chemistry **Credits: (4)**
- CHEM 1125 - Elementary Organic Bio-Chemistry Lab **Credits: (1)**
- **or**
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)**
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)**
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- **or**
- CHEM 1130 PS - Introduction to General, Organic & Biochemistry **Credits: (4)**
- CHEM 1135 - Introduction to General, Organic & Biochemistry Lab **Credits: (1)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** * and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)** *
- MATH 1010 - Intermediate Algebra **Credits: (4-5)** or
- MLS 2003 - Applied Laboratory Mathematics and Operations **Credits: (3)**
- MICR 1113 LS - Introductory Microbiology **Credits: (3)** or
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**

Note:

* *Equivalencies HTHS 2110 and HTHS 2111*

- ZOO 2420 LS - Human Physiology **(4)** and
- ZOO 2320 - Human Anatomy **(4)**
- *or*
- PHYS 1010 PS - Elementary Physics **(3)**

Bachelor of Science

Medical Laboratory Sciences (BS)

- **Program Prerequisite:** Completion of MLS AAS Degree requirements. Students transferring from another college or university must have an MLS/MLT AAS Degree and CLT/MLT certification.
- **Minor:** A minor is not required, but minors are available in chemistry and microbiology with successful completion of additional courses as specified by the department offering the minor.
- **Grade Requirements:** A grade of "B-" or better in all MLS courses, and a grade of "C" or better in all support courses.
- **Credit Hour Requirements:** A minimum of 120 credit hours is required for graduation.
- **Program Code:** Medical Laboratory Professional (2039BS) with Lab Track (2040), or Pre-Professional Tracks (2041).
- **CIPC:** Medical Laboratory Professional (511005) with Lab Track (511005), or Pre-Professional Tracks (511102).

Advisement

All medical laboratory science students are required to meet with an advisor prior to application. Thereafter, advisement with a faculty each year is recommended. To schedule an advising appointment, call the MLS office at 801-626-6118 or email mls@weber.edu.

Admission Requirements

Campus students:

1. Must have a minimum cumulative GPA of 3.0.
2. Must have completed WSU MLS AAS Program. Transfer students must have a MLS/MLT AAS Degree and/or CLT/MLT ASCP certification.
3. Meet with an MLS faculty advisor.
4. Apply for the BS program and include non-refundable \$25 fee by April 1st for fall semester acceptance. Applications can be found online. For more information, call the MLS office at 801-626-6118.
5. Complete a federal background check and drug screen by the end of fall semester after being accepted into the program.
6. Students for whom English is not their native language need to submit documentation of proficiency in English. Please refer to the MLS website for more details.

Online students:

1. Must have a minimum cumulative GPA of 2.7.
2. Must be currently employed by an accredited (TJC/CAP/COLA/CLIA) laboratory that can provide a multidisciplinary laboratory experience.
3. Must have an MLS/MLT AAS Degree and CLT/MLT certification. (Note: acceptable certification; MLT(ASCP), MT(AMT), or MT(AAB).)
4. Contact the BS MLS online advisor, Christy Achter, at 801-626-6874 for advising.
5. Have employer read and sign Statement of Support form.
6. Apply to WSU for general admissions.
7. Send all official transcripts from other institutions to the WSU admissions office.
8. Complete a MLS BS online application. Submit a completed Statement of Support along with the application. A \$95 non-refundable departmental application fee is also required.
9. Complete a federal background check and drug screen, if required by employer.

For more information about the online application requirements process contact Christy Achter at 801-626-6874.

General Education Requirements

Refer to Degree Requirements for Bachelor of Science requirements. The following required courses will fulfill both program requirements and general education requirements in the Life and Physical Sciences areas: CHEM 1130/1135 CHEM 1110/ 1115, CHEM 1210/1215, HTHS 2110, MICR 1113, MICR 2054, PHYS 1010.

Some requirements may be met by ACT, CLEP, and/or AP scores as designated by the University (contact the Admissions Office for more information).

Credit Policy

MLS Obsolete Credit BS: Medical Laboratory Sciences credits earned more than five (5) years prior to application or re-application to the BS program (MLT) will not be accepted toward major requirement.

Program Learning Outcomes

- Knowledge Goal: Demonstrate knowledge of theory underlying laboratory testing using analytical, interpretive, and problem solving skills.
- Knowledge Goal: Apply mathematical calculations to laboratory situations.
- Laboratory Skill: Perform laboratory procedures from simple to complex, including specimen collection and processing, analysis, interpretation, and use of quality assurance procedures.
- Laboratory Skill: Correlate laboratory theory and terminology to practical laboratory work.
- Laboratory Skill: Gather additional laboratory data and apply problem solving skills to solve problems/discrepancies.
- Diagnostic Skill: Relate laboratory findings to common disease processes.
- Professionalism and Ethics: Demonstrate professional conduct and ethical behavior.
- Communication Skill: Demonstrate effective communication skills and behaviors with colleagues in the program and in a laboratory setting.
- Supervisory Skill: Demonstrate ability to oversee day-to-day operations to include hiring and technical supervision.
- Research Skill: Demonstrate proficiency in basic research skills and statistical analysis.
- Interprofessional Relations: Understand the role of other health care disciplines in patient diagnosis and successfully participate as part of the health care team.

Major Course Requirements for BS Degree

An AAS in MLS is required prior to enrollment in BS Degree (34 lower division core credit hours)

- MLS 1001 - Online Orientation for AAS Degree **Credits: (1)**
- MLS 1113 - Introduction to Medical Laboratory Practices **Credits: (4)**
- MLS 1114 - Principles of Hematology and Hemostasis **Credits: (4)**
- MLS 2210 - Principles of Immunohematology **Credits: (5)**
- MLS 2211 - Principles of Clinical Chemistry I **Credits: (4)**
- MLS 2212 - Principles of Clinical Microbiology I **Credits: (5)**
- MLS 2213 - Principles of Clinical Chemistry II **Credits: (4)**
- MLS 2214 - Principles of Clinical Microbiology II **Credits: (5)**
- MLS 2256 INT - Supervised Clinical Experience I **Credits: (1)**

- MLS 2257 INT - Supervised Clinical Experience II **Credits: (1)**

Note:

Transfer students must have completed a MLS/MLT program, be MLT certified, and must register for MLS 3301 to enter the BS program.

Courses Required for Junior and Senior Curriculum

Select one of the following tracks:

Track I (Laboratory professional) 62-76 credits required

Online and Campus students

MLS Courses Required- Track I (B- grade or better)

- MLS 1001 - Online Orientation for AAS Degree **Credits: (1)**
or
- MLS 3301 - Online Orientation for BS Degree **Credits: (2)**
- MLS 3302 - Biostatistics, Research Methods, and Laboratory Practices **Credits: (4)**
- MLS 3310 - Advanced Immunohematology **Credits: (4)**
- MLS 3312 - Clinical Laboratory Immunology and Virology **Credits: (4)**
- MLS 3313 - Advanced Hematology and Hemostasis **Credits: (4)**
- MLS 3314 - Advanced Clinical Chemistry **Credits: (4)**
- MLS 3316 - Advanced Clinical Microbiology and Molecular Diagnostics **Credits: (4)**
- MLS 3318 - Clinical Molecular Diagnostics **Credits: (3)**
- MLS 4409 - Clinical Correlation **Credits: (1)**
and
- MLS 4410 SUS - Interdisciplinary Health Care Teams **Credits: (3)**
or
- MLS 4803 CRE - Research Projects in Medical Laboratory Sciences I **Credits: (2)**
and
- MLS 4804 CRE - Research Projects in Medical Laboratory Sciences II **Credits: (2)**
- MLS 4411 - MLS Simulated Laboratory I **Credits: (3)**
- MLS 4412 - MLS Simulated Laboratory II **Credits: (3)**
- MLS 4415 - Laboratory Teaching and Supervision **Credits: (3)**
- MLS 4453 INT - Supervised Clinical Experience I **Credits: (1)**
- MLS 4454 INT - Supervised Clinical Experience II **Credits: (1)**

Support Courses Required- Track I (C grade or better)

- WSU Math QL Requirement
- CHEM 1130 PS - Introduction to General, Organic & Biochemistry **Credits: (4)** and
- CHEM 1135 - Introduction to General, Organic & Biochemistry Lab **Credits: (1)**
or
- CHEM 1110 PS - Elementary Chemistry **Credits: (4)** and
- CHEM 1115 - Elementary Chemistry Lab **Credits: (1)**
- CHEM 1120 - Elementary Organic Bio-Chemistry **Credits: (4)** and
- CHEM 1125 - Elementary Organic Bio-Chemistry Lab **Credits: (1)**

or

- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**
- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)** *

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** or
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)** or
- ZOOL 2320 - Human Anatomy **Credits: (4)** or
- PHYS 1010 PS - Elementary Physics **Credits: (3)** *

- MICR 2054 LS - Principles of Microbiology **Credits: (4)** or
- MICR 1113 LS - Introductory Microbiology **Credits: (3)** *

- MICR 3305 - Medical Microbiology **Credits: (5)** or
- MICR 3603 - Advanced Microbiology for the Health Professions **Credits: (3)** or
- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)** or
- HAS 3010 - Professionalism in Healthcare **Credits: (3)**

Note:

** Students seeking a BS degree are required to complete a minimum of one semester of Organic or Bio Chemistry. This requirement can be satisfied through completion of CHEM 1130/1135 or CHEM 1120/1125 or CHEM 2310/2315.*

Track II (Pre-professional) (88-92 credits required)

Campus students only

MLS Courses Required- Track II (B- grade or better)

- MLS 1001 - Online Orientation for AAS Degree **Credits: (1)** *
- or**
- MLS 3301 - Online Orientation for BS Degree **Credits: (2)** *
 - MLS 3302 - Biostatistics, Research Methods, and Laboratory Practices **Credits: (4)**
 - MLS 3310 - Advanced Immunohematology **Credits: (4)**
 - MLS 3312 - Clinical Laboratory Immunology and Virology **Credits: (4)**
 - MLS 3313 - Advanced Hematology and Hemostasis **Credits: (4)**
 - MLS 3314 - Advanced Clinical Chemistry **Credits: (4)**
 - MLS 3316 - Advanced Clinical Microbiology and Molecular Diagnostics **Credits: (4)**
 - MLS 3318 - Clinical Molecular Diagnostics **Credits: (3)**

 - MLS 4409 - Clinical Correlation **Credits: (1)** and
 - MLS 4410 SUS - Interdisciplinary Health Care Teams **Credits: (3)**
- or**
- MLS 4803 CRE - Research Projects in Medical Laboratory Sciences I **Credits: (2)** and
 - MLS 4804 CRE - Research Projects in Medical Laboratory Sciences II **Credits: (2)**

- MLS 4411 - MLS Simulated Laboratory I **Credits: (3)**
- MLS 4453 INT - Supervised Clinical Experience I **Credits: (1)**
- MLS 4454 INT - Supervised Clinical Experience II **Credits: (1)**

Support Courses Required Track II (C grade or better)

- WSU Math QL Requirement
- CHEM 1210 PS - Principles of Chemistry I **Credits: (4)** and
- CHEM 1215 - Principles of Chemistry I Lab **Credits: (1)**

- CHEM 1220 - Principles of Chemistry II **Credits: (4)** and
- CHEM 1225 - Principles of Chemistry II Lab **Credits: (1)**

- CHEM 2310 - Organic Chemistry I **Credits: (4)** and
- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**

- CHEM 2320 - Organic Chemistry II **Credits: (4)** and
- CHEM 2325 - Organic Chemistry II Lab **Credits: (1)**
- or**
- CHEM 3070 - Biochemistry I **Credits: (3)**

- MICR 2054 LS - Principles of Microbiology **Credits: (4)** or
- MICR 1113 LS - Introductory Microbiology **Credits: (3)**

- MICR 3305 - Medical Microbiology **Credits: (5)** or
- MICR 3603 - Advanced Microbiology for the Health Professions **Credits: (3)** or
- PUBH 3200 - Epidemiology and Biostatistics **Credits: (3)** or
- HAS 3010 - Professionalism in Healthcare **Credits: (3)**

- PHYS 2010 PS - College Physics I **Credits: (5)**
- PHYS 2020 - College Physics II **Credits: (5)**
- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**

Note:

Equivalencies HTHS 2110 and HTHS 2111

- *ZOOL 2420 LS - Human Physiology (4)*
- and*
- *ZOOL 2320 - Human Anatomy (4) or*
- *PHYS 1010 PS - Elementary Physics (3)*

Post Baccalaureate Certificate

Technologist in Blood Banking Post Baccalaureate Certificate

This Post-Bachelor's Certificate program will prepare students who lack a formal degree or certification in medical laboratory sciences (MLS) to work in a clinical immunohematology (Blood Banking) laboratory. Students will progress through four online courses containing all of the immunohematology content included in a bachelor level MLS program, which also includes laboratory operations and an in-person clinical rotation of 160 hours minimum. After completion of this certificate program students will qualify to take the Technologist in Blood Banking BB(ASCP) certification exam from the American Society for Clinical Pathology (ASCP) via Route 3 (<https://www.ascp.org/content/board-of-certification/get-credentialed>).

- **Program Requirements:** Students must have a minimum GPA of 3.0 and have completed a baccalaureate degree from a regionally accredited college/university with a major in biological science or chemistry, or have completed a baccalaureate degree with a combination of 30 semester hours (45 quarter hours) in biology and chemistry.
- **Grade Requirements:** To receive a Technologist in Blood Banking Post Baccalaureate Certificate students will need to pass each certificate course with a minimum grade of a "B-" or higher.
- **Credit Hour Requirements:** 12 credit hours
- **Program Code:** 2100PBC
- **CIPC:** 511001

Courses Required (12 credit hours)

- MLS 5301 - Fundamentals of Immunohematology **Credits: (3)**
- MLS 5302 - Advanced Immunohematology and Transfusion Medicine **Credits: (3)**
- MLS 5203 - Technologist in Microbiology: Applied Laboratory Mathematics and Operations **Credits: (3)**
- MLS 5304 - Clinical Rotation in Immunohematology **Credits: (3)**

Technologist in Microbiology Post Baccalaureate Certificate (PBC)

This Post-Bachelor's Certificate program is a partnership with the American Society of Microbiology (ASM) to prepare students to work in a clinical microbiology laboratory who lack a formal degree or certification in medical laboratory sciences (MLS). Students will progress through four online courses containing all of the clinical microbiology content included in a bachelor level MLS program, which also includes laboratory operations and an in-person clinical rotation of 160 hours minimum. After completion of this certificate program students will qualify to take the Technologist in Microbiology M(ASCP) certification exam from the American Society for Clinical Pathology (ASCP) via Route 3.

- **Program Prerequisites:** None.
- **Program Requirements:** Students must have a minimum GPA of 2.7 and have completed a baccalaureate degree from a regionally accredited college/university with a major in biological science or chemistry, or have completed a baccalaureate degree with a combination of 30 semester hours (45 quarter hours) in biology and chemistry.
- **Grade Requirements:** to receive a Technologist in Microbiology Post Baccalaureate Certificate students will need to pass each certificate course with a minimum grade of a "B-" or higher.
- **Credit Hour Requirements:** 12 credit hours.
- **Program Code:** 2082PBC
- **CIPC:** 410101

Credit Policy

MLS Obsolete Credit ASM: Medical Laboratory Sciences credits earned more than five (5) years prior to application or re-application to the ASM program (MLT) will not be accepted toward major requirement.

Required Courses (12 credit hours)

- MLS 5201 - Technologist in Microbiology: Clinical Microbiology I **Credits: (3)**
- MLS 5202 - Technologist in Microbiology: Clinical Microbiology II **Credits: (3)**
- MLS 5203 - Technologist in Microbiology: Applied Laboratory Mathematics and Operations **Credits: (3)**
- MLS 5204 - Technologist in Microbiology: Supervised Clinical Experience **Credits: (3)**

Certification

Medical Laboratory Sciences Medical Laboratory Assistant (MLA) Certificate

The Medical Laboratory Assistant (MLA) certificate of completion is designed to teach core clinical laboratory skills to individuals from various health care professions. The curriculum will focus on basic laboratory methods in quality control, quality assurance, information recording and transfer, normal and abnormal laboratory values, and problem recognition. Students will receive basic technical instruction in laboratory safety, microscopy, phlebotomy, specimen collection and processing, and laboratory instrumentation in the areas of hematology, serology, urinalysis, clinical chemistry, and microbiology. Upon successful completion of the course, students will receive a Certificate from the Dumke College of Health Profession's Medical Laboratory Assistant (MLA) program and are designated as CLA level assistant IV by local industry.

For campus students, the MLA certificate is granted after successful completion of MLS 1113, Intro to Medical Laboratory Practices.

Online students must complete MLS 1010, Core Clinical Laboratory Skills, and have the support of a clinical laboratory to fulfill the laboratory requirement. The laboratory component will address applications with a focus on point-of-care-testing (POCT). Students will be required to spend a minimum of 64 unpaid hours during the semester working on laboratory competency. If students wish to continue to further their education, MLS 1113 will be waived upon enrollment into the MLS AAS Program at WSU. Contact the AAS/MLT online academic advisor, Christy Achter, at 801-626-6874 or christyachter@weber.edu for advising.

Program Learning Outcomes

- Knowledge Goal: Demonstrate knowledge of theory underlying laboratory testing using analytical, interpretive, and problem solving skills.
- Knowledge Goal: Apply mathematical calculations to laboratory situations.
- Laboratory Skill: Perform laboratory procedures from simple to complex, including specimen collection and processing, analysis, interpretation, and use of quality assurance procedures.
- Laboratory Skill: Correlate laboratory theory and terminology to practical laboratory work.
- Laboratory Skill: Gather additional laboratory data and apply problem solving skills to solve problems/discrepancies.
- Diagnostic Skill: Relate laboratory findings to common disease processes. Professionalism and Ethics:
- Demonstrate professional conduct and ethical behavior.

- **Communication Skill:** Demonstrate effective communication skills and behaviors with colleagues in the program and in a laboratory setting for the best new technologies to integrate organization's business processes.

Department of Respiratory Therapy

Department Chair: Mich Oki

Medical Director: Roger Paulman, M.D.

Location: Marriott Allied Health Building, Rm 309

Telephone Contact: Irma Marroquin-Lewis (801) 626-7071 **Professor:** Paul Eberle; **Associate Professor:** Mich Oki; **Assistant Professors:** Sarah Allred, Sharri Vasas; **Instructor:** Laurel Duncan

Respiratory care professionals are actively involved, as members of the health care team, in the diagnosis, treatment, management, education, and long-term care of patients with cardiopulmonary problems. These patients may be in the newborn nursery, surgical/medical/rehabilitation units, outpatient clinics, Emergency Room, or cardiac/shock-trauma/burn/neurologic intensive care units. Respiratory Care Practitioners [RCPs] are employed in both acute and long-term care hospitals, skilled nursing facilities, and home health agencies.

Licensed RCPs perform therapeutic and diagnostic procedures under the direction of a physician. Respiratory care practitioners are competent in basic patient care and assessment, medical gas administration, aerosol and humidity therapy, medication administration, hyperinflation techniques, bronchopulmonary drainage and percussion, mechanical ventilation, airway management, advanced cardiac life support, pulmonary function studies, and blood gas sampling and analysis. Patient education, smoking cessation/nicotine intervention, and health promotion are also included in the RCP scope of practice.

The respiratory therapy program follows a career-ladder approach from the pre-professional level through a Bachelor of Science degree. The pre-professional level requires two academic years, leads to an Associate of Applied Science degree, and qualifies the student for the Respiratory Therapy Bachelor of Science program providing eligibility to national credentialing and licensure to practice respiratory care (RCP). Acceptance to the pre-professional level requires program completion through the Bachelor of Science degree level.

Licensure

Applicants who have been convicted of a felony, treated for serious mental illness or substance abuse should discuss their eligibility status with the Utah Department of Professional Licensing. Acceptance to the respiratory therapy program does not assure eligibility for a RCP license. The Utah Department of Professional Licensing makes final decisions on issuance of professional licensure. Any student that is convicted of a felony will be dismissed from the program.

Accreditation

The Respiratory Therapy Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC), P.O. Box 54876 Hurst, Texas 76054-4876.

To fulfill its mission, the department sets the following goals for graduates of the program: 1) To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs) and,

2) to prepare leaders for the field of respiratory care by including curricular content that includes objectives related to acquisition of skills in one or more of the following: management, education, research, advanced clinical practice (which may include an area of clinical specialization). Program credentialing, attrition, and on-time graduation outcomes may be reviewed at the following site: <https://coarc.com/getattachment/Students/Programmatic-Outcome-Data/2017-RCS-Program-Outcomes.pdf.aspx?lang=en-US>

Associate of Applied Science

Respiratory Therapy, Pre-Professional (AAS)

- **Program Prerequisites:** Completion of all prerequisite courses with a grade of "C" or better ("C-" or CR are not acceptable in prerequisite courses). In addition, students must complete an application/selection process, which requires prior completion of current CPR certification at the BLS-C level (also see Admissions Requirements below).
- **Grade Requirements:** A grade of "C" or better in each course is required by this program (a "C-" is not acceptable). CR/NC courses in this program require a "C" or better to receive CR. A cumulative GPA of 2.5 is required to enter the program.
- **Credit Hour Requirements:** A total of 60-67 credit hours is required for graduation; 38 of these are required REST courses and 18 are required general education courses.
- **Program Code:** 2022AAS
- **CIPC:** 510908

Advisement

Students may contact an advisor in the Dr. Ezekiel R. Dumke College of Health Professions' Admissions & Advisement Office (Marriott Allied Health Building, room 108, phone 801-626-6136, email healthprofessions@weber.edu) for program information and an application.

Admissions Requirements

Declare your program of study (see Enrollment Services and Information). Meet with a Dumke College of Health Professions advisor and then file a Program Application (at the Dr. Ezekiel R. Dumke College of Health Professions Admissions Office, MH 108 on or before February 1). Program selection criteria includes cumulative GPA, prerequisite GPA, completion of application process, previous healthcare experience, and formal Selection Committee interview. Complete all prerequisite courses with "C" (2.0) or better.

Admission requirements include the following:

- Graduation from high school or equivalent program
- Cumulative grade point average of 2.5
- Complete FBI criminal background check or designated background check. Any student that is convicted of a felony will be dismissed from the program.
- Admission to Weber State University
- Completed application to Associate of Applied Science Degree and payment of the \$25 application fee

Prerequisite Courses

- REST 1540 - Survey of Respiratory Therapy **(1)**
- MATH 1010 - Intermediate Algebra **(4)** (*with a grade of "C" or better*) or 23 or above on the ACT
- ENGL 1010 EN1 - Introductory College Writing **(3)**
- COMM 1020 HU - Principles of Public Speaking **(3)** or

- COMM 2110 HU CEL - Interpersonal and Small Group Communication **(3)**
- PSY 1010 SS - Introductory Psychology **(3)** or
- PSY 2000 SS/CC - The Psychology of Human Relationships **(3)**
- HTHS 2230 - Introductory Pathophysiology **(3)**
- REST 1560 - Multi-Skilled Health Care Worker **(1)** *or CNA, military medic, or EMT course either*
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **(4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **(4)** *or introductory level courses in the three basic sciences:*
- CHEM 1010 PS - Introductory Chemistry **(3)**
- MICR 1113 LS - Introductory Microbiology **(3)**
- ZOOL 2420 LS - Human Physiology **(4)**

General Education

Refer to Degree Requirements for Associate of Applied Science requirements. The following general education courses will fulfill both general education and program requirements: PSY 1010 or PSY SS2200, ENGL 1010, COMM 1020 or COMM 2110, and **either** HTHS 2110/HTHS 2111 **or** introductory-level courses in some of the basic sciences (human biology, chemistry and microbiology). One additional course in a physical or life science is required for students taking the HTHS option.

Consult with Academic Advising or Dr. Ezekiel R. Dumke College of Health Professions Admission Advisor regarding general education guidelines.

Program Learning Outcomes

- Cognitive skills (problem solving) are facts and concepts that respiratory therapist must know and apply in practice. In didactic courses, learning objectives are evaluated in traditional methods and through face-to-face interactions or in on-line formats using "virtual labs" and in clinical scenarios. Learning objectives include words like discuss or explain a particular patient care concept.
- Psychomotor skills (task competency) are performance based activities encountered in laboratory and/or clinical settings. Simple re-demonstration of skills is rarely sufficient as a learning outcome but repeatedly practiced in peer-to-peer practices, instructor pass-offs, and with clinical preceptors at the bedside. Learning objectives include action words like analyze, apply, or compute data presented in patient care pathologies.
- Affective skills (attitude) are measured in attitudes or motivations of students in exhibition of favorable behavioral traits and in developing empathy for patients. These behavioral traits are evaluated by clinical preceptors for arriving "on time," being prepared and/or showing interest in activities scheduled for the day. These can be viewed as employee characteristics that include statements like, "would you hire this student" at the conclusion of a clinical day. Clinical preceptors file daily evaluations (and students evaluate clinical preceptors for reciprocity) as feedback on these performances and in achieving the stated learning objectives. Graduation satisfaction surveys are completed at the conclusion of the curriculum by graduate surveys. Additionally, cognitive, psychomotor, and affective skills are annually measured by employer surveys completed within 6 months of program completion and reported to our accreditation commission (CoARC) which remain on-file for a period of three years.

Major Course Requirements for AAS Degree

Respiratory Therapy Courses Required (38 credit hours)

- REST 1540 - Survey of Respiratory Therapy **Credits: (1)**
- REST 1560 - Multi-Skilled Health Care Worker **Credits: (1)**
- REST 2140 - Introduction to Basic Therapeutic Modalities Lab **Credits: (3)**
- REST 2160 - Equipment Management Lab **Credits: (3)**
- REST 2210 - Elementary Cardiopulmonary Anatomy and Physiology **Credits: (3)**
- REST 2230 - Cardiopulmonary Pathophysiology **Credits: (2)**
- REST 2250 - Basic Patient Assessment **Credits: (2)**
- REST 2270 - Application of Cardiopulmonary Diagnostics **Credits: (3)**
- REST 2300 - Basic Modalities in Respiratory Care I **Credits: (3)**
- REST 2310 - Basic Modalities in Respiratory Care II **Credits: (3)**
- REST 2320 - Essentials of Mechanical Ventilation **Credits: (2)**
- REST 2330 - Entry Level Respiratory Therapy Review **Credits: (1)**
- REST 2520 - Principles of Pharmacology **Credits: (2)**
- REST 2700 INT - Clinical Applications **Credits: (4)**
- REST 2710 INT - Specialty Clinical Experiences **Credits: (1)**
- REST 2720 INT - Clinical Applications **Credits: (3)**

Bachelor of Science

Respiratory Therapy (BS)

- **Program Prerequisite:** Completion of Respiratory Therapy, Pre-Professional (AAS) degree or Certificate of Completion from an accredited, respiratory therapy program (R.R.T. eligible) or complete CRT SAE with cut score of 95/140 following pre-professional year.
- **Grade Requirements:** A grade of "C" or better in each course required by this program (a "C-" is not acceptable). CR/NC courses in this program require a "C" or better to receive CR. A GPA of 2.75 is required to enter the program.
- **Credit Hour Requirements:** A total of 120 credits are required for graduation (includes AAS degree requirements); 76 of these are REST credits. A total of 40 upper division credit hours are required (courses numbered 3000 and above); 38 of these are required REST credits. Departmental standards are applied to independent projects and directed readings.
- **Program Code:** 2022BS
- **CIPC:** 510908

Advisement

All respiratory therapy students are required to meet with a faculty advisor before beginning bachelor's degree courses, and at least annually after entering program, and complete an academic contract specifying major courses, approved electives, and graduation requirements. Call 801-626-7071 for more information or to schedule an appointment.

During June, July and August, students may contact an advisor in the Dr. Ezekiel R. Dumke College of Health Professions' Admissions & Advisement Office (Marriott Allied Health Building, room 108, phone 801-626-6136, email healthprofessions@weber.edu) for program information and an application, if a faculty member of the Respiratory Therapy Department is not available.

Admissions Requirements

Declare your program of study (see Enrollment Services and Information). Complete Respiratory Therapy, Pre-Professional (AAS) degree requirements (or provide Certificate of Completion from an accredited, respiratory therapy program). Meet with faculty advisor and establish an academic contract.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. Of the Quantitative Literacy courses [MATH 1030, MATH 1040, or MATH 1050], MATH 1030 QL - Contemporary Mathematics is the preferred course for program completion. The following general education courses will fulfill both general education and program requirements: PSY 1010 or PSY SS2200, ENGL 1010, COMM 1020 or COMM 2110, and either HTHS 2110/HTHS 2111 or introductory-level courses in some of the basic sciences (human biology, chemistry and microbiology).

Consult with department advisor or Dr. Ezekiel R. Dumke College of Health Professions Admission Advisor regarding general education guidelines.

Major Course Requirements for BS Degree

Complete the requirements for the AAS degree or equivalent in addition to the courses listed below.

Respiratory Therapy Courses Required (33 credit hours minimum)

- REST 3210 - Advanced Cardiopulmonary Anatomy and Physiology **Credits: (3)**
- REST 3220 - Advanced Cardiopulmonary Pathophysiology **Credits: (3)**
- REST 3230 - Advanced Cardiopulmonary Technology **Credits: (2)**
- REST 3260 - Neonatal/Pediatric Respiratory Care **Credits: (3)**
- REST 3270 - Adult Critical Care **Credits: (2)**
- REST 3280 - Patient Care Continuum/ Quality Management **Credits: (3)**
- REST 3760 INT - Clinical Applications of Neonatal/Pediatric Respiratory Care **Credits: (4)**
- REST 3770 INT - Clinical Applications of Adult Critical Care **Credits: (4)**
- REST 3800 - Respiratory Care Certifications **Credits: (3)**
- REST 3780 INT - Clinical Applications **Credits: (2)**
- REST 3900 - Clinical Simulation Seminar **Credits: (1)**
- REST 4610 - Advanced Patient Assessment **Credits: (1-2)**
- REST 4620 - Health Promotion **Credits: (1-2)**
- REST 4630 - Continuous Quality Improvement **Credits: (1-2)** or
- HIM 3300 - Introduction to Quality Improvement in Healthcare **Credits: (3)**

Upper Division Electives (7 credit hours minimum)

In addition to the 33 REST credit hours required above, a minimum of 7 credit hours must be selected from the following upper division electives. Departmental standards are developed which specify content of certain projects; remaining credits are "elective" with content approved by program advisor. Other upper division credits will be considered upon approval of program advisor. A total of 40 upper division credit hours is required.

- REST 3500 - Survey of Polysomnography **Credits: (1)**
- REST 3501 - Anatomy and Physiology of Sleep **Credits: (3)**
- REST 3502 - Introduction to Sleep Disorders **Credits: (2)**
- REST 3503 - Instrumentation and Computers in Polysomnography **Credits: (2)**

- REST 3505 - Therapeutics of Managing Sleep Apnea **Credits: (2)**
- REST 4800 - Independent Projects **Credits: (1-6)**
- REST 4830 - Directed Readings **Credits: (1-3)**
- REST 4850 - Study Abroad **Credits: (1-6)**
- REST 4990 - Senior Seminar **Credits: (2)**
- HAS 3000 - The Healthcare System **Credits: (3)**
- HAS 3230 - Health Communication **Credits: (3)**
- HAS 3260 - Healthcare Leadership and Management **Credits: (3)**
- HAS 4400 - Legal and Ethical Aspects of Health Administration **Credits: (3)**
- REST 4600 - Patient Education and Disease Management **Credits: (3)**
(3)

Emphasis Option for Bachelor of Interdisciplinary Studies

Respiratory Therapy (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** A grade of "C" or better in each course is required by this program (a "C-" is not acceptable). CR/NC courses in this program require a "C" or better to receive CR. A cumulative GPA of 2.57 is required for graduation.
- **Credit Hour Requirements:** A minimum of 18 credit hours, all upper division REST courses, are required.
- **Program Code:** 2022
- **CIPC:** 510908

Course Requirements for BIS Concentration

Select 18 credit hours of upper division REST courses in consultation with an advisor.

Refer to the Respiratory Therapy (BIS) Bachelor of Integrated Studies section of this catalog for BIS degree requirements.

Doctor of Nursing Practice

Chair: Dr. Rieneke Holman

Director: Melissa Neville-Norton, DNP, APRN, CPNP-PC

Location: Marriott Allied Health Building, Rm 438

Graduate Nursing Administrative Assistant: Cheryl Hyatt (801) 626-6137 or cherylhyatt@weber.edu

Enrollment Director: Robert Holt (801) 626-7774, prompt 6 or rholt@weber.edu

The Doctor of Nursing Practice (DNP) degree is a practice-focused terminal degree in nursing, designed for nurses who are seeking preparation and excellence at the highest level of clinical nursing practice. The DNP program of study has two emphases: a family nurse practitioner emphasis and a leadership emphasis. Both emphases focus on direct and indirect advanced nursing practice leadership and healthcare provision to influence the health outcomes of individuals and populations from a systems approach. The DNP-Family Nurse Practitioner (FNP) emphasis prepares

nurses with a Bachelor of Science in Nursing (BSN) to become eligible for national FNP certification, which is an advanced practice registered nurse (APRN) and future healthcare leadership. The DNP-Leadership emphasis prepares nurses who possess a BSN and a master's degree in one of the following-nursing, public health, business, or health administration for healthcare transformation and leadership.

Graduates of the DNP program are prepared to fully evaluate, translate, and implement science for improved healthcare outcomes and healthcare systems improvement. The practice-focused DNP degree is distinctly different from a Ph.D. or research doctoral degree program. The Annie Taylor Dee School of Nursing is responsive to national APRN academic and practice mandates recommendations and community workplace demands for leadership and access to primary care in our regional health care systems.

The DNP degree at WSU ensures optimally prepared nurse practitioners and nurse leaders who achieve the university's dual mission; integrating access, learning, and community in the service of high-quality health care and favorable outcomes for regional patients, families, and communities. Nationally, the DNP degree is replacing the Master of Science in Nursing (MSN) for all APRNs as this terminal degree in the field becomes the requirement by 2025. The DNP degree is the preferred degree for advanced nursing practice for the provision of direct and indirect care (executive leadership, health policy, informatics, and population health).

Admission

Admission is competitive; therefore, the criteria listed on the application form should be considered as minimum standards.

Applicants must apply for admission to the DNP-Leadership program. Applications may be obtained online on the Annie Taylor Dee School of Nursing website <http://weber.edu/nursing>.

Applications must be completed and on file by the admission cycle application deadline. An application fee must be paid at the time the application is submitted. Admission applications are reviewed by the Annie Taylor Dee School of Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by email and/or US Postal Service mail. Admission requirements are outlined on the applicant website available at <http://weber.edu/nursing>.

Accreditation

Effective July 7, 2020, this nursing program is a candidate for initial accreditation by the Accreditation Commission for Education in Nursing. This candidacy status expires on July 1, 2022.

Accreditation Commission for Education in Nursing (ACEN)

3390 Peachtree Road NE, Suite 1400

Atlanta, GA 30326

(404) 975-5000

<http://www.acenursing.us/candidates/candidacy.asp>

Note: Upon granting of initial accreditation by the ACEN Board of Commissioners, the effective date of initial accreditation is the date on which the nursing program was approved by the ACEN as a candidate program that concluded in the Board of Commissioners granting initial accreditation

Doctor of Nursing

Doctor of Nursing Practice (DNP)

The Doctor of Nursing Practice (DNP) degree is a practice-focused terminal degree in nursing, designed for nurses who are seeking preparation and excellence at the highest level of advanced nursing practice.

The DNP program of study has two emphases: including a post-BSN to DNP Family Nurse Practitioner (FNP) emphasis and post-Masters to DNP Leadership emphasis. Both emphases focus on direct and indirect advanced nursing practice leadership and healthcare provision to influence the health outcomes of individuals and populations from a systems approach. The DNP-FNP emphasis prepares nurses with a Bachelor of Science in Nursing (BSN) for an advanced practice degree (APRN) who are eligible for national FNP certification upon successful graduation from the program.

The post-master's to DNP leadership emphasis prepares nurses with a BSN and a master's degree in one of the following areas (nursing, public health, business, or health administration) for translational science, healthcare transformation, and healthcare leadership.

Graduates of the DNP program are prepared to fully evaluate, translate, and implement science for improved healthcare outcomes and healthcare systems improvement. The practice-focused DNP degree is distinctly different from a Ph.D. or research doctoral degree program. By establishing a Doctor of Nursing Practice (DNP) program, the Annie Taylor Dee School of Nursing supports the national APRN practice mandates, leadership recommendations and community workplace demands for leadership and access to primary care in our regional health care systems.

The DNP graduate meets the university's dual mission of; integrating access, learning, and community service by providing high-quality health care and favorable outcomes for regional patients, families, and communities upon graduation.

- **Grade Requirements:** To earn the DNP degree, candidates must successfully complete all DNP program courses with a grade of "B-" or higher and maintain an overall program GPA of 3.0 or higher.
- **Program Code:** Nursing Practice (2060DNP) with Concentration/Emphasis in Family Nurse Practitioner (2062), Executive Leadership (2091) or Psychiatric Mental Health Nurse Practitioner (2097).
- **CIPC:** 513818

Emphases

Select one of the following:

- Doctor of Nursing Practice (DNP), Family Nurse Practitioner Emphasis
- Doctor of Nursing Practice (DNP), Executive Leadership Program Emphasis

Admission

Admission is competitive; therefore, the criteria listed on the application form should be considered as minimum standards.

Applicants must apply for admission to the DNP-FNP Nursing program. Applications may be obtained online on the Annie Taylor Dee School of Nursing website <http://weber.edu/nursing>.

Applications must be completed and on file by the admission cycle application deadline. An application fee must be paid at the time the application is submitted. Admission applications are reviewed by the Annie Taylor Dee School of Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by email and via US postal mail. Admission requirements are outlined on the applicant website available at <http://weber.edu/nursing>.

Accreditation

Effective July 7, 2020, this nursing program is a candidate for initial accreditation by the Accreditation Commission for Education in Nursing. This candidacy status expires on July 1, 2022.

Accreditation Commission for Education in Nursing (ACEN)

3390 Peachtree Road NE, Suite 1400

Atlanta, GA 30326

(404) 975-5000

<http://www.acenursing.us/candidates/candidacy.asp>

Note: Upon granting of initial accreditation by the ACEN Board of Commissioners, the effective date of initial accreditation is the date on which the nursing program was approved by the ACEN as a candidate program that concluded in the Board of Commissioners granting initial accreditation

www.acenursing.org

Doctor of Nursing Practice (DNP), Executive Leadership Program Emphasis

The Doctor of Nursing Practice (DNP)- Executive Leadership program option prepares post-master nurses for advanced leadership positions in healthcare systems and academic institutions. Nurses applying for the program must possess a BSN with a master's in nursing (MSN), a master's in business (MBA), or master's in health administration (MHA), or a master's in public health (MPH). The DNP-Executive Leadership program is part-time, fully online, and completed in 5-semesters. Students completing a DNP Project that involves translational science that promotes improvement or change related to the health of individuals and populations or healthcare and systems.

- **Grade Requirements:** To earn the DNP degree, candidates must successfully complete all DNP program courses with a grade of "B-" or higher and maintain an overall program GPA of 3.0 or higher.
- **Program Code:** Nursing Practice (2060DNP) with Concentration/Emphasis in Executive Leadership Program (2091).
- **CIPC:** 513818

Admission

Admission is competitive; therefore, the criteria listed on the application form should be considered as minimum standards.

Applicants must apply for admission to the DNP-Leadership program. Applications may be obtained online on the Annie Taylor Dee School of Nursing website <http://weber.edu/nursing>.

Applications must be completed and on file by the admission cycle application deadline. An application fee must be paid at the time the application is submitted. Admission applications are reviewed by the Annie Taylor Dee School of Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by email. Admission requirements are outlined on the applicant website available at <http://weber.edu/nursing>.

Doctor of Nursing Practice, Executive Leadership Emphasis Required Courses(31 credit hours)

- NRSG 6190 - Professional Foundations for Graduate Nursing Students **Credits: (1)**
- NRSG 7010 - Scholarly and Ethical Foundations for Advanced Practice Nursing **Credits: (3)**
- NRSG 7020 - Biostatistics/Epidemiology **Credits: (3)**
- NRSG 7030 - Information Technology to Support Evidence-Based Practice **Credits: (2)**
- NRSG 7040 - Systems Approach and QI **Credits: (3)**
- NRSG 7050 - Advanced Population Health **Credits: (3)**
- NRSG 7060 - DNP Organizational Leadership **Credits: (3)**
- NRSG 7070 - Healthcare Policy & Professionalism **Credits: (2)**
- NRSG 7801 - DNP Project I **Credits: (3)**
- NRSG 7802 - DNP Project II **Credits: (3)**
- NRSG 7803 - DNP Project III **Credits: (3)**
- MHA 7080 - Healthcare Finance/Economics **Credits: (2)**

Doctor of Nursing Practice (DNP), Family Nurse Practitioner Emphasis

The Doctor of Nursing Practice (DNP) Family Nurse Practitioner (FNP) emphasis prepares the post-BSN student to complete the requirements for certification as an advanced practice registered nurse (APRN) in the role of an FNP. The DNP is a terminal nursing degree, which prepares graduates for translational science to influence direct and indirect health outcomes not only for individuals but for populations and healthcare systems.

The DNP-Family Nurse Practitioner (FNP) program is a 76.5 credit, full-time, hybrid program over 8 semesters. Didactic classes are online with occasional synchronous meetings. Students receive personalized attention and instruction on-campus for five lab courses in our state-of-the-art nurse practitioner suites. Students must complete a total of 750 clinical practice hours during the last four semesters to graduate from the program. A DNP project will be completed during the final three semesters with a focus on evidence-based practice and quality improvement to promote systems-level change related to healthcare outcomes.

- **Grade Requirements:** Graduates must successfully complete all DNP program courses with a grade of "B-" or higher
- **Program Code:** Nursing Practice (2060DNP) with Concentration/Emphasis in Family Nurse Practitioner (2062).
- **CIPC:** 513818

Admission

Applicants must apply for admission to the DNP-FNP Nursing program by the application deadline. Admission is competitive and the criteria listed in the application should be considered as minimum standards. Please see <https://www.weber.edu/Nursing/DNP.html> for application information.

Doctor of Nursing Practice, Family Nurse Practitioner Emphasis Required Courses (76.5 credit hours)

Doctor of Nursing Practice Core Courses (31 Credit Hours)

- NRSG 6190 - Professional Foundations for Graduate Nursing Students **Credits: (1)**
- NRSG 7010 - Scholarly and Ethical Foundations for Advanced Practice Nursing **Credits: (3)**
- NRSG 7020 - Biostatistics/Epidemiology **Credits: (3)**

- NRSG 7030 - Information Technology to Support Evidence-Based Practice **Credits: (2)**
- NRSG 7040 - Systems Approach and QI **Credits: (3)**
- NRSG 7050 - Advanced Population Health **Credits: (3)**
- NRSG 7060 - DNP Organizational Leadership **Credits: (3)**
- NRSG 7070 - Healthcare Policy & Professionalism **Credits: (2)**
- MHA 7080 - Healthcare Finance/Economics **Credits: (2)**
- NRSG 7801 - DNP Project I **Credits: (3)**
- NRSG 7802 - DNP Project II **Credits: (3)**
- NRSG 7803 - DNP Project III **Credits: (3)**

DNP Family Nurse Practitioner Emphasis Required Courses (45.5 Credit Hours)

- NRSG 6120 - Research and Statistics **Credits: (3)**
- NRSG 6210 - Advanced Pathophysiology I **Credits: (2)**
- NRSG 6211 - Advanced Pathophysiology II **Credits: (2)**
- NRSG 6215 - Advanced Pharmacology I **Credits: (2)**
- NRSG 6216 - Advanced Pharmacology II **Credits: (2)**
- NRSG 6220 - Advanced Health Assessment **Credits: (2)**
- NRSG 6221 - Diagnostic Reasoning **Credits: (2)**
- NRSG 6225 - FNP Clinical Skills **Credits: (1)**
- NRSG 6230 - FNP Patient Care Lab: Women's Health **Credits: (1)**
- NRSG 6231 - FNP Patient Care Lab: Pediatrics **Credits: (1)**
- NRSG 6235 - FNP Patient Care I: Adult **Credits: (3)**
- NRSG 7902 - FNP Clinical I **Credits: (3)**
- NRSG 6240 - FNP Patient Care II: Older Adult **Credits: (2)**
- NRSG 6245 - FNP Patient Care III: Pediatrics **Credits: (2)**
- NRSG 7903 - FNP Clinical II **Credits: (3)**
- NRSG 6250 - FNP Patient Care IV: Women's Health **Credits: (2)**
- NRSG 7002 - Transition to APRN Practice **Credits: (2)**
- NRSG 7904 INT - FNP Clinical III **Credits: (3)**
- NRSG 6270 - Mental Health for Primary Care **Credits: (3)**
- NRSG 7003 - Telehealth for Advanced Practice Nurses **Credits: (0.5)**
- NRSG 7905 - FNP Clinical IV **Credits: (3)**
- NRSG 7004 - Complementary and Alternative Therapies for Advanced Practice Nursing **Credits: (1)**

Doctor of Nursing Practice (DNP), Psychiatric Mental Health Nurse Practitioner Emphasis

The Doctor of Nursing Practice (DNP) Psychiatric Mental Health Nurse Practitioner (PMHNP) emphasis prepares the post-BSN student to complete the requirements for certification as an advanced practice registered nurse (APRN) in the role of a PMHNP. The DNP is a terminal nursing degree, which prepares graduates for translational science to influence direct and indirect health outcomes not only for individuals but for populations and healthcare systems.

The DNP-PMHNP program is a 75-credit, full-time, hybrid program over 7 semesters. Didactic classes are online with occasional synchronous meeting. Students receive personalized attention and instruction on-campus for lab courses

in our state-of-the-art nurse practitioner suites. Students must complete a total of 750 clinical practice hours during the last four semesters to graduate from the program. A DNP project will be completed during the last three semesters with a focus on evidence-based practice and quality improvement to promote systems-level change related to healthcare outcomes.

- **Grade Requirements:** Graduates must successfully complete all DNP program courses with a grade of "B-" or higher.
- **Program Code:** Nursing Practice (2060DNP) with Concentration/Emphasis in Psychiatric Mental Health Nurse Practitioner (2097).
- **CIPC:** 513818

Admission

Applicants must apply for admission to the DNP-PMHNP program by the application deadline. Admission is competitive and the criteria listed in the application should be considered as minimum standards. Please see <https://www.weber.edu/Nursing/DNP.html> for application information.

DNP Required Core Courses

- NRSG 6190 - Professional Foundations for Graduate Nursing Students **Credits: (1)**
- MHA 7080 - Healthcare Finance/Economics **Credits: (2)**
- NRSG 7010 - Scholarly and Ethical Foundations for Advanced Practice Nursing **Credits: (3)**
- NRSG 7020 - Biostatistics/Epidemiology **Credits: (3)**
- NRSG 7030 - Information Technology to Support Evidence-Based Practice **Credits: (2)**
- NRSG 7040 - Systems Approach and QI **Credits: (3)**
- NRSG 7050 - Advanced Population Health **Credits: (3)**
- NRSG 7060 - DNP Organizational Leadership **Credits: (3)**
- NRSG 7070 - Healthcare Policy & Professionalism **Credits: (2)**
- NRSG 7801 - DNP Project I **Credits: (3)**
- NRSG 7802 - DNP Project II **Credits: (3)**
- NRSG 7803 - DNP Project III **Credits: (3)**

DNP-Psychiatric Mental Health Nurse Practitioner Emphasis Required Courses

- NRSG 6120 - Research and Statistics **Credits: (3)**
- NRSG 6210 - Advanced Pathophysiology I **Credits: (2)**
- NRSG 6211 - Advanced Pathophysiology II **Credits: (2)**
- NRSG 6212 - Advanced Psychopathophysiology **Credits: (2)**
- NRSG 6215 - Advanced Pharmacology I **Credits: (2)**
- NRSG 6216 - Advanced Pharmacology II **Credits: (2)**
- NRSG 6217 - Advanced Psychopharmacology **Credits: (2)**
- NRSG 6220 - Advanced Health Assessment **Credits: (2)**
- NRSG 6221 - Diagnostic Reasoning **Credits: (2)**
- NRSG 6222 - Mental Health Assessment, Diagnostic Reasoning& Treatment I **Credits: (3)**
- NRSG 6223 - Mental Health Assessment, Diagnostic Reasoning& Treatment II **Credits: (3)**
- NRSG 6271 - Psychotherapeutic Modalities **Credits: (3)**
- NRSG 6272 - Substance Abuse& Addiction Disorder Therapy& Management **Credits: (1)**

- NRSG 7002 - Transition to APRN Practice **Credits: (2)**
- NRSG 7004 - Complementary and Alternative Therapies for Advanced Practice Nursing **Credits: (1)**
- NRSG 7912 - PMHNP Clinical I **Credits: (3)**
- NRSG 7913 - PMHNP Clinical II **Credits: (3)**
- NRSG 7914 - PMHNP Clinical III **Credits: (3)**
- NRSG 7915 - PMHNP Clinical IV **Credits: (3)**

Master of Health Administration Program

Health Administrative Services Department Chair: Dr. Darcy Carter

Enrollment Director: Lindsay Garr, 801-626-6228

Location: Interprofessional Education Building, Rm 210

Telephone Contact: Kristi Andersen, 801-626-7242

Website: weber.edu/mha and weber.edu/emha

The Master of Health Administration (MHA) program at Weber State University is designed to meet the needs of working healthcare professionals and to prepare them for executive leadership in the healthcare industry. Firmly grounded in the development of three overarching domains: Personal, Professional, and Applied Skills, the program fosters self-development, critical thinking and life-long learning.

Full-time students can complete the MHA or the eMHA in two academic years. All courses in the campus MHA are offered in a hybrid, face-to-face/online, eight-week format on Tuesday and Thursday evenings at our WSU Davis campus. eMHA students spend 1.5 days on campus each semester with the balance of the coursework completed online. MHA and eMHA courses are taught by an optimum blend of academic professors and working healthcare executives and culminate in a real-time final project resulting in a deliverable of importance and measurable value to one of their local healthcare organizations.

Master of Health Administration

Master of Health Administration (MHA)

- **Program Code:** 2030MHA
- **CIPC:** 512211

Minimum Admission Requirements

To be considered for the MHA program, students must meet the following prerequisites:

- Hold a Bachelor's degree from a regionally accredited school (must be completed by program start date)-no specific discipline required
- Meet a GPA requirement of 3.0 or higher on a 4.0 scale
- U.S. healthcare or supervisory experience (preferred, not required)
- GRE/GMAT not required

Grade Requirements

To receive a Master of Health Administration degree, the student must complete all courses in the MHA program with a grade of "C" or higher, and maintain an overall program GPA of 3.0 or higher.

Program Learning Outcomes

- **Communication:** The competency includes things such as executive proficiency in written and oral communication, the ability to communicate across disciplines, and to project a professional business presence both individually and as a representative of one's organization.
- **Relationship Management:** This competency includes things such as the ability to develop positive collaborative relationships with peers, subordinates, and superiors within and across organizations, and to lead and work with teams effectively. In addition it includes the demonstration of emotional intelligence.
- **Critical and Creative Thinking:** This competency includes things such as the ability to seek and use qualitative and quantitative information, developing insight, and using these to achieve the mission, vision, and goals of one's organization. In addition, it includes the ability to understand and lead transformational innovation.
- **Professionalism:** This competency includes things such as a sense of personal accountability and the ability to assume risk and responsibility. It also includes an orientation to the development of a life-long learning agenda and a commitment to ethical conduct and personal growth.
- **Healthcare Leadership:** This competency requires a deep and broad understanding of the industry; both its clinical and administrative aspects. It includes the masterful application of skills such as transparency, decision making, leading and managing change, being a role model, mentoring, and developing the talent of subordinates.
- **Law, Policy, and Governance:** This competency includes things such as the ability to accurately assess and work within the external political, legal, and regulatory environment. It requires an understanding of healthcare policy and its impact on the health of individuals and of populations. In addition, it includes the ability to navigate internal organizational dynamics, and to participate in governance of the organization.
- **Community Awareness and Population Health:** This competency requires the management of populations of peoples' health and includes things such as the ability to investigate population health characteristics and to participate in improving population health in the local community. It also includes attentiveness to the ecological and social factors that influence health behaviors.
- **Human Resources Management:** This competency includes things such as the ability to ethically lead and manage the human resources processes needed for effective staffing in the operation of a healthcare organization.
- **Financial Management:** This competency includes things such as the ability interpret financial and accounting documents, plan and execute budgets, make capital investment decisions, and to articulate and implement executive fiduciary responsibilities.
- **Information Technology:** This competency includes things such as the ability to recognize critical elements of information technology and to participate in the management of the acquisition and implementation of information systems and personnel. It also includes a working knowledge of the use of data, importance of quality data, and analysis of data within the healthcare industry to support all aspects of decision making and organizational performance.
- **Performance Improvement and Quality Management:** This competency requires a rudimentary understanding of the clinical environment and the use of an evidence based approach to care, management, and risk management. It includes things such as the ability to use quality and systems tools to measure, promote, and to implement quality improvement initiatives in clinical and administrative partnerships within healthcare organizations.
- **Strategic Management:** This competency includes things such as the ability to conduct external and internal environmental analyses, to apply the principles of strategy formulation, implementation, and control, and to develop corporate strategy, market research, and planning.

Course Requirements for MHA

Required Courses (39 credit hours)

- MHA 6000 - Health Systems & the Healthcare Economy **Credits: (3)**
- MHA 6100 - Leading & Managing People in Healthcare **Credits: (3)**
- MHA 6200 - Population Health and Data Analytics **Credits: (3)**
- MHA 6240 - Human Resources Management in Healthcare **Credits: (3)**
- MHA 6249 - Accounting and Finance Principles for Healthcare Managers **Credits: (3)**
- MHA 6250 - Healthcare Finance **Credits: (3)**
- MHA 6300 - Quality Improvement and Risk Management in Health Services Organizations **Credits: (3)**
- MHA 6320 - Health Policy and Economics **Credits: (3)**
- MHA 6350 - Decision Making for Healthcare Leaders **Credits: (3)**
- MHA 6400 - Strategic Health Planning and Marketing **Credits: (3)**
- MHA 6440 - Health Ethics and Law **Credits: (3)**
- MHA 6450 - Health Informatics **Credits: (3)**
- MHA 6500 INT - Field Work **Credits: (3)**

MHA Elective Courses

Select two of the following courses

- MHA 6140 - Post Acute Care Administration **Credits: (3)**
- MHA 6160 - Medical Group Management **Credits: (3)**
- MHA 6180 - Healthcare Entrepreneurship **Credits: (3)**
- MHA 6360 - Comparative International Health Systems **Credits: (3)**
- MHA 6370 - Executive Leadership Seminars in Healthcare **Credits: (3)**
- MHA 6830 - Directed Study **Credits: (1-3)** (3 credit hours required)
- MHA 6840 - Case Study Analysis **Credits: (3)**
- MHA 6850 GLB - MHA Study Abroad **Credits: (3)**

Master of Physician Assistant Studies

Department Chair: Sandra Stennett

Telephone Contract: Jessica Septon (801) 626-7282

Director of Clinical Education: Kenton Cummins

Clinical Coordinator: Jessica Bickley

Medical Director: Dr. Robert Bunnell

Assistant Professors: Nicholas Dean, Clayton Halford, Sandra Stennet

Master of Physician Assistant Studies

The Physician Assistant Program at Weber State University is a 24-month graduate level program awarding a Master of Physician Assistant Studies (MPAS) degree upon completion. One class of 20 students is enrolled in January of each year. Applications are accepted starting in April (date established by CASPA). The WSU PA program application cycle closes July 15th at 11:59 pm ET and must be verified through CASPA by August 15th at 11:59 ET.

To achieve our desired standard of quality, meet accreditation standards, and provide students with an educational experience of exceptional caliber, Weber State University Physician Assistant Program (WSUPAP) requires the highest standards for its applicants. Requirements for being considered as an applicant to the program are outlined below.

Degree and GPA Requirements

Applicants to the WSU PA program must have been awarded a baccalaureate degree (or higher) with a minimum cumulative GPA of 3.0 and a science GPA of 3.0 (on a 4.0 scale), from a regionally accredited U.S. institution of higher education prior to enrollment. College seniors are eligible to apply, provided they will receive their baccalaureate degree prior to the month start date, have the required number of clinical hours, and have met all other prerequisites required by the program.

Pre-requisite Coursework

All applicants must complete the following prerequisite coursework at a regionally accredited U.S. institution of higher learning with a grade of B- or higher, prior to application to the program. All specified prerequisite courses are required; no substitutions for prerequisite coursework will be accepted.

Science Courses	Description
Must be completed at a 4-year institution within 7 years of application. Students with prerequisite coursework taken more than seven years prior to application are required to take the PA-CAT (Physician Assistant College Admission Test). Scores must be reported directly from Exam Maxima. Online science courses not accepted.	
Human Anatomy with Lab - 4 credit hrs WSU Equivalents: HTHS 2110 or ZOOL 2320	• Must be "human" and encompass the complete study of anatomy of all major systems of the human body. A semester combined Human Anatomy & Physiology course sequences are acceptable if completed at a regionally accredited institution. • Comparative or Vertebrate Anatomy will not be accepted.
Human Physiology with Lab - 4 credit hrs WSU Equivalents: HTHS 2111 or ZOOL 2420	• Must be "human" and encompass the complete study of physiology of all major systems of the human body. A semester combined Human Anatomy & Physiology course sequences are acceptable if completed at a regionally accredited institution. • Comparative or Vertebrate Physiology will not be accepted. Exercise Physiology does not satisfy this requirement.
Microbiology with Lab - 4 credit hrs WSU equivalents: MICR 2054	• A general, medical, or clinical microbiology course is acceptable. • Individual courses in bacteriology, virology, mycology, or parasitology do not satisfy this requirement.
General Chemistry 1 & 2 with Lab - 8 credit hrs WSU equivalents: CHEM 1110, CHEM 1120, CHEM 1210, CHEM 1220	• Chemistry for pre-professional students

Non- Science Courses (Community college or online courses accepted)	Description
Statistics - 2 credit hrs	• Course directed towards an understanding of foundational statistics

Psychology - 3 credit hrs	Student choice of Introductory, Developmental, or Abnormal Psychology
Medical Terminology - 1 credit hr	Any course in Medical Terminology

Terms and Conditions for Prerequisite Coursework

- Coursework Completion:** All prerequisite coursework must be completed at a regionally accredited four-year U.S. institution of higher learning prior to application to the program.
- Expiration of Prerequisite Courses:** Students with prerequisite coursework taken more than seven years prior to the application deadline are required to take the PA-CAT (Physician Assistant College Admission Test). Additional information about the PA-CAT and reporting your scores is provided below.
- Transcripts:** Prerequisite coursework must be verifiable through official transcripts. Due to the number of applications received, we are unable to review transcript content for prospective applicants. All course requirements and prerequisites are published on this website.
- Pass/Fail, Online Courses:** Prerequisite courses must be taken for a letter grade. Online prerequisite science courses are not accepted.
Due to the COVID-19 pandemic, courses taken in the years 2020 and 2021 as pass/fail or online will be considered by the Admissions Committee on a case-by-case basis.
- Substitutions:** Students granted admission must fulfill all application requirements; no substitutions for prerequisite coursework will be accepted, including but not limited to the following: advanced placement, international baccalaureate (IB) courses, credit for experiential learning, courses completed as part of a professional degree, and/or college-level examination program (CLEP) test.

Recommended Coursework

Pharmacology	Pathophysiology	Organic Chemistry	Biochemistry	Technical Writing	Spanish	Genetics	Immunology
<i>WSU Equivalents</i>							
HTHS 3240 (preferred) or HTHS 2240	HTHS 2230	CHEM 2310, CHEM 2320	CHEM 3070	ENGL 2100	Any Spanish Language Course	ZOOL 3300	MICR 3254

Clinical Healthcare Experience

A minimum of 500 hours of clinical healthcare experience must be accrued at the time of application and recorded as part of the official CASPA application. Experiences in inpatient settings and/or those in positions requiring autonomous, high-level, medical decision-making (as listed below) are scored highest. Hours obtained observing or shadowing, or as part of an educational program will not be counted towards the 500 hours.

Healthcare hours and clinical experience are subject to verification, and the program reserves the right to contact supervisors to confirm reported hours.

Examples of acceptable clinical healthcare experience include, but are not limited to:

Limited Level	Moderate Level	High Level

• Phlebotomist • PT Assistant • Laboratory Technician • Pharmacy Tech • Medical Interpreter • Research Assistant • EKG Tech • Psych Tech • ED Tech • Medical Scribe	• CNA or CMA • Dental Hygienist • Licensed Clinical Social Worker • Speech Language Pathologist • EMT • LPN • Radiology Tech • Occupational Therapist • Ultrasonographer • Med Tech • Exercise Physiologist	• Paramedic • RN • Respiratory Therapist • International Medical Graduate • Medic/Corpsman • Pharmacist • Athletic Trainer • Dietician • Perfusionist • Midwife • Physical Therapist

PA-CAT

To ensure students matriculate into the program with equivalent academic preparation, students whose coursework is older than seven years must either retake prerequisite courses or score, at minimum, in the 3rd quintile on the PA-CAT to demonstrate readiness for the curriculum.

- To learn more about how and where to take the exam, go to the Exam Master PA-CAT website.
- PA-CAT scores are good for two years.
- To report scores, select Weber State University PA Program in your Candidate Score Portal.
- Applicants must complete the PA-CAT by the end of June in order for scores to be reported by the program's application deadline of July 15th.
- Scheduling the PA-CAT exam may take up to three weeks; please plan accordingly.
- The Admissions Committee considers both composite and quintile scores when evaluating performance.

Competitive Candidates

The program aims to select candidates whose background and interests align with our mission, goals, and values. Only those candidates who fulfill three or more of the following criteria will receive additional review and scoring by the Admissions Committee:

Criteria include:

- WSU students, alumni, faculty, and staff
- Science GPA >3.5
- >9 credit hours or more of recommended coursework
- Graduate degree from a regionally accredited U.S. institution of higher education
- PA-CAT composite scores in the top two quintiles
- Paid clinical healthcare experience in an inpatient or hospital setting
- >100 hours of community service
- Service in a leadership role for > 8 months
- Diverse backgrounds: underrepresented minorities in medicine (Black/African American, Native American, Latinx), economically disadvantaged (Pell Grant recipient), history of military service, first-generation college students

Each of the above criteria are evaluated and weighted individually. Completion of a graduate degree, academic strength, and quality and quantity of healthcare, leadership, and community service hours will be weighted at a higher level on an ascending scale during the application screening and review process. Candidates with higher scores are more likely to be invited for an interview.

International Students

Candidates are considered for admission to the Weber State University PA Program without regard to their country of origin. For purposes of admissions and financial aid, U.S. permanent residents are considered equivalent to U.S. citizens.

DACA (Deferred Action Childhood Arrivals)

Students with DACA status are currently eligible to apply for and obtain a license to practice as a physician assistant in Utah. Prospective applicants should consult the requirements of the licensing authority in any state in which they consider practicing to determine qualifications for licensure. Information concerning licensure in Utah can be found at the Utah Department of Professional Licensing. Information about other states can be found on the NCCPA website.

International Applicants

International applicants are welcome to apply if they meet our admissions requirements. Applicants with international medical degrees are ineligible to apply unless they also hold a qualifying degree (bachelor's or higher) from a regionally accredited U.S. institution of higher education prior to matriculation. We do not provide waivers or exemptions for applicants without a qualifying degree.

It is the responsibility of international applicants to maintain their F-1 student status while in the United States. For more information, please refer to the current section of the WSU International Student and Scholar Center (ISSC).

TOEFL (Test of English as a Foreign Language)

Applicants for whom English is a second language must submit their TOEFL scores with their application. The test must have been taken within the two years prior to the July 15th application deadline for an applicant to be considered for an interview.

Minimum required TOEFL iBT proficiency level scores must be "high-intermediate". Weber State University Educational Testing Services (ETS) code for submitting your TOEFL score to CASPA is 4941.

Master of Physician Assistant Studies

Master of Physician Assistant Studies (MPAS)

- **Program Description:** The Weber State University Physician Assistant (PA) Program is a two-year, full-time, intensive graduate level program that will train individuals with clinical experience and a strong academic background for careers as physician assistants and leaders in the field of medicine. Students who successfully complete each aspect of the program, including a master's project and summative competency exams (scheduled throughout the program), are eligible for graduation. Graduates from the program will receive a Master of Physician Assistant Studies (MPAS) degree from Weber State University and are eligible for certification by the National Commission on the Certification of Physician Assistants (NCCPA). Once certified, the PA is eligible to apply for a license to practice medicine in all 50 states and the District of Columbia.
- **Credit Hour Requirement:** A total of 92 graduate credit hours are required to complete the program.
- **Program Code:** 2080MPAS
- **CIPC:** 510912

Pre-requisites and Admissions

Applicants to the WSU PA Program must hold a bachelor's degree or higher and meet all program Prerequisites and Matriculation Requirements before they are eligible to apply to the program. Interested applicants must submit a formal application and all supporting documents to the Central Application Service for the Physician Assistant (CASPA) on or before the program's published deadline. No exceptions will be made for late applications.

Accreditation

Accreditation statement - The ARC-PA has granted Accreditation-Provisional status to the Weber State University Physician Assistant Program sponsored by Weber State University. Accreditation-Provisional is an accreditation status granted when the plans and resource allocation, if fully implemented as planned, of a proposed program that has not yet enrolled students appear to demonstrate the program's ability to meet the ARC-PA Standards or when a program holding Accreditation-Provisional status appears to demonstrate continued progress in complying with the Standards as it prepares for the graduation of the first class (cohort) of students. Accreditation-Provisional does not ensure any subsequent accreditation status. It is limited to no more than five years from matriculation of the first class.

The program's accreditation history can be viewed on the ARC-PA website at

<http://www.arc-pa.org/accreditation-history-weber-state/>.

Advisement

For questions, please contact the program's Admissions Coordinator at wsupaadmissions@weber.edu.

Curriculum

Only students who are admitted to the program are eligible to take courses within the department. The curriculum is "lock step", meaning that students must complete the program by passing each exam and each course before being eligible to progress and take classes in subsequent semesters.

Year 1

The first year of training consists of classroom instruction enhanced by simulated clinical experiences designed to provide students with a foundation in medical knowledge, skills, behaviors, and attitudes required for the practice of medicine. The curriculum builds on prerequisite coursework and clinical experiences students complete prior to matriculation and utilizes an integrated systems-based approach that eliminates compartmentalized knowledge and helps students achieve clinical acumen by creating meaningful application between biomedical science, clinical science, pharmacotherapy, and professional practice. Content synthesis is further enhanced by integrating a variety of teaching methods, including lectures, labs, team- and inquiring-based learning, and evidence-based practice.

Didactic Curriculum - Semester 1

- MPAS 6001 - Professional Development 1 **Credits: (1)**
- MPAS 6010 - Mechanisms of Health and Disease **Credits: (2)**
- MPAS 6020 - Introduction to History and Physical **Credits: (4)**
- MPAS 6030 - Introduction to Clinical Pharmacology **Credits: (1)**
- MPAS 6040 - Introduction to Medical Diagnostics **Credits: (3)**
- MPAS 6050 - Evidence-Based Practice 1 **Credits: (2)**
- MPAS 6060 - Eyes, Ears, Nose, and Throat **Credits: (2)**
- MPAS 6080 - Infectious Disease **Credits: (3)**
- MPAS 6101 - Clinical Integration 1 **Credits: (1)**

- MPAS 6110 - Pulmonology **Credits: (3)**
- *Summative 1*

Didactic Curriculum - Semester 2

- MPAS 6002 - Professional Development 2 **Credits: (1)**
- MPAS 6070 - Dermatology **Credits: (2)**
- MPAS 6100 - Hematology/Oncology **Credits: (2)**
- MPAS 6120 - Genitourinary (Nephrology/Urology) **Credits: (4)**
- MPAS 6130 - Endocrinology **Credits: (3)**
- MPAS 6180 - Cardiovascular Medicine **Credits: (5)**
- MPAS 6150 - Musculoskeletal Disorders 1 **Credits: (1)**
- MPAS 6102 - Clinical Integration 2 **Credits: (3)**
- *Summative 2*

Didactic Curriculum - Semester 3

- MPAS 6003 - Professional Development 3 **Credits: (1)**
- MPAS 6170 - Neurology **Credits: (4)**
- MPAS 6140 - Obstetrics and Gynecology **Credits: (3)**
- MPAS 6190 - Gastroenterology **Credits: (3)**
- MPAS 6200 - Musculoskeletal Disorders 2 **Credits: (2)**
- MPAS 6210 - Psychiatry **Credits: (3)**
- MPAS 6051 - Evidence-Based Practice 2 **Credits: (1)**
- MPAS 6103 - Clinical Integration 3 **Credits: (3)**
- *Summative 3*

Year 2

Following successful completion of the first year of training, students begin a year of supervised clinical practice experiences (SCPEs) in a variety of settings in multiple disciplines under the direct supervision of a clinical preceptor. In direct patient care environments, students expand and apply basic medical knowledge, practice clinical and technical skills, and participate in the team-based practice of medicine. During this clinical phase, students will return to campus periodically for testing as well as continued didactic training in medicine and professional development. The master's project will also be completed during the clinical year.

- MPAS 6004 - Professional Development 4 **Credits: (1)**
- MPAS 6005 - Professional Development 5 **Credits: (1)**
- MPAS 6006 - Professional Development 6 **Credits: (1)**
- MPAS 6500 - Preceptorship 1 **Credits: (12)**
- MPAS 6510 - Preceptorship 2 **Credits: (12)**
- MPAS 6520 - Preceptorship 3 **Credits: (12)**

Master's Project

In addition to the courses listed above, students are required to successfully complete a master's project.

Comprehensive Summative Exams

Students must undergo and pass comprehensive summative exams throughout the program used to evaluate competencies required to meet Entrustable Professional Activities, real-life, key tasks that a PA can be entrusted to perform in a given healthcare context once sufficient competence has been demonstrated.

Master of Science in Athletic Training Program

Director: Valerie W. Herzog, EdD, LAT, ATC

Location: Room 224, Swenson Building

Telephone Contact: Margarita Lopez, 801-626-8631

Faculty: Valerie W. Herzog, EdD, LAT, ATC; Conrad Gabler, PhD, LAT, ATC; Matthew Donahue, PhD, LAT, ATC; Alysia Cohen, PhD, MPH, LAT, ATC; Hannah Stedje, MS, LAT, ATC

The WSU Master of Science in Athletic Training (MSAT) degree is designed to enable students with a bachelor's degree in an area other than athletic training to obtain eligibility for the Board of Certification (BOC) examination. This program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Graduates of the MSAT are eligible for the Board of Certification (BOC) examination.

The program provides students with knowledge and skills in the prevention, evaluation, treatment, and rehabilitation of musculoskeletal injuries and general medical conditions. The Master of Science in Athletic Training program is specifically designed to prepare students for a career in health care as a certified athletic trainer. Athletic trainers are currently employed in colleges and universities, public and private high schools, corporations, rehabilitation clinics, professional sports organizations, the military, factories, and hospitals (www.nata.org - National Athletic Trainers' Association).

Master of Science

Master of Science in Athletic Training (MS)

- **Program Code:** 2057MS
- **CIPC:** 510913

Minimum Admissions Requirements

- Bachelor's degree
- Admission to Weber State University (Students apply only to the MSAT and will be admitted to WSU and the MSAT concurrently. Students do NOT need to apply through the WSU general admissions process)
- Minimum 3.0 GPA*
- Submit Graduate Athletic Training Student Application through ATCAS (found online at: <https://atcas.liaisoncas.com>)
- Submit Application Essay/Personal Statement (see online application in ATCAS for details)
- Two References - at least one reference must be a college-level instructor
- Grade of C or better in all prerequisite courses (all prerequisites must have been completed within the last 10 years prior to application)**
- Documentation of at least 50 observations hours with a Certified Athletic Trainer (or similar healthcare provider for international applicants)

- Program Interview - in person or over the phone
- Completed Technical Standards Form - can be completed after admission (Form can be found at: <https://www.weber.edu/msat/admission.html>)
- Official Transcripts from ALL other colleges/universities attended (send directly to ATCAS)
- Proof of immunizations (completed after admission)
- Hepatitis-B vaccination (can be completed in first semester if deficient)
- Pay Application fee (paid directly to ATCAS)

** Grade point averages between 2.75 and 2.99 will be considered.*

*** Students who are deficient in four or fewer prerequisite courses may be admitted on a conditional basis if the courses can be added to the schedule while still meeting the prerequisites prior to each graduate course.*

The priority application deadline is January 15 for the following fall semester. Applications received after the deadline will be considered on a rolling admissions basis if available slots still exist. Students are encouraged to apply by the January 15th deadline, as the program will likely reach capacity at that point. The online application may be accessed on-line at: <https://atcas.liasoncas.com>.

Post-Admission Requirements

After formal admission to the Athletic Training Master's degree program, students are required to complete an FBI background check and drug test. The WSU Master of Science in Athletic Training Program enters into Affiliation Agreements with multiple healthcare facilities and schools throughout the state. These agreements provide WSU MSAT students and faculty authorized access to facility resources and patients. In response to stipulations contained within one or more of these Agreements, the WSU MSAT requires students admitted to the program to submit to an FBI level criminal background check as well as a urine drug test. This screening process has been mandated by the WSU MSAT in an effort to more effectively protect the safety and well-being of the patients, clients, and residents of those facilities, and is fully supported by the Department of Athletic Training and the MSAT faculty.

Both the background check and the drug test will be completed during the student's first semester. The expenses (approximately \$80) will be paid for by the student.

Additional Admission Requirements for International Students

All international students and any applicants educated outside the U.S. must demonstrate proficiency in English. Those whose native language is not English, or whose language of instruction for their undergraduate degree was not English, will be required to submit an official score from the Test of English as a Foreign Language (TOEFL) which is not more than two years old and on which a minimum score of 563 (paper-based), or 85 (internet-based) with a minimum score of 17 in each section, has been earned. The MSAT Program also accepts the International English Language Testing System (IELTS) - applicants may have an official score report sent to the MSAT Program Director which is not more than two years old and on which a minimum score of 6.5 overall, with a minimum of 6.0 in each section, has been earned.

Students who have not earned the minimum required English proficiency scores may still be admitted conditionally. Student who have at least a score of 70 on the TOEFL exam (internet-based) would be required to begin ESL and other coursework at Weber State University one semester prior to beginning MSAT coursework. During this preparatory semester, students would be required to complete, with a grade of a C+ or better, approximately 8 credits of ESL courses and complete, with a grade of C or better, approximately 6 credits of MSAT prerequisite courses.

Students who have a 61-69 score on the TOEFL exam would be required to begin ESL and other coursework at Weber State University for two semesters prior to beginning MSAT coursework. During this preparatory semester, students would be required to complete, with a grade of a C+ or better, approximately 8 credits of ESL courses per semester and complete, with a grade of C or better, approximately 6 credits of MSAT prerequisite courses per semester.

The MSAT Program Director will determine which ESL and prerequisite courses are most appropriate based on the student's undergraduate coursework and English proficiency scores.

Minimum English Proficiency scores for conditional admissions:

TOEFL (internet-based) - 70 (one semester); 61 (two semesters)

TOEFL (paper-based) - 525 (one semester); 500 (two semesters)

IELTS - 6.0 (one semester); 5.5 (two semesters)

Selection Process

- A. All applications will be ranked by using a numerical scale to rate the elements of the application.
- B. Students receiving the highest scores in the rating process will be invited to enter the Master of Science in Athletic Training Program. The selection committee is comprised of the MSAT faculty. The number of students chosen to enter the program each year will vary, in compliance with accreditation guidelines related to professor and preceptor-to-student ratios. Selection into the MSAT is competitive and satisfaction of the minimum requirements does not guarantee admission.
- C. Applicants not invited to enter the MSAT may reapply the following year. All applicants who reapply must meet all requirements in effect at the time of reapplication. Students who choose to reapply must review the program website and/or catalog for current admission requirements at that time.
- D. All students selected for the MSAT must provide evidence of being able to meet the **Technical Standards for Admission of the program. Only those students who verify that they can meet those technical standards, with or without reasonable accommodations, will be allowed to enter the program.** The Technical Standards can be found on the program's website at: <https://www.weber.edu/msat/admission.html>

Retention Requirements

- A. After students are selected into the MSAT, retention in the program will be based on the following criteria:
 1. Grade "B-" or better in all required MSAT courses (*includes Graduate Practicum courses*).
 2. Maintain an overall Weber State University Graduate GPA of 3.0.
 3. Adhere to MSAT Athletic Training Student Handbook Policies.
- B. Students who fail to meet the retention criteria will be placed on probation in the MSAT program for one semester. If standards are not met by the end of the probationary period, the student will be dismissed from the program. Students who receive a grade lower than a "B-" in any required MSAT course must repeat that course and receive a grade of "B-" or higher to remain in the program. Failure to repeat the course (*when offered*) will result in dismissal from the program. Students who receive a grade lower than a "B-" in two or more MSAT courses will be dismissed from the program.

Early Admission for Weber State students

Students enrolled in any Bachelor's degree program at Weber State with 75 credits completed towards a degree may apply for early admissions consideration. Students applying for early admissions are still required to complete all Admissions requirements listed above. To be eligible for early admissions consideration, the following must be completed prior to application.

Students must have completed 17 credits of MSAT prerequisites as follows:

- 8 credits of Anatomy and Physiology
 - ZOOL 2320 - Human Anatomy (4) or HTHS 2110 LS - Integrated Human Anatomy and Physiology I (4); *AND*
 - ZOOL 2420 LS - Human Physiology (4) or HTHS 2111 - Integrated Human Anatomy and Physiology II (4)

- 9 additional credits from the MSAT prerequisite requirements (see below).
- Students must have a minimum of 3.0 GPA in their completed prerequisite courses.
- The required 50 observation hours with a Certified Athletic Trainer must be completed prior to application.
- Students will also need to complete a program interview during the early admission process.
- The early admission process will take place in March of each year. Please refer to the program website for specific deadlines: <https://weber.edu/msat>.

Advisement

Students enrolled in the MSAT program will be assigned a faculty advisor. Students will be encouraged to meet with their faculty advisor at least once a semester and to engage in dialogue when necessary regarding academic success, clinical assignments, and/or personal or professional issues.

Transfer Credits

In compliance with the Higher Education Act, Weber State University only accepts transfer credit from regionally accredited colleges and universities.

Students who have completed graduate athletic training coursework at another CAATE-accredited professional master's degree program in Athletic Training may apply for up to 9 transfer credits. The transfer of graduate credits from non-CAATE-accredited programs will be considered on a case-by-case basis. Approval of all transfer credits requires an official transcript, a copy of the course syllabus, and approval by the WSU MSAT Program Director.

Program Learning Outcomes

- Promoting health lifestyle behaviors with effective education and communication to enhance wellness and minimize the risk of injury and illness. (Injury and Illness Prevention and Wellness Promotion)
- Implementing systematic, evidence-based examinations and assessments to formulate valid clinical diagnoses and determine patients' plan of care. (Examination, Assessment, and Diagnosis)
- Integrating best practices in immediate and emergency care for optimal outcomes. (Immediate and Emergency Care)
- Rehabilitating and reconditioning injuries, illnesses and general medical conditions with the goal of achieving optimal activity level based on core concepts (i.e., knowledge and skillsets fundamental to all aspects of therapeutic interventions)
- Using the applications of therapeutic exercise, modality devices and manual techniques. (Therapeutic Intervention)
- Integrating best practices in policy construction and implementation, documentation and basic business practices to promote optimal patient care and employee well-being. (Healthcare Administration and Professional Responsibility)

Prerequisite Course Requirements for MS

Required Prerequisite Courses (32 credit hours)

(or equivalent courses - syllabi or catalog course description required)

- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- PUBH 3150 - Introduction to Public Health **Credits: (3)**
- ESS 3500 - Biomechanics **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**

- PSY 1010 SS - Introductory Psychology **Credits: (3)**
- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- CHEM 1010 PS - Introductory Chemistry **Credits: (3)**
- ZOOL 1010 LS - Animal Biology **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**

Course Requirements for MS

Required Courses (67-69 credit hours)

Didactic Courses

- MSAT 6080 - Research Methods I **Credits: (3)**
- MSAT 6085 - Research Methods II **Credits: (3)**
- MSAT 6090 - Research Methods III **Credits: (3)**
- MSAT 6100 - Advanced Emergency Care in AT **Credits: (3)**
- MSAT 6200 - Mental and Behavioral Health in Injury and Rehabilitation **Credits: (3)**
- MSAT 6300 - Orthopedic Assessment and Diagnosis I **Credits: (3)**
- MSAT 6301 - Orthopedic Assessment and Diagnosis II **Credits: (3)**
- MSAT 6350 - Assessment and Care of General Medical Conditions **Credits: (3)**
- MSAT 6390 - Foundations of Therapeutic Interventions **Credits: (2)**
- MSAT 6400 - Therapeutic Modalities for Musculoskeletal Injuries **Credits: (2)**
- MSAT 6401 - Innovations in Therapeutic Modalities **Credits: (2)**
- MSAT 6431 - Orthopedic Taping and Durable Medical Equipment **Credits: (1)**
- MSAT 6432 - Casting and Orthotic Fabrication **Credits: (1)**
- MSAT 6450 - Therapeutic Rehabilitation I **Credits: (3)**
- MSAT 6451 - Therapeutic Rehabilitation II **Credits: (3)**
- MSAT 6452 - Advanced Manual Therapy Techniques **Credits: (3)**
- MSAT 6480 - Advanced Principles of Evidence-Based Practice **Credits: (3)**
- MSAT 6500 INT - Foundations of Athletic Training **Credits: (3)**
- MSAT 6600 - Administration and Management in Athletic Training **Credits: (3)**
- MSAT 6700 - Advanced Diagnostic Imaging for the Athletic Training Profession **Credits: (1)**
- MSAT 6740 - Nutrition for Athletic Trainers **Credits: (1)**
- MSAT 6760 - Suturing, Joint Relocation and Advanced AT Skills **Credits: (1)**
- MSAT 6998 - Master's Board of Certification (BOC) Exam Preparation **Credits: (1)**
- MSAT 6999 - Special Topics in Athletic Training **Credits: (1-3)**

Clinical Courses

- MSAT 6501 INT - Graduate Practicum I **Credits: (3)**
- MSAT 6502 INT - Graduate Practicum II **Credits: (3)**
- MSAT 6503 INT - Graduate Practicum III **Credits: (3)**
- MSAT 6504 INT - Graduate Practicum IV **Credits: (3)**

Optional Electives

- MSAT 6095 - Research Methods IV **Credits: (1-3)**
- MSAT 6750 - Evidence-Based Evaluation and Treatment of the SI Joint and Spine **Credits: (2)**

Master of Science in Nursing Program

Chair: Rieneke Holman, PhD, RN

Director: Melissa Neville-Norton, DNP, APRN, CPNP-PC

Location: Marriott Allied Health Building, Rm 438

Program Secretary: Cheryll Hyatt (801) 626-7833

Enrollment Director: Rob Holt (801) 626-6753

The Weber State University Annie Taylor Dee School of Nursing Master of Science in Nursing (MSN) program is designed to prepare the graduate as a nurse executive and a nurse educator with knowledge and skills to lead change, promote health, and elevate care in various roles and settings. The emphases of nursing educator and nurse executive are specifically intended for individuals who want to advance their practice and careers in these areas.

The MSN Executive and Educator degree consists of 39 credit hours beyond the earned baccalaureate degree which includes core courses (15 credits) and emphasis of nurse administrator or nurse educator (20 credits per concentration) which includes 4 credits of project hours. The WSU executive and educator graduate nursing programs are completely online. There are limited face to face experiences during Residency courses.

Certificate courses may not be concurrently applied towards the WSU MSN degree. The School of Nursing programs are nationally accredited by the Accreditation Commission for Education in Nursing (ACEN) 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia, 30326. www.acenursing.org.

Post Master's Certificate

Nurse Educator Post Master's Certificate

The Nurse Educator Graduate Certificate is a stand-alone certificate.

- **Program Prerequisite:** Completion of an MSN degree.
- **Grade Requirements:** A minimum grade of "B-" is required in all courses and an overall program GPA of 3.0 or higher.
- **Credit Hour Requirements:** A minimum of 12 credit hours is required.
- **Program Code:** 2055PMC
- **CIPC:** 513203

The certificate can be completed in two (2) semesters based on course availability and optional residency. Students may choose to register for an optional 90-hour supervised residency in the area of focus. The certificate will be awarded upon completion of all required graduate-level courses. All courses are delivered in a 100% online except for the optional 90-hour residency.

Certificate courses may not be concurrently applied towards the WSU MSN degree.

Gainful Employment Disclosure

Course Requirements for Graduate Certificate

Courses Required

- NRS 6170 - Teaching Strategies **Credits: (3)**
- NRS 6520 - Curriculum Development for Nursing Educators **Credits: (3)**
- NRS 6540 - Measurement of Competence and Outcomes in Nursing Education **Credits: (3)**
- NRS 6150 - Advanced Pathophysiology, Pharmacology and Assessment for the Nurse Educator **Credits: (3)**
- NRS 6700 INT - Nurse Educator Residency **Credits: (2)**

Nurse Leadership & Management Post Master's Certificate

- **Program Prerequisite:** The Graduate Leadership & Management Certificate is a stand-alone certificate: completion of an MSN degree is a prerequisite to admission to the graduate certificate program.
- **Grade Requirements:** A minimum grade of "B-" is required in all courses and an overall program GPA of 3.0 or higher.
- **Credit Hour Requirements:** A minimum of 12 credit hours is required.
- **Program Code:** 2092PMC
- **CIPC:** 513802

The certificate will be awarded upon completion of all required graduate-level courses. The program can be completed in two to four semesters based on course availability. Students may choose to register for an optional 90 hour supervised residency in the area of focus. With the exception of the optional executive residency, all courses are delivered in a 100% online format. Enrollment will be capped at 5 students per track at the discretion of the MSN Program Director.

Certificate courses may not be concurrently applied towards the WSU MSN degree.

Gainful Employment Disclosure

Course Requirements for Graduate Certificate

Courses Required

- NRS 6300 - Quality Improvement, Patient Safety and Risk Issues in Patient Care Delivery **Credits: (3)**
- NRS 6380 - Retaining and Developing a Competent Workforce in Nursing **Credits: (2)**
- NRS 6324 - Financial Issues in Nursing Administration **Credits: (2)**
- MHA 6000 - Health Systems & the Healthcare Economy **Credits: (3)**
- NRS 6400 INT - Nurse Leadership & Management Residency **Credits: (2)**

Master of Science

Master of Science in Nursing (MSN)

The Weber State University Annie Taylor Dee School of Nursing (ATDSN) Master of Science in Nursing (MSN) program is designed for professional advancement and nursing leadership in academia and healthcare organizations. This accredited program offers specialties in nursing education and nursing leadership and management. During these programs of study, graduate students will experience diverse and evidence-based learning opportunities from highly qualified graduate faculty; culminating in a community-based residency experience in nursing clinical, academic, or administrative leadership. The accelerated MSN block format includes 100% online

coursework offered over three consecutive semesters of study. The program includes personalized advising and support from nursing faculty with years of educational, clinical, and leadership experience. The MSN Nurse Educator degree emphasis is 33 total credits. The 100% online course includes curriculum design, instructional strategies, student assessment, and program evaluation. The MSN Leadership and Management degree emphasis is 32 total credits. The 100% online coursework applies leadership principles such as developing and retaining a competent workforce, budgeting, staffing, and performance measurement.

For nurses who possess a current master's degree in nursing who would like to strengthen or expand their current roles, the ATDSN offers post-master's certificates in nursing education and administrative leadership. The Nurse Leadership and Management Certificate (12 credits) and the Nurse Educator Certificate (14 credits) can be completed in two semesters with an optional community-based residency experience in nursing clinical, academia, or administrative leadership.

- **Grade Requirements:** To earn the MSN degree, candidates must successfully complete all MSN program courses with a grade of "B-" or higher and maintain an overall program GPA of 3.0 or higher.
- **Program Code:** 2031MSN with Educator emphasis (2050) or Nurse Leadership and Management emphasis (2092)
- **CIPC:** 513802 with Educator emphasis (513203) or Nurse Leadership and Management emphasis (513802)

Accreditation

The MSN Program is accredited by:

Accreditation Commission for Education in Nursing (ACEN)
3343 Peachtree Road NE, Suite 850
Atlanta, GA 30326
P. 404.975.5000
F. 404.975.5020
www.acenursing.org

Admission Requirements

Enrollment Director (801) 626-6753

Criteria for admission to the WSU Annie Taylor Dee School of Nursing's MSN Program can be found on the MSN Program website (weber.edu/msn). Select the "Applications and Checklists" option. *Admission is competitive; therefore, the listed criteria for admission should be considered as minimum standards.* For more information, please contact the School of Nursing Enrollment Director (801) 626-6753.

Before beginning the admissions process, applicants must be currently matriculated students at Weber State University or apply for admission to the University.

The MSN Program application requirements may be requested through email to MSN@weber.edu or phone (801) 626-7774, option 6. Applications become available online at weber.edu/msn October 1 with a deadline date of March 1. Pending student enrollment, the MSN coursework begins each fall semester.

A \$60 application fee must be paid at the end of the online application process. Admission applications are reviewed and evaluated by the Nursing Program Admissions and Advancement Committee.

Program Learning Outcomes

- Patient Centered Care - Design level-appropriate contemporary program outcomes and curricula that prepare graduates to function effectively in the healthcare environment with a focus on the patient.

- Teamwork & Collaboration - Participates in interdisciplinary efforts to contribute to the professional standing of nursing and address the healthcare education needs in local, national and international arenas.
- Evidence-Based Practice (EBP) - Uses evidence to support best practices in teaching andragogy as well as the development of educational experiences.
- Quality Improvement - Incorporates quality improvement strategies in the development and evaluation of educational programs.
- Patient Safety - Incorporates national patient safety resources that promote patient and provider safety in the practice arena.
- Informatics - Utilizes information technology to support educational practice and incorporates the use of informatics to improve quality healthcare and innovative teaching.

Required MSN Core Courses (18 credit hours)

MSN students are required to take foundational, core courses that emphasize research, statistics, evidence-based practice, leadership, population health, and informatics.

- NRSG 6110 - Translating Research and Evidence into Practice **Credits: (3)**
- NRSG 6120 - Research and Statistics **Credits: (3)**
- NRSG 6180 - Improving Patient Care and Nursing Practice through Information Systems **Credits: (2)**
- NRSG 6190 - Professional Foundations for Graduate Nursing Students **Credits: (1)**
- NRSG 6255 - Leadership and Accountability in Advanced Nursing **Credits: (2)**
- NRSG 6801 - Integrating Scholarship into Practice **Credits: (2)**
- NRSG 6802 - Integrating Scholarship into Practice **Credits: (2)**
- NRSG 6140 SUS/CEL - Collaborative Approaches in Population Health **Credits: (3)**

Emphasis (Core) Courses Required

Select one of the following concentrations

Nurse Educator Emphasis (16 credit hours)

- NRSG 6150 - Advanced Pathophysiology, Pharmacology and Assessment for the Nurse Educator **Credits: (3)**
- NRSG 6170 - Teaching Strategies **Credits: (3)**
- NRSG 6520 - Curriculum Development for Nursing Educators **Credits: (3)**
- NRSG 6540 - Measurement of Competence and Outcomes in Nursing Education **Credits: (3)**
- NRSG 6560 - Socialization in the Role of Nursing Educator **Credits: (2)**
- NRSG 6700 INT - Nurse Educator Residency **Credits: (2)**

Nurse Leadership and Management Emphasis (14 credit hours)

- NRSG 6300 - Quality Improvement, Patient Safety and Risk Issues in Patient Care Delivery **Credits: (3)**
- NRSG 6324 - Financial Issues in Nursing Administration **Credits: (2)**
- NRSG 6360 - Scope and Practice of Nursing Administration **Credits: (2)**
- NRSG 6380 - Retaining and Developing a Competent Workforce in Nursing **Credits: (2)**
- NRSG 6400 INT - Nurse Leadership & Management Residency **Credits: (2)**
- MHA 6000 - Health Systems & the Healthcare Economy **Credits: (3)**

Note:

Please see Admission Advisors.

Master of Science in Radiologic Sciences Program

Department Chair: Tanya Nolan, EdD, RT(R) (ARRT), RDMS

Location: Marriott Health Building, Room 363F

Telephone Contact: MSRS Enrollment Manager, Cathy Wells, 801-626-8538

The Master of Science in Radiologic Sciences (MSRS) program allows you to build the program based on your educational and professional interests. Students can focus in areas of advanced practice, education, management, research, interventional cardiology, Radiology Assistant, musculoskeletal sonography, radiology nursing, and interprofessional education (IPE).

The following emphases are available:

Cardiac Specialist

The Master of Science in Radiologic Sciences (MSRS) with emphasis in Cardiac Specialist prepares students with the knowledge and clinical skills necessary for a career in the cardiac cath lab. Students will develop analytical thinking skills and research capability while studying a wide range of disciplines including coronary and structural heart disease, multimodality cardiac imaging, and interventional cardiac catheterization. Students will learn alongside a multidisciplinary team of professionals while assisting with cath lab procedures such as angiography, hemodynamic assessment, coronary stenting, and valve implantation. Upon graduation, students will be qualified to sit for the Registered Cardiovascular Invasive Specialist (RCIS) and/or the Cardiac Interventional Radiography (CI) exam.

The program is four (4) semesters in length, which requires the student to attend in the summer. A competency-based clinical evaluation system is utilized throughout the program. A student must achieve a predetermined level of competency in the academic and preceptor courses in order to receive grades for the course. A minimum of 24 clock hours per week of clinic education must be completed in an affiliated health care facility.

Innovation and Improvement

The Master of Science in Radiologic Sciences (MSRS) with emphasis in Innovation and Improvement is focused on elevating the imaging professional and patient care by providing students with diverse and customized skills and knowledge necessary to connect their imaging practices with policy.

Imaging professions will broaden their clinical comprehension, develop their leadership and educational expertise, enhance their research ingenuity, and extend their professional versatility within the imaging industry.

Radiologist Assistant

The Master of Science in Radiologic Sciences (MSRS) with emphasis in Radiologist Assistant prepares students to work as a Registered Radiologist Assistant (RA). The role of the RA provider is to improve efficiency and patient care in imaging services by providing advanced level support to radiologists. The curriculum incorporates the RRA certification requirements as published by the American Registry of Radiologic Technologists (ARRT). Students will learn advanced patient care, safety, and procedures through academic work and clinical experience.

The program is four (4) semesters in length, which requires the student to attend in the summer. A competency-based clinical evaluation system is utilized throughout the program. A student must achieve a predetermined level of

competency in the academic and preceptor courses in order to receive grades for the course. A minimum of 24 clock hours per week of clinic education must be completed in an affiliated health care facility.

Master of Science

Master of Science in Radiologic Sciences (MSRS)

- **Program Code:** 2037MSRS with an emphasis in Cardiac Specialist (2067), Innovation & Improvement (2065) or Radiologist Assistant (2066)
- **CIPC:** 510911

Areas of Emphasis

Master of Science in Radiologic Sciences (MSRS), Cardiac Specialist Emphasis: The student choosing the Cardiac Specialist emphasis will acquire the knowledge and clinical skills necessary for a career in the cardiac cath lab. The invasive cardiovascular technology student will develop analytical thinking skills and research capability while studying a wide range of disciplines, including coronary and structural heart disease, multimodality cardiac imaging, and interventional cardiac catheterization. Students will learn alongside cardiologists while assisting with cath lab procedures such as angiography, hemodynamic assessment, coronary stenting, and valve implantation. Upon graduation, students will be qualified to sit for the Registered Cardiovascular Invasive Specialist (RCIS) and/or the Cardiac - Interventional Radiography (CI) exam.

Master of Science in Radiologic Sciences (MSRS), Innovation and Improvement Emphasis: The Masters of Science of Radiologic Sciences with emphasis in Innovation and Improvement is focused on elevating the imaging professional and patient care by providing students with diverse and customized skills and knowledge necessary to connect their imaging practices with policy. Imaging professionals will broaden their clinical comprehension, develop their leadership and educational expertise, enhance their research ingenuity, and extend their professional versatility within the imaging industry.

Master of Science in Radiologic Sciences (MSRS), Radiologist Assistant Emphasis: The Masters of Science of Radiologic Sciences with emphasis on Radiologist Assistant is intended to prepare students to work as a Registered Radiologist Assistant (RA). The role of the RA provider is to improve efficiency and patient care in imaging services by providing advanced level support to radiologists. The curriculum incorporates the RRA certification requirements as published by the American Registry of Radiologic Technologists (ARRT). Students will learn advanced patient care, safety, and procedures through academic work and clinical experience.

The maximum time for completion of the degree, including thesis, will be three years if the maximum time is exceeded, the student must petition to the program for an extension.

Program Learning Outcomes

- Patient Care and Education
- Professional Development and Research
- Clinical Competency and Medical Ethics
- Procedures, Anatomy and Pathophysiology
- Instrumentation and Quality Control

Admission Requirements for All MSRS

Criteria to be considered for acceptance into the program include:

1. Admission to Weber State University and online application for the MSRS Program.
2. Payment of the MSRS program application fee.
3. Graduate of a regionally accredited baccalaureate academic program in health science (includes, but not limited to, cardiovascular technology, ultrasound, radiologic technology, respiratory therapy, or nursing)
4. Official transcripts from all institutions attended.
5. A cumulative undergraduate GPA of at least 3.0. If undergraduate GPA is below 3.0, consideration may be based on GPA calculation on the last 60 semester hours (90 quarter hours) of undergraduate work.
6. Recommendation forms (3).

Additional Requirements for International Students

- Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or intladmissions@weber.edu.
- Submit an official score from the Test of English as a Foreign Language (TOEFL) of 75 overall, with a minimum of 17 in each category OR International English Language Testing System (IELTS) 6.5 overall, with a minimum of 6.0 in each category.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.
 - Provide a professional transcript evaluation of course work completed outside the United States. For a list of approved agencies, click here: <https://www.weber.edu/issc/foreign-credentials-evaluation-services.html>. A translated transcript is not accepted. Transcripts must be evaluated on a course-by-course format, showing U.S. semester credit and grade equivalent for each course based on a 4.0 GPA scale.
- Evaluation of foreign health imaging professional certifications by MSRS faculty.
- Graduate students must first apply and be accepted by the MSRS graduate program before the admission can be processed for Weber State University.

Application

The application is available online at www.weber.edu/msrs. An application fee is required for the application to be considered complete.

- Application for Cardiac Specialist MSRS admission should be made by May 1 for fall semester admission, however, applications will be accepted beyond this date until we reach capacity.
- Application for Innovation and Improvement MSRS admission should be made by March 1 for summer semester admission, May 1 for fall semester admission, and November 1 for spring semester admission, however, applications will be accepted beyond these dates until we reach capacity. Preceptors must be identified by July 1 or enrollment may be deferred to the following academic year.
- Application for Radiologist Assistant MSRS admission should be made by May 1 for fall semester admission, however, applications will be accepted beyond this date until we reach capacity.

Student Advisement

A program advisor will be appointed by the School of Radiologic Sciences Chair from the graduate faculty in the program. All MSRS candidates must consult the program advisor at least once a semester. The School of Radiological Sciences Chair will serve as chair of the advisement committee, which will comprise all MSRS faculty. For issues regarding registration and scheduling, students should contact the MSRS Enrollment Manager at msrs@weber.edu.

Continued program evaluation and improvement will assure a high-quality program that meets the students' needs. The student's needs and success will be monitored continuously throughout the program.

The Master of Science in Radiologic Sciences (MSRS) program allows you to build the program based on your educational and professional interests. Students can focus in areas of advanced practice, education, management, research, interventional cardiology, musculoskeletal sonography, radiology nursing, and interprofessional education (IPE).

Master of Science in Radiologic Sciences Core (12 credit hours)

- MSRS 6100 - Research Methods **Credits: (3)**
- MSRS 6120 - Research and Statistics **Credits: (3)**
- MSRS 6900 INT - Capstone: Clinical Fellowship & Portfolio **Credits: (3)**
- MSRS 6999 - Master's Thesis in Radiologic Sciences **Credits: (3)**

Master of Science in Radiologic Sciences (MSRS), Cardiac Specialist Emphasis

- **Grade Requirements:** All required courses must be completed with a grade of "B" or higher.
- **Credit Hour Requirements:** A total of 59 credit hours are required.
- **Program Code:** 2037MSRS with Emphasis in 2067
- **CIPC:** 510911

The maximum time for completion of the degree, including thesis, will be three years; if the maximum time is exceeded, the student must petition to the program for an extension.

Admission Requirements for All MSRS

Criteria to be considered for acceptance into the program include:

1. Admission to Weber State University and online application for the MSRS Program.
2. Payment of the MSRS program application fee.
3. Graduate of a regionally accredited baccalaureate academic program in health science (includes, but not limited to, cardiovascular technology, ultrasound, radiologic technology, respiratory therapy, or nursing)
4. Official transcripts from all institutions attended.
5. A cumulative undergraduate GPA of at least 3.0. If undergraduate GPA is below 3.0, consideration may be based on GPA calculation on the last 60 semester hours (90 quarter hours) of undergraduate work.
6. Recommendation forms (3).

Additional Requirements for International Students

- Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or intladmissions@weber.edu.
- Submit an official score from the Test of English as a Foreign Language (TOEFL) of 75 overall, with a minimum of 17 in each category OR International English Language Testing System (IELTS) 6.5 overall, with a minimum of 6.0 in each category.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.
 - Provide a professional transcript evaluation of course work completed outside the United States. For a list of approved agencies, click here: <https://www.weber.edu/issc/foreign-credentials-evaluation-services.html>. A translated transcript is not accepted. Transcripts must be evaluated on

a course-by-course format, showing U.S. semester credit and grade equivalent for each course based on a 4.0 GPA scale.

- Evaluation of foreign health imaging professional certifications by MSRS faculty.
- Graduate students must first apply and be accepted by the MSRS graduate program before the admission can be processed for Weber State University.

Additional Admission Requirements for Cardiac Specialist Emphasis

- Health Care Responsibility and Agreement to Provide Clinical Preceptorship Form
- Active Affiliation Agreement with the Clinical Site
- Documentation of current Basic Life Support (BLS) certification

Application

The application is available online at www.weber.edu/msrs. An application fee is required for the application to be considered complete.

- Application for Cardiac Specialist MSRS admission should be made by May 1 for fall semester admission, however, applications will be accepted beyond this date until we reach capacity.

Student Advisement

A program advisor will be appointed by the School of Radiologic Sciences Chair from the graduate faculty in the program. All MSRS candidates must consult the program advisor at least once a semester. The School of Radiological Sciences Chair will serve as chair of the advisement committee, which will comprise all MSRS faculty. For issues regarding registration and scheduling, students should contact the MSRS Enrollment Manager at msrs@weber.edu.

Continued program evaluation and improvement will assure a high-quality program that meets the students' needs. The student's needs and success will be monitored continuously throughout the program.

The Master of Science in Radiologic Sciences (MSRS) program allows you to build the program based on your educational and professional interests. Students can focus in areas of advanced practice, education, management, research, interventional cardiology, musculoskeletal sonography, radiology nursing, and interprofessional education (IPE).

Master of Science in Radiologic Sciences Core (12 credit hours)

- MSRS 6100 - Research Methods **Credits: (3)**
- MSRS 6120 - Research and Statistics **Credits: (3)**
- MSRS 6900 INT - Capstone: Clinical Fellowship & Portfolio **Credits: (3)**
- MSRS 6999 - Master's Thesis in Radiologic Sciences **Credits: (3)**

Cardiac Specialist Required Electives (47 credit hours)

- MSRS 6130 - Functional Hemodynamics **Credits: (3)**
- MSRS 6263 - Advanced Diagnostic Services Pharmacology **Credits: (3)**
- MSRS 6310 - Evaluation of the Cardiac System **Credits: (3)**

- MSRS 6311 - Interventional Cardiac Procedures I **Credits: (3)**
- MSRS 6312 - Interventional Cardiac Procedures II **Credits: (3)**
- MSRS 6313 - Interventional Cardiac Procedures III **Credits: (3)**
- MSRS 6493 - Advanced 3D Medical Imaging **Credits: (3)**
- MSRS 6860 INT - Clinical Preceptorship I **Credits: (3)**
- MSRS 6861 INT - Clinical Preceptorship II **Credits: (3)**
- MSRS 6862 INT - Clinical Preceptorship III **Credits: (3)**
- MSRS 6140 - Clinical Laboratory Correlation **Credits: (3)**
- MSRS 6200 - Population Health in Radiologic Sciences **Credits: (3)**
- MSRS 6461 - Leadership in Clinical Practice **Credits: (3)**
- MSRS 6482 - Current Trends in Cardiovascular Imaging **Credits: (3)**
- MSRS 6484 - Sonographic Fundamentals for Invasive Guidance **Credits: (3)**
- MSRS 6910 - Transition to Practice **Credits: (2)**

Master of Science in Radiologic Sciences (MSRS), Innovation and Improvement Emphasis

- **Grade Requirements:** All required courses must be completed with a grade of "B" or higher.
- **Credit Hour Requirements:** A total of 36 credit hours are required.
- **Program Code:** 2037MSRS with Emphasis in 2065
- **CIPC:** 510911

The maximum time for completion of the degree, including thesis, will be three years; if the maximum time is exceeded, the student must petition to the program for an extension.

Admission Requirements for All MSRS

Criteria to be considered for acceptance into the program include:

1. Admission to Weber State University and online application for the MSRS Program.
2. Payment of the MSRS program application fee.
3. Graduate of a regionally accredited baccalaureate academic program in health science (includes, but not limited to, cardiovascular technology, ultrasound, radiologic technology, respiratory therapy, or nursing)
4. Official transcripts from all institutions attended.
5. A cumulative undergraduate GPA of at least 3.0. If undergraduate GPA is below 3.0, consideration may be based on GPA calculation on the last 60 semester hours (90 quarter hours) of undergraduate work.
6. Recommendation forms (3).

Additional Requirements for International Students

- Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or intladmissions@weber.edu.
- Submit an official score from the Test of English as a Foreign Language (TOEFL) of 75 overall, with a minimum of 17 in each category OR International English Language Testing System (IELTS) 6.5 overall, with a minimum of 6.0 in each category.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.
 - Provide a professional transcript evaluation of course work completed outside the United States. For a list of approved agencies, click here: <https://www.weber.edu/issc/foreign-credentials->

evaluation-services.html. A translated transcript is not accepted. Transcripts must be evaluated on a course-by-course format, showing U.S. semester credit and grade equivalent for each course based on a 4.0 GPA scale.

- Evaluation of foreign health imaging professional certifications by MSRS faculty.
- Graduate students must first apply and be accepted by the MSRS graduate program before the admission can be processed for Weber State University.

Application

The application is available online at www.weber.edu/msrs. An application fee is required for the application to be considered complete.

- Application for Innovation and Improvement MSRS admission should be made by March 1 for summer semester admission, May 1 for fall semester admission, and November 1 for spring semester admission, however, applications will be accepted beyond these dates until we reach capacity.

Student Advisement

A program advisor will be appointed by the School of Radiologic Sciences Chair from the graduate faculty in the program. All MSRS candidates must consult the program advisor at least once a semester. The School of Radiological Sciences Chair will serve as chair of the advisement committee, which will comprise all MSRS faculty. For issues regarding registration and scheduling, students should contact the MSRS Enrollment Manager at msrs@weber.edu.

Continued program evaluation and improvement will assure a high-quality program that meets the students' needs. The student's needs and success will be monitored continuously throughout the program.

The Master of Science in Radiologic Sciences (MSRS) program allows you to build the program based on your educational and professional interests. Students can focus in areas of advanced practice, education, management, research, interventional cardiology, musculoskeletal sonography, radiology nursing, and interprofessional education (IPE).

Master of Science in Radiologic Sciences Core (12 credit hours)

- MSRS 6100 - Research Methods **Credits: (3)**
- MSRS 6120 - Research and Statistics **Credits: (3)**
- MSRS 6900 INT - Capstone: Clinical Fellowship & Portfolio **Credits: (3)**
- MSRS 6999 - Master's Thesis in Radiologic Sciences **Credits: (3)**

Innovation and Improvement Required Electives (24 credit hours)

Select 24 credit hours from the following:

- MSRS 6140 - Clinical Laboratory Correlation **Credits: (3)**
- MSRS 6150 - Grant Writing for the Imaging Clinical Scientist **Credits: (3)**
- MSRS 6200 - Population Health in Radiologic Sciences **Credits: (3)**
- MSRS 6210 - Global Health in Medical Imaging **Credits: (3)**
- MSRS 6220 - International Competency in Medical Imaging **Credits: (3)**
- MSRS 6443 - Clinical Pathways **Credits: (3)**
- MSRS 6450 - Managing Health Information **Credits: (3)**
- MSRS 6461 - Leadership in Clinical Practice **Credits: (3)**

- MSRS 6463 - Problem Patient Management **Credits: (3)**
- MSRS 6481 - Current Trends in Pediatric Imaging **Credits: (3)**
- MSRS 6482 - Current Trends in Cardiovascular Imaging **Credits: (3)**
- MSRS 6483 - Musculoskeletal Sonography **Credits: (3)**
- MSRS 6485 - Current Trends in Visual Analytics **Credits: (3)**
- MSRS 6486 - Pathological Review Across Imaging Modalities **Credits: (3)**
- MSRS 6487 - Current Trends in Pain Management **Credits: (3)**
- MSRS 6493 - Advanced 3D Medical Imaging **Credits: (3)**
- MSRS 6992 - Advanced Practice Seminar **Credits: (1-3)**
- MSRS 6850 - Study Abroad **Credits: (3)**

Master of Science in Radiologic Sciences (MSRS), Radiologist Assistant Emphasis

- **Grade Requirements:** All required courses must be completed with a grade of "B" or higher.
- **Credit Hour Requirements:** A total of 62 credit hours are required.
- **Program Code:** 2037MSRS with Emphasis in 2066
- **CIPC:** 510911

The maximum time for completion of the degree, including thesis, will be three years; if the maximum time is exceeded, the student must petition to the program for an extension.

Admission Requirements for All MSRS

Criteria to be considered for acceptance into the program include:

1. Admission to Weber State University and online application for the MSRS Program.
2. Payment of the MSRS program application fee.
3. Graduate of a regionally accredited baccalaureate academic program in health science (includes, but not limited to, cardiovascular technology, ultrasound, radiologic technology, respiratory therapy, or nursing)
4. Official transcripts from all institutions attended.
5. A cumulative undergraduate GPA of at least 3.0. If undergraduate GPA is below 3.0, consideration may be based on GPA calculation on the last 60 semester hours (90 quarter hours) of undergraduate work.
6. Recommendation forms (3).

Additional Requirements for International Students

- Please seek advisement/assistance from WSU's International Student and Scholar Center at 801-626-6853 or intladmissions@weber.edu.
- Submit an official score from the Test of English as a Foreign Language (TOEFL) of 75 overall, with a minimum of 17 in each category OR International English Language Testing System (IELTS) 6.5 overall, with a minimum of 6.0 in each category.
- Oral language proficiency assessment.
- Weber State University-accepted bachelor's degree.
 - Provide a professional transcript evaluation of course work completed outside the United States. For a list of approved agencies, click here: <https://www.weber.edu/issc/foreign-credentials-evaluation-services.html>. A translated transcript is not accepted. Transcripts must be evaluated on a course-by-course format, showing U.S. semester credit and grade equivalent for each course based on a 4.0 GPA scale.

- Evaluation of foreign health imaging professional certifications by MSRS faculty.
- Graduate students must first apply and be accepted by the MSRS graduate program before the admission can be processed for Weber State University.

Additional Requirements for RA Emphasis

Admission to the program requires a bachelor's degree, health imaging certification and Health Care experience.

Criteria to be considered for acceptance into the program include:

- Health Care Responsibility and Clinical Radiologist Preceptorship Agreement Form
- Active Clinical Site Affiliation Agreement with WSU
- An annual report of all radiologic procedures provided by the intended clinical site from the prior year
- Evidence of accreditation from the intended clinical site
- Radiologic Technology (RT) credentials from the ARRT
- Documentation of current Basic Life Support (BLS) certification

Application

The application is available online at www.weber.edu/msrs. An application fee is required for the application to be considered complete.

- Application for Radiologist Assistant MSRS admission should be made by May 1 for fall semester admission, however, applications will be accepted beyond this date until we reach capacity. Preceptors must be identified by July 1 or enrollment may be deferred to the following academic year.

Student Advisement

A program advisor will be appointed by the School of Radiologic Sciences Chair from the graduate faculty in the program. All MSRS candidates must consult the program advisor at least once a semester. The School of Radiological Sciences Chair will serve as chair of the advisement committee, which will comprise all MSRS faculty. For issues regarding registration and scheduling, students should contact the MSRS Enrollment Manager at msrs@weber.edu.

Continued program evaluation and improvement will assure a high-quality program that meets the students' needs. The student's needs and success will be monitored continuously throughout the program.

The Master of Science in Radiologic Sciences (MSRS) program allows you to build the program based on your educational and professional interests. Students can focus in areas of advanced practice, education, management, research, interventional cardiology, musculoskeletal sonography, radiology nursing, and interprofessional education (IPE).

Master of Science in Radiologic Sciences Core (12 credit hours)

- MSRS 6100 - Research Methods **Credits: (3)**
- MSRS 6120 - Research and Statistics **Credits: (3)**
- MSRS 6900 INT - Capstone: Clinical Fellowship & Portfolio **Credits: (3)**
- MSRS 6999 - Master's Thesis in Radiologic Sciences **Credits: (3)**

Radiologist Assistant Required Electives (50 credit hours)

- MSRS 6130 - Functional Hemodynamics **Credits: (3)**
- MSRS 6403 - Evaluation of the Osseous System **Credits: (3)**
- MSRS 6413 - Evaluation of the Chest **Credits: (3)**
- MSRS 6423 - Evaluation of the Abdomen and G I System **Credits: (3)**
- MSRS 6433 - Evaluation of the Genitourinary System **Credits: (3)**
- MSRS 6443 - Clinical Pathways **Credits: (3)**
- MSRS 6453 - Evaluation/CNS and Facial Structures **Credits: (3)**
- MSRS 6463 - Problem Patient Management **Credits: (3)**
- MSRS 6473 - Non-vascular Invasive Imaging **Credits: (3)**
- MSRS 6860 INT - Clinical Preceptorship I **Credits: (3)**
- MSRS 6861 INT - Clinical Preceptorship II **Credits: (3)**
- MSRS 6862 INT - Clinical Preceptorship III **Credits: (3)**
- MSRS 6863 - Vascular Invasive Imaging Procedures **Credits: (3)**
- MSRS 6140 - Clinical Laboratory Correlation **Credits: (3)**
- MSRS 6910 - Transition to Practice **Credits: (2)**
- MSRS 6484 - Sonographic Fundamentals for Invasive Guidance **Credits: (3)**
- MSRS 6200 - Population Health in Radiologic Sciences **Credits: (3)**

Master of Science in Respiratory Therapy

Director: Mich Oki

Location: Marriott Allied Health Building, Rm 309B

Telephone Contact: Irma Marroquin-Lewis (801) 626-7071

Enrollment Director: Alisa Kimball (801) 626-6840

Professor: Paul Eberle; **Associate Professor:** Mich Oki; **Assistant Professors:** Sharri Vasas, Sarah Allred;

Instructor: Laurel Duncan

The MSRT program is designed for post-professional career development and to prepare respiratory care practitioners as 1) department or clinical administrators, 2) college-level faculty and/or asthma educators, and 3) clinical researchers employed within a variety of healthcare institutions. Two of five post-professional practice credentials (Certified PFT [CPFT] or Registered PFT [RPFT], Sleep Disorders Specialist [SDS] or Registered Polysomnographic Technologist [RPsgT], Adult Critical Care Specialist [ACCS], Neonatal/Pediatric Specialist [NPS], and Asthma Educator [AE-C]) relative to practitioner expertise are required for completion of the degree. Additionally, specific concentrations/emphasis of practice will prepare students for advanced careers in respiratory care. These concentrations are specifically intended for individuals with clinical experience pursuing advanced career pathways in administration, as college faculty, or as clinical researchers or health care consultants. Master of Science in Respiratory Therapy graduates participate in the health care arena as post-professional leaders with roles as clinical respiratory therapists prepared to provide guidance and administrative leadership to departments and to undergraduates throughout the educational processes associated with providing, managing, coordinating, and consulting in respiratory care.

The MSRT degree consists of 36 credit hours beyond the earned baccalaureate degree. This includes core courses in medical writing, medical pathophysiology, and medical ethics and law (9 credits), and providing a mechanism for two post-professional practice credentials. Additionally, concentrations chosen by the student in areas of health administration, college-level faculty or asthma educator, or clinical research (9 credits per concentration) are required for emphasis. MSRT students are required to complete 6 credits as a capstone project incorporating research principles learned throughout the curriculum. The MSRT program is developed with "hybrid" educational courses. This means the majority of coursework will be online with a few scheduled classroom experiences dependent on the area of concentration/emphasis chosen.

School of Radiologic Sciences

- **Department Chair:** Robert Walker, PhD, RT(R)(MR)(CT)(QM), FASRT
- **Location:** Marriott Health Building, Room 363
- **Telephone Contacts:**
 - **AAS Radiography:** Beverly Figueroa, 801-626-6329
 - **BS Specialties:** Emily Darby, 801-626-6057
 - **Toll Free Telephone:** 1-800-848-7770, Option 1
 - **Independent Study Manager:** Pam Berg, 801-626-6619
 - **MSRS Enrollment Manager:** Cathy Wells, 801-626-8538
 - **Student Liaison:** Crysta Herman, 801-626-8537
 - **Admissions/Counseling:** Eric Neff, 801-626-6128

Professors: Tanya Nolan, Robert Walker; **Associate Professors:** Rex Christensen, Casey Neville; **Assistant Professors:** Victor Clampitt, Laurie Coburn, Robert Ferguson, Ambree Penrod, Christopher Steelman, Taylor Ward, Kimberly Parkinson; **Adjunct Faculty:** Daryn Ashby, Wynn Harrison, Julie Hawk, Ryan Hecox, Diane Kawamura, Christopher Marston, Cheryl Walczak

Radiologic Sciences is a medical field that uses ionizing radiation, sound waves and magnetic fields to produce medical images for diagnostic purposes or to treat diseases by combining medical procedures with technology.

Radiography

The Radiography program provides integrated didactic instruction with the utilization of on campus x-ray rooms and clinical experience in Radiology departments of the affiliated health facilities. During the course of the program, radiologic physics, anatomy, radiographic procedures, positioning, and patient assessment are taught. The student will participate in clinical education within the affiliate health facilities throughout the program.

The program is 5 continuous semesters. The student qualifies for an Associate of Applied Science degree upon completion of the general education requirements and the professional course work. Upper division elective courses completed during the program may be applied toward a baccalaureate degree.

Diagnostic Medical Sonography

The Diagnostic Medical Sonography program is designed as an advanced discipline of study for two-year graduates of radiography programs or equivalent as determined by the School of Radiologic Sciences. A student can complete the required courses and be eligible to sit for the national certification examination. The courses offered in Diagnostic Medical Sonography are upper-division and will be accepted as satisfying the requirements for a primary area emphasis for those students who have been accepted into the Bachelor of Science program.

The program and support courses are four (4) semesters in length for the Cardiac Emphasis or the Medical Emphasis and three (3) semesters in length for the Vascular Emphasis. A competency-based evaluation system is utilized throughout the program. A student must achieve a predetermined level of competency in the academic and clinical courses in order to receive grades for the course. The clinical education courses require a minimum of 24 clock hours per calendar week in an affiliated health care facility.

Nuclear Medicine

The Nuclear Medicine program is designed as an advanced discipline of study for ARRT registered technologists or the acceptable equivalent. A student can complete the required courses, obtain a certificate of completion, and be eligible to sit for the national certification examination. The courses offered in the Nuclear Medicine program are upper-division and will be accepted as satisfying the requirements for a primary area emphasis for those students who have been accepted into the Bachelor of Science program.

The program is three (3) full semesters in length, which requires the student to attend in the summer. A competency-based clinical evaluation system is utilized throughout the program. A student must achieve a predetermined level of competency in the academic and clinical courses in order to receive grades for the course. A minimum of 24 clock hours per week of clinical education must be completed in an affiliated health care facility.

Radiation Therapy

The Radiation Therapy program is designed as an advanced discipline of study for graduates of accredited programs. A student can complete the required courses, obtain a certificate of completion, and be eligible to sit for the national certification examination. The courses offered in the Radiation Therapy program are upper-division and will be accepted as satisfying the requirements for a primary area emphasis for those students who have been accepted into the Bachelor of Science program.

The program is three (3) full semesters in length, which requires the student to attend in the summer. A competency-based clinical evaluation system is utilized throughout the program. A student must achieve a predetermined level of competency in the academic and clinical courses in order to receive grades for the course. A minimum of 24 clock hours per week of clinical education must be completed in an affiliated health care facility.

Advanced Radiologic Science

The Advanced Radiologic Sciences program is designed as an advanced discipline of study for ARRT registered technologists or equivalent as determined by the School of Radiologic Sciences. Students in the program must select an area or combination of areas of emphasis. These areas are designed to meet your career goals in medical imaging modalities and for technical management and educational positions. The courses offered in the Advanced Radiologic Sciences are upper-division and will be accepted as satisfying the requirements for a primary area emphasis for those students in the Bachelor of Science program.

The programs are either three (3) or four (4) semesters in length, depending on the emphasis, which requires the student to attend in the summer. A competency-based clinical evaluation system is utilized throughout the program. A student must achieve a predetermined level of competency in the academic and clinical courses in order to be eligible to sit for the national certification examinations. A minimum of 24 clock hours per week of clinical education must be completed in an affiliated health care facility.

The following emphases are available:

- Computed Tomography (CT)
- Interventional Radiology (IR)
- Magnetic Resonance Imaging (MRI)
- Women's Imaging

Master of Science in Radiologic Sciences

The Master of Science in Radiologic Sciences (MSRS) program allows you to build the program based on your educational and professional interests. Students can focus in areas of advanced practice, education, management, research, interventional cardiology, Radiology Assistant, musculoskeletal sonography, radiology nursing, and interprofessional education (IPE).

The following emphases are available:

Cardiac Specialist

The Master of Science in Radiologic Sciences (MSRS) with emphasis in Cardiac Specialist prepares students with the knowledge and clinical skills necessary for a career in the cardiac cath lab. Students will develop analytical thinking

skills and research capability while studying a wide range of disciplines including coronary and structural heart disease, multimodality cardiac imaging, and interventional cardiac catheterization. Students will learn alongside a multidisciplinary team of professionals while assisting with cath lab procedures such as angiography, hemodynamic assessment, coronary stenting, and valve implantation. Upon graduation, students will be qualified to sit for the Registered Cardiovascular Invasive Specialist (RCIS) and/or the Cardiac Interventional Radiography (CI) exam.

The program is four (4) semesters in length, which requires the student to attend in the summer. A competency-based clinical evaluation system is utilized throughout the program. A student must achieve a predetermined level of competency in the academic and preceptor courses in order to receive grades for the course. A minimum of 24 clock hours per week of clinic education must be completed in an affiliated health care facility.

Innovation and Improvement

The Master of Science in Radiologic Sciences (MSRS) with emphasis in Innovation and Improvement is focused on elevating the imaging professional and patient care by providing students with diverse and customized skills and knowledge necessary to connect their imaging practices with policy. Imaging professions will broaden their clinical comprehension, develop their leadership and educational expertise, enhance their research ingenuity, and extend their professional versatility within the imaging industry.

Radiologist Assistant

The Master of Science in Radiologic Sciences (MSRS) with emphasis in Radiologist Assistant prepares students to work as a Registered Radiologist Assistant (RA). The role of the RA provider is to improve efficiency and patient care in imaging services by providing advanced level support to radiologists. The curriculum incorporates the RRA certification requirements as published by the American Registry of Radiologic Technologists (ARRT). Students will learn advanced patient care, safety, and procedures through academic work and clinical experience.

The program is four (4) semesters in length, which requires the student to attend in the summer. A competency-based clinical evaluation system is utilized throughout the program. A student must achieve a predetermined level of competency in the academic and preceptor courses in order to receive grades for the course. A minimum of 24 clock hours per week of clinic education must be completed in an affiliated health care facility.

Associate of Applied Science

Radiography (AAS)

Radiography is a program offered under School of Radiologic Sciences. The program provides integrated didactic instruction with the utilization of on campus x-ray rooms and clinical experience in Radiology departments of the affiliated health facilities. During the course of the program, radiologic physics, anatomy, radiographic procedures, positioning, and patient assessment are taught. The student will participate in clinical education within the affiliate health facilities throughout the program.

The program is 5 continuous semesters. The student qualifies for an associate of applied science degree upon completion of the general education requirements and the professional course work. Upper division elective courses completed during the program may be applied toward a baccalaureate degree.

- **Program Prerequisite:** Complete the prerequisite courses, make application and be accepted to the program. Please contact the DCHP Admissions Advisement Center at 801-626-7136/6136 for a list of specific prerequisite courses.
- **Grade Requirements:** Demonstrate ability to achieve scholastically with grades of C or better.

- **Credit Hour Requirements:** The credit hours required for graduation with an AAS degree are 23-26 credit hours of prerequisite courses and 73 credit hours of didactic and clinical education courses.
- **Program Code:** 2013AAS
- **CIPC:** 510911

Advisement

Students accepted into the program should meet annually with assigned faculty advisor for course and program review.

Admission Requirements

- Be accepted to Weber State University and declare program of study as Radiography applicant.
- Apply to the Radiography Program for acceptance and follow the procedures as outlined on the program application, which is in addition to the Weber State Admissions Application. The deadline date for applications to be received is January 10 of each year. Student selection is made during Spring semester and those accepted into the program begin their professional phase of the curriculum the following fall semester.
- Pay the \$25 program application fee.
- Present a satisfactory high school and/or college(s) transcript(s).
- Complete the general education courses listed below.

General Education

Refer to Degree Requirements degree requirements.

The following are required:

English ENGL 1010 (3)
 English ENGL 2010 (3) or an oral or written Communication course
 Quantitative Literacy - MATH 1010 (4)
 Computer Literacy (demonstrate literacy) no credit
 Social Sciences (Introductory Psychology) Course (3)
 Humanities (Communication) Course (3)
 Life Science (3)
 or Health Sciences (Biomed) HTHS 2110 (4) and HTHS 2111 (4)

Program Learning Outcomes

- Identify the biological effects of radiation.
- Demonstrate proper radiation protection procedures during diagnostic procedures.
- Demonstrate proper use and understanding of radiation exposure monitors and diagnostic radiation equipment.
- Demonstrate, select, accurately explain and produce diagnostic quality radiographs.
- Demonstrate repeated competency in accurately explaining the proper radiographic film radiographic image production, image processing, and digital image formation'
- Demonstrate and accurately interpret quality assurance testing.
- Demonstrate proper evaluation and critique of radiographic positioning, technical factors, anatomy, physiology and pathology.
- Demonstrate legal and professional responsibility.
- Demonstrate appropriate patient education, safety and comfort skills.

- Demonstrate acceptable methods of infection control and prevention.
- Demonstrate proper patient monitoring during radiographic procedures.
- Demonstrate appropriate responses to diverse patient populations.
- Demonstrate a sense of professionalism and desire to learn.
- Demonstrate working knowledge of radiographic anatomy, structural relationship and pathology

Major Course Requirements for AAS Degree

Courses Required (73 credit hours)

- RADT 1022 - Introduction to Radiologic Technology **Credits: (2)**
- RADT 1303 - Principles of Radiographic Exposure I **Credits: (3)**
- RADT 1502 - Radiographic Anatomy and Positioning I **Credits: (2)**
- RADT 1601 - Clinical Simulation I **Credits: (1)**
- RADT 2821 - Directed Readings & Research I **Credits: (2)**
- RADT 2861 INT - Clinical Education **Credits: (3)**
- RADT 2042 - Community-Based Patient Care I **Credits: (1-2)**
- RADT 1512 - Radiographic Anatomy and Positioning II **Credits: (2)**
- RADT 1621 - Clinical Simulation II **Credits: (1)**
- RADT 2043 - Specialty Based Patient Care **Credits: (2)**
- RADT 2272 - Basic Sectional Anatomy **Credits: (2)**
- RADT 2403 - Principles of Radiographic Exposure II **Credits: (3)**
- RADT 2822 - Directed Readings & Research II **Credits: (2)**
- RADT 2862 INT - Clinical Education **Credits: (3)**
- RADT 1522 - Radiographic Anatomy and Positioning III **Credits: (2)**
- RADT 1641 - Clinical Simulation III **Credits: (1)**
- RADT 2803 - Independent Research **Credits: (1-3)**
- RADT 2823 - Directed Readings & Research III **Credits: (2)**
- RADT 2863 INT - Clinical Education **Credits: (3)**
- RADT 3003 - Psycho-Social Medicine **Credits: (3)**
- RADT 3043 - Medical Ethics and Law **Credits: (3)**
- RADT 1532 - Radiographic Anatomy and Positioning IV **Credits: (2)**
- RADT 1661 - Clinical Simulation IV **Credits: (1)**
- RADT 2824 - Directed Readings & Research IV **Credits: (2)**
- RADT 2864 INT - Clinical Education **Credits: (3)**
- RADT 2942 - Transition to Clinical Practice **Credits: (2)**
- RADT 3403 - Radiobiology & Health Physics **Credits: (3)**
- RADT 3463 - Computerized Imaging **Credits: (3)**
- RADT 2865 INT - Clinical Education **Credits: (2)**
- RADT 2913 - Comprehensive Review **Credits: (2)**
- RADT 2825 - Directed Readings & Research V **Credits: (2)**
- RADT 3443 - Quality Assurance in Radiology **Credits: (3)**
- RADT 1542 - Radiographic Anatomy and Positioning V **Credits: (2)**
- RADT 1681 - Clinical Simulation V **Credits: (1)**

Institutional Certificate

Arizona Practical Technologist in Radiology Certificate of Proficiency

The Arizona Practical Technologist in Radiography (PTR) Certificate program will consist of 2 semesters that incorporate integrated didactic instruction and clinical experience in affiliated health facilities. During the course of the program, radiologic physics, anatomy, radiographic procedures, positioning, and patient assessment are taught. The student will participate in clinical education within the affiliate health facilities throughout the program.

Courses taken during the program may be applied towards the AAS Radiologic Technology degree. Upon successful completion of this certificate, students will be eligible for the State Limited Scope Licensing exam in the state of Arizona.

- **Program Prerequisites:** Acceptance to Weber State University, make application and be accepted to the program.
- **Advisement:** Students accepted into the program should meet annually with assigned faculty advisor for course and program review.
- **Admission Requirements:** Be accepted to Weber State University and declare program of study as Radiography applicant. Apply to the Radiography Program for acceptance and follow the procedures as outlined on the program application, which is in addition to the Weber State Admissions Application. The deadline date for applications to be received is March 1st of each year for AZ PTR Applicants. Student selection is made during Summer semester and those accepted into the program begin their professional phase of the curriculum the following fall semester. Present a satisfactory high school and/or college(s) transcript(s).
- **Grade Requirements:** Demonstrate ability to achieve scholastically with grades of C or better.
- **Program Code:** 2089CP
- **CIPC Code:** 510911

Required Courses

- RADT 1022 - Introduction to Radiologic Technology **Credits: (2)**
- RADT 1303 - Principles of Radiographic Exposure I **Credits: (3)**
- RADT 1502 - Radiographic Anatomy and Positioning I **Credits: (2)**
- RADT 1512 - Radiographic Anatomy and Positioning II **Credits: (2)**
- RADT 1601 - Clinical Simulation I **Credits: (1)**
- RADT 1621 - Clinical Simulation II **Credits: (1)**
- RADT 2042 - Community-Based Patient Care I **Credits: (1-2)**
- RADT 2043 - Specialty Based Patient Care **Credits: (2)**
- RADT 2861 INT - Clinical Education **Credits: (3)**
- RADT 2862 INT - Clinical Education **Credits: (3)**
- RADT 2866 INT - Final Competency Evaluation **Credits: (2)**

Cardiology Technician Certificate of Proficiency

The Cardiology Technician Certificate of Proficiency is a program offered under School of Radiologic Sciences. This is a hybrid program offered Fall, Spring, and Summer semesters. During the program, students will gain understanding and skills appropriate to ECG procedures, rhythm analysis, heart anatomy and morphology, cardiac pathophysiology, cardiac imaging specialties, and patient care. At the conclusion of this program, students will be eligible for the

Cardiac Credentialing International (CCI) certification examinations for Cardiographic Technician and Rhythm Analysis.

- **Program Prerequisite:** None.
- **Grade Requirements:** Demonstrate ability to achieve scholastically with grades of C or better.
- **Credit Hour Requirements:** The credit hours required for completion of the certificate will include the 10 credit hours (4 courses) within the Cardiology Technician program as well as the 8 credit hours of life science covering Anatomy and Physiology (HTHS 1110 LS - Integrated Human Anatomy and Physiology I (4) and HTHS 1111 - Integrated Human Anatomy and Physiology II (4)) or (ZOOL 2100 - Human Anatomy (4) and ZOOL 2200 LS - Human Physiology (4)).
- **Advisement:** Students enrolled in the Cardiology Technician Certificate program will receive continuous advisement from individual instructors throughout the duration of the program.
- **Admission Requirements:** Be accepted to Weber State University and register for Limited Radiography Program. Present a satisfactory high school and/or college(s) transcript(s).
- **Program Code:** 2087CP
- **CIPC Code:** 510901

Program Learning Outcomes

1. Incorporate appropriate professional ethics and patient care and use of ECG equipment.
2. Demonstrate knowledge of advanced cardiac pathologies.
3. Maintain cardiac monitoring support.
4. Critically determine rhythm changes based on pathology and patient medications.
5. Perform standard and modified ECG testing and monitoring.
6. Demonstrate knowledge of stress test equipment and protocols.
7. Verify the functionality of ambulatory monitoring supplies and equipment.

Required Courses

- RADT 1012 - Cardiographic Technician **Credits: (3)**
- RADT 1013 - Rhythm Analysis **Credits: (3)**
- RADT 1014 - Basic Cardiac Imaging **Credits: (3)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)**
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
- RADT 1015 - Patient Care in Cardiology **Credits: (2)**

Colorado Limited Scope Operator (LSO) Certificate of Proficiency

The Colorado Limited Scope Operator in Radiography (LSO) Certificate program will consist of 2 semesters that incorporate integrated didactic instruction and clinical experience in affiliated health facilities. During the course of the program, radiologic physics, anatomy, radiographic procedures, positioning, and patient assessment are taught. The student will participate in clinical education within the affiliate health facilities throughout the program. Courses taken during the program may be applied towards the AAS Radiologic Technology degree. Upon successful completion of this certificate, students will be eligible for the State Limited Scope Licensing exam in the state of Colorado.

- **Program Prerequisites:** Acceptance to Weber State University, make application and be accepted to the program.

- **Advisement:** Students accepted into the program should meet annually with assigned faculty advisor for course and program review.
- **Admission Requirements:** Be accepted to Weber State University and declare program of study as Radiography applicant. Apply to the Radiography Program for acceptance and follow the procedures as outlined on the program application, which is in addition to the Weber State Admissions Application. The deadline date for applications to be received is May 1st of each year for CO LSO Applicants. Student selection is made during Summer semester and those accepted into the program begin their professional phase of the curriculum the following fall semester. Present a satisfactory high school and/or college(s) transcript(s).
- **Grade Requirements:** Demonstrate ability to achieve scholastically with grades of C or better.
- **Program Code:** 2094CP
- **CIPC Code:** 510911

Required Courses

- RADT 1022 - Introduction to Radiologic Technology **Credits: (2)**
- RADT 1303 - Principles of Radiographic Exposure I **Credits: (3)**
- RADT 1502 - Radiographic Anatomy and Positioning I **Credits: (2)**
- RADT 1601 - Clinical Simulation I **Credits: (1)**
- RADT 2042 - Community-Based Patient Care I **Credits: (1-2)**
- RADT 2861 INT - Clinical Education **Credits: (3)**
- RADT 1512 - Radiographic Anatomy and Positioning II **Credits: (2)**
- RADT 1522 - Radiographic Anatomy and Positioning III **Credits: (2)**
- RADT 1621 - Clinical Simulation II **Credits: (1)**
- RADT 1641 - Clinical Simulation III **Credits: (1)**
- RADT 2043 - Specialty Based Patient Care **Credits: (2)**
- RADT 2862 INT - Clinical Education **Credits: (3)**
- RADT 2866 INT - Final Competency Evaluation **Credits: (2)**

Limited Radiographer Certificate of Proficiency

The Limited Radiographer Certificate for Proficiency is a program offered under School of Radiologic Sciences. The program provides integrated didactic instruction with the utilization of clinical simulation. During the course of the program, radiologic physics, anatomy, radiographic procedures, positioning, and patient assessment are taught.

The program is one semester and is offered during fall, spring and summer semesters. The student qualifies for a certificate of proficiency upon completion of the program.

- **Program Prerequisite:** None.
- **Grade Requirements:** Demonstrate ability to achieve scholastically with grades of C or better.
- **Credit Hour Requirements:** The credit hours required for completion of the certificate will include the 10 credit hours (5 courses) within the Limited Radiographer program as well as the 8 credit hours of life science covering Anatomy and Physiology (HTHS 2110 LS - Integrated Human Anatomy and Physiology I **(4)** and HTHS 2111 - Integrated Human Anatomy and Physiology II **(4)**) or (ZOOL 2320 - Human Anatomy **(4)** and ZOOL 2420 LS - Human Physiology **(4)**).
- **Program Code:** 2068CP
- **CIPC:** 51.0911

Advisement

Students enrolled in the Limited Radiographer program will receive continuous advisement from individual instructors throughout the duration of the program.

Use Grad MAPs to plan your degree

Admission Requirements

1. Be accepted to Weber State University and register for Limited Radiography Program.
2. Present a satisfactory high school and/or college(s) transcript(s).

Program Learning Outcomes

- Identify the fundamental concepts of biological effects of radiation.
- Demonstrate proper radiation protection procedures during diagnostic procedures.
- Demonstrate proper use and understanding of radiation exposure monitors and diagnostic radiation equipment.
- Demonstrate, select, accurately explain and produce diagnostic quality radiographs that fall within the scope of practice for radiology practical technicians in the state of Utah (Statute 58-54).
- Demonstrate repeated competency in accurately explaining the proper radiographic image production, image processing, and digital image formation
- Demonstrate proper evaluation and critique of radiographic positioning, technical factors, anatomy, physiology and pathology that fall within the scope of practice for radiology practical technicians in the state of Utah (Statute 58-54).
- Demonstrate legal and professional responsibility within the limited scope of practice for a radiology practical technician.
- Demonstrate appropriate patient education, safety and comfort skills.
- Demonstrate acceptable methods of infection control and prevention.
- Demonstrate proper patient monitoring during radiographic procedures.
- Demonstrate appropriate responses to diverse patient populations.
- Demonstrate a sense of professionalism and desire to learn.
- Understand the radiographic anatomy and positioning specific to the Limited Scope of Practice (Utah Statute 58-54) which only includes Chest, Extremities, Skull/Sinus, Spine, and Podiatric.

Required Courses

The program provides integrated didactic instruction with the utilization of clinical simulation. During the course of the program, radiologic physics, anatomy, radiographic procedures, positioning, and patient assessment are taught.

- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
OR
- ZOOL 2320 - Human Anatomy **Credits: (4)** and
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

- RADT 1021 - Limited Clinical Simulation **Credits: (1)**
- RADT 1022 - Introduction to Radiologic Technology **Credits: (2)**
- RADT 1023 - Limited Radiographic Anatomy & Positioning **Credits: (2)**
- RADT 1024 - Limited Principles of Radiographic Exposure **Credits: (3)**
- RADT 1025 - Limited Patient Care and Assessment **Credits: (2)**

Bachelor of Science

Advanced Radiologic Sciences (BS)

The Advanced Radiologic Sciences program is designed to fill the continuing education needs of registered technologists, to provide a career ladder for those who wish to obtain additional skills in a specialized area, and to provide an opportunity to earn a Bachelor of Science (BS) degree. Programs of study are designed to meet the career goals of students in medical imaging modalities and for technical, management and educational positions.

Areas of Emphasis

1. Advanced Radiologic Sciences (BS), Magnetic Resonance Imaging (MRI) Emphasis
 2. Advanced Radiologic Sciences (BS), Interventional Radiology (IR) Emphasis
 3. Advanced Radiologic Sciences (BS), Computed Tomography (CT) Emphasis
 4. Advanced Radiologic Sciences (BS), Women's Imaging Emphasis
 5. Advanced Radiologic Sciences (BS), Advanced Radiologic Sciences Emphasis
- **Program Prerequisite:** Must be an ARRT registered technologist or acceptable equivalent as determined by the School of Radiologic Sciences, make application and be accepted to the program of choice (refer to the Admission Requirements below).
 - **Minor:** Students may select any approved minor in consultation with a faculty advisor and the completion of an academic contract.
 - **Grade Requirements:** After admittance into the program of choice, a GPA of 2.0 is required in all professional courses.
 - **Credit Hours:** A total of 120 credit hours are required for graduation; 30-48 of these must be within the major emphasis.
 - **Program Code:** Advanced Radiologic Science (2016BS) with Advanced Radiologic Sciences Emphasis (2073), Magnetic Resonance Imaging Emphasis (2074), Interventional Radiology Emphasis (2075), Computed Tomography Emphasis (2076), or Women's Imaging Emphasis (2077)
 - **CIPC:** Advanced Radiologic Science (510911), CT (510999), MRI (510920), CIT (510901), Women's Imaging (510999), RA (510814)

Advisement

Students must meet with a faculty advisor for the program of study selected and should meet with a faculty advisor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

1. Apply for admission to Weber State University;
2. Apply to the program of choice and submit a \$25.00 application fee;
3. Submit copy of active ARRT certification card or acceptable equivalent;
4. Submit transcripts from all colleges and universities attended;
5. Complete an academic contract in consultation with a faculty advisor;
6. The Program of Study within the Advanced Radiologic Sciences major will be declared upon acceptance into modality.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Radiologic Sciences Core (4 credit hours)

Students must complete an upper division research course in either the major area of emphasis or in the minor emphasis. The course must be equivalent to RADT 4943 - Baccalaureate Thesis (2) and approved by a faculty advisor.

- RADT 4933 - Research Methods **Credits: (2)**
- RADT 4943 - Baccalaureate Thesis **Credits: (2)**

Advanced Radiologic Sciences (BS), Advanced Radiologic Sciences Emphasis

- **Program Prerequisite:** Must be an ARRT registered technologist or acceptable equivalent as determined by the School of Radiologic Sciences, make application and be accepted to the program of choice (refer to the Admission Requirements below).
- **Minor:** Students may select any approved minor in consultation with a faculty advisor and the completion of an academic contract.
- **Grade Requirements:** After admittance into the program of choice, a GPA of 2.0 is required in all professional courses.
- **Credit Hours:** A total of 120 credit hours are required for graduation; 30-48 of these must be within the major emphasis.
- **Program Code:** 2016BS with Emphasis 2073
- **CIPC:** 510911

Advisement

Students must meet with a faculty advisor for the program of study selected and should meet with a faculty advisor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

1. Apply for admission to Weber State University;
2. Apply to the program of choice and submit a \$25.00 application fee;
3. Submit copy of active ARRT certification card or acceptable equivalent;
4. Submit transcripts from all colleges and universities attended;
5. Complete an academic contract in consultation with a faculty advisor;
6. The Program of Study within the Advanced Radiologic Sciences major will be declared upon acceptance into modality.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Radiologic Sciences Core (4 credit hours)

Students must complete an upper division research course in either the major area of emphasis or in the minor emphasis. The course must be equivalent to RADT 4943 - Baccalaureate Thesis (2) and approved by a faculty advisor.

- RADT 4933 - Research Methods **Credits: (2)**
- RADT 4943 - Baccalaureate Thesis **Credits: (2)**

Advanced Radiologic Sciences Required Courses (10 credit hours)

- RADT 3003 - Psycho-Social Medicine **Credits: (3)**
- RADT 3043 - Medical Ethics and Law **Credits: (3)**
- RADT 3423 - Federal Regulations **Credits: (2)**
- RADT 4203 - Patient Education in Radiology **Credits: (2)**

Electives (25-33 credit hours)

Select at least 25 credit hours from the following courses. Elective courses must have approval of a faculty advisor.

- RADT 3123 - Sectional Anatomy **Credits: (2)**
- RADT 3143 - Imaging Pathophysiology I **Credits: (2)**
- RADT 3144 - Imaging Pathophysiology II **Credits: (2)**
- RADT 3243 - Community-Based Patient Care II **Credits: (2)**
- RADT 3253 - Specialty-Based Patient Care II **Credits: (2)**
- RADT 3263 - Diagnostic Services Pharmacology **Credits: (2)**
- RADT 3403 - Radiobiology & Health Physics **Credits: (3)**
- RADT 3443 - Quality Assurance in Radiology **Credits: (3)**
- RADT 3463 - Computerized Imaging **Credits: (3)**
- RADT 3563 - Managing Clinical Information **Credits: (3)**
- RADT 3863 INT - Clinical Internship **Credits: (2-6)**
- RADT 4213 - Supervision and Staff Development **Credits: (3)**
- RADT 4223 - Promotional Strategies **Credits: (3)**
- RADT 4233 - Fiscal Analysis in Radiology **Credits: (3)**
- RADT 4243 - Quality Management in Radiology **Credits: (3)**
- RADT 4253 - Risk Management **Credits: (3)**
- RADT 4303 - Cardiology **Credits: (3)**
- RADT 4403 - Imaging Pathology **Credits: (3)**
- RADT 4413 - Forensic Radiology **Credits: (3)**
- RADT 4433 - PACS Administration **Credits: (3)**
- RADT 4443 - Imaging Informatics **Credits: (3)**
- RADT 4453 - Advanced Imaging: 3D Visualization and 3D Printing **Credits: (3)**
- RADT 4543 - Bone Densitometry **Credits: (3)**
- RADT 4572 - Advanced Breast Imaging **Credits: (3)**
- RADT 4573 - The Female Patient and Medical Imaging **Credits: (3)**
- RADT 4610 - Clinical Simulation I **Credits: (1)**
- RADT 4611 - Clinical Simulation II **Credits: (1)**
- RADT 4612 - Clinical Simulation III **Credits: (1)**

- RADT 4803 - Individual Research **Credits: (1-3)**
- RADT 4833 - Directed Readings and Research **Credits: (3)**
- RADT 4863 INT - Clinical Internship **Credits: (2-4)**
- RADT 4992 - Seminar **Credits: (1-2)**

Advanced Radiologic Sciences (BS), Computed Tomography (CT) Emphasis

- **Program Prerequisite:** Must be an ARRT registered technologist or acceptable equivalent as determined by the School of Radiologic Sciences, make application and be accepted to the program of choice (refer to the Admission Requirements below).
- **Minor:** Students may select any approved minor in consultation with a faculty advisor and the completion of an academic contract.
- **Grade Requirements:** After admittance into the program of choice, a GPA of 2.0 is required in all professional courses.
- **Credit Hours:** A total of 120 credit hours are required for graduation; 30-49 of these must be within the major emphasis.
- **Program Code:** 2016BS with Emphasis 2076
- **CIPC:** 510999

Advisement

Students must meet with a faculty advisor for the program of study selected and should meet with a faculty advisor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

1. Apply for admission to Weber State University;
2. Apply to the program of choice and submit a \$25.00 application fee;
3. Submit copy of active ARRT certification card or acceptable equivalent;
4. Submit transcripts from all colleges and universities attended;
5. Complete an academic contract in consultation with a faculty advisor;
6. The Program of Study within the Advanced Radiologic Sciences major will be declared upon acceptance into modality.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Radiologic Sciences Core (4 credit hours)

Students must complete an upper division research course in either the major area of emphasis or in the minor emphasis. The course must be equivalent to RADT 4943 - Baccalaureate Thesis (2) and approved by a faculty advisor.

- RADT 4933 - Research Methods **Credits: (2)**
- RADT 4943 - Baccalaureate Thesis **Credits: (2)**

Support Courses for CT (34 credit hours)

- RADT 3003 - Psycho-Social Medicine **Credits: (3)**
- RADT 3043 - Medical Ethics and Law **Credits: (3)**
- RADT 3123 - Sectional Anatomy **Credits: (2)**
- RADT 3143 - Imaging Pathophysiology I **Credits: (2)**
- RADT 3144 - Imaging Pathophysiology II **Credits: (2)**
- RADT 3253 - Specialty-Based Patient Care II **Credits: (2)**
- RADT 3403 - Radiobiology & Health Physics **Credits: (3)**
- RADT 3563 - Managing Clinical Information **Credits: (3)**
- RADT 3863 INT - Clinical Internship **Credits: (2-6)** (6 credit hours required)
- RADT 4203 - Patient Education in Radiology **Credits: (2)**
- RADT 4303 - Cardiology **Credits: (3)**
- RADT 4863 INT - Clinical Internship **Credits: (2-4)** (3 credit hours required)

Computed Tomography (CT) Required Courses (11 credit hours)

- RADT 4613 - Computed Tomography of the Torso and Limbs **Credits: (3)**
- RADT 4653 - Computed Tomography of the Central Nervous System **Credits: (3)**
- RADT 4663 - Computed Tomography Physics, Instrumentation & Safety **Credits: (3)**
- RADT 4942 - Transition to Specialty Practice **Credits: (2)**

Advanced Radiologic Sciences (BS), Interventional Radiology (IR) Emphasis

- **Program Prerequisite:** Must be an ARRT registered technologist or acceptable equivalent as determined by the School of Radiologic Sciences, make application and be accepted to the program of choice (refer to the Admission Requirements below).
- **Minor:** Students may select any approved minor in consultation with a faculty advisor and the completion of an academic contract.
- **Grade Requirements:** After admittance into the program of choice, a GPA of 2.0 is required in all professional courses.
- **Credit Hours:** A total of 120 credit hours are required for graduation; 30-48 of these must be within the major emphasis.
- **Program Code:** 2016BS with Emphasis 2075
- **CIPC:** 510911

Advisement

Students must meet with a faculty advisor for the program of study selected and should meet with a faculty advisor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

1. Apply for admission to Weber State University;
2. Apply to the program of choice and submit a \$25.00 application fee;
3. Submit copy of active ARRT certification card or acceptable equivalent;
4. Submit transcripts from all colleges and universities attended;
5. Complete an academic contract in consultation with a faculty advisor;
6. The Program of Study within the Advanced Radiologic Sciences major will be declared upon acceptance into modality.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Radiologic Sciences Core (4 credit hours)

Students must complete an upper division research course in either the major area of emphasis or in the minor emphasis. The course must be equivalent to RADT 4943 - Baccalaureate Thesis (2) and approved by a faculty advisor.

- RADT 4933 - Research Methods **Credits: (2)**
- RADT 4943 - Baccalaureate Thesis **Credits: (2)**

Interventional Radiology Required Courses (9 credit hours)

- RADT 4313 - Visceral, Pelvic and Extremity Angiography **Credits: (3)**
- RADT 4333 - Head and Neck Angiography **Credits: (3)**
- RADT 4343 - Thoracic and Venous Procedures **Credits: (3)**

Support Courses for IR (32 credit hours)

- RADT 3003 - Psycho-Social Medicine **Credits: (3)**
- RADT 3043 - Medical Ethics and Law **Credits: (3)**
- RADT 3123 - Sectional Anatomy **Credits: (2)**
- RADT 3143 - Imaging Pathophysiology I **Credits: (2)**
- RADT 3144 - Imaging Pathophysiology II **Credits: (2)**
- RADT 3253 - Specialty-Based Patient Care II **Credits: (2)**
- RADT 3263 - Diagnostic Services Pharmacology **Credits: (2)**
- RADT 3563 - Managing Clinical Information **Credits: (3)**
- RADT 3863 INT - Clinical Internship **Credits: (2-6)** (6 credit hours required)
- RADT 4203 - Patient Education in Radiology **Credits: (2)**
- RADT 4303 - Cardiology **Credits: (3)**
- RADT 4863 INT - Clinical Internship **Credits: (2-4)** (3 credit hours required)
- RADT 4942 - Transition to Specialty Practice **Credits: (2)**

Advanced Radiologic Sciences (BS), Magnetic Resonance Imaging (MRI) Emphasis

- **Program Prerequisite:** Must be an ARRT registered technologist or acceptable equivalent as determined by the School of Radiologic Sciences, make application and be accepted to the program of choice (refer to the Admission Requirements below).
- **Minor:** Students may select any approved minor in consultation with a faculty advisor and the completion of an academic contract.
- **Grade Requirements:** After admittance into the program of choice, a GPA of 2.0 is required in all professional courses.
- **Credit Hours:** A total of 120 credit hours are required for graduation; 30-49 of these must be within the major emphasis.
- **Program Code:** 2016BS with Emphasis 2074
- **CIPC:** 510920

Advisement

Students must meet with a faculty advisor for the program of study selected and should meet with a faculty advisor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

1. Apply for admission to Weber State University;
2. Apply to the program of choice and submit a \$25.00 application fee;
3. Submit copy of active ARRT certification card or acceptable equivalent;
4. Submit transcripts from all colleges and universities attended;
5. Complete an academic contract in consultation with a faculty advisor;
6. The Program of Study within the Advanced Radiologic Sciences major will be declared upon acceptance into modality.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Radiologic Sciences Core (4 credit hours)

Students must complete an upper division research course in either the major area of emphasis or in the minor emphasis. The course must be equivalent to RADT 4943 - Baccalaureate Thesis (2) and approved by a faculty advisor.

- RADT 4933 - Research Methods **Credits: (2)**
- RADT 4943 - Baccalaureate Thesis **Credits: (2)**

Support Courses for MRI (31 credit hours)

- RADT 3003 - Psycho-Social Medicine **Credits: (3)**
- RADT 3043 - Medical Ethics and Law **Credits: (3)**
- RADT 3123 - Sectional Anatomy **Credits: (2)**
- RADT 3143 - Imaging Pathophysiology I **Credits: (2)**
- RADT 3144 - Imaging Pathophysiology II **Credits: (2)**
- RADT 3253 - Specialty-Based Patient Care II **Credits: (2)**

- RADT 3563 - Managing Clinical Information **Credits: (3)**
- RADT 3863 INT - Clinical Internship **Credits: (2-6)** (6 credit hours required)
- RADT 4203 - Patient Education in Radiology **Credits: (2)**
- RADT 4303 - Cardiology **Credits: (3)**
- RADT 4863 INT - Clinical Internship **Credits: (2-4)** (3 credit hours required)
- RADT 4601 - MRI Entry Level-Patient Care and Safety **Credits: (2)**

Magnetic Resonance Imaging (MRI) Required Courses (17 credit hours)

- RADT 4603 - Magnetic Resonance Imaging Physics, Instrumentation & Safety **Credits: (3)**
- RADT 4623 - Advanced MRI Procedures **Credits: (3)**
- RADT 4633 - Magnetic Resonance Imaging of the Central Nervous System **Credits: (3)**
- RADT 4643 - Magnetic Resonance of the Torso and Limbs **Credits: (3)**
- RADT 4945 - Fundamentals in MRI Certification **Credits: (2)**
- RADT 4630 - MRI Simulation 1 **Credits: (1)**
- RADT 4631 - MRI Simulation 2 **Credits: (1)**
- RADT 4632 - MRI Simulation 3 **Credits: (1)**

Advanced Radiologic Sciences (BS), Women's Imaging Emphasis

- **Program Prerequisite:** Must be an ARRT registered technologist or acceptable equivalent as determined by the School of Radiologic Sciences, make application and be accepted to the program of choice (refer to the Admission Requirements below).
- **Minor:** Students may select any approved minor in consultation with a faculty advisor and the completion of an academic contract.
- **Grade Requirements:** After admittance into the program of choice, a GPA of 2.0 is required in all professional courses.
- **Credit Hours:** A total of 120 credit hours are required for graduation; 30-48 of these must be within the major emphasis.
- **Program Code:** 2016BS with Emphasis 2077
- **CIPC:**

Advisement

Students must meet with a faculty advisor for the program of study selected and should meet with a faculty advisor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

1. Apply for admission to Weber State University;
2. Apply to the program of choice and submit a \$25.00 application fee;
3. Submit copy of active ARRT certification card or acceptable equivalent;
4. Submit transcripts from all colleges and universities attended;
5. Complete an academic contract in consultation with a faculty advisor;

6. The Program of Study within the Advanced Radiologic Sciences major will be declared upon acceptance into modality.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Radiologic Sciences Core (4 credit hours)

Students must complete an upper division research course in either the major area of emphasis or in the minor emphasis. The course must be equivalent to RADT 4943 - Baccalaureate Thesis (2) and approved by a faculty advisor.

- RADT 4933 - Research Methods **Credits: (2)**
- RADT 4943 - Baccalaureate Thesis **Credits: (2)**

Required Courses (14 credit hours)

- RADT 4553 - Breast Anatomy, Physiology and Pathology **Credits: (3)**
- RADT 4563 - Mammographic Positioning/Imaging Techniques **Credits: (3)**
- RADT 4583 - Mammographic Equipment and Quality Assurance **Credits: (3)**
- RADT 4863 INT - Clinical Internship **Credits: (2-4)**
- RADT 4942 - Transition to Specialty Practice **Credits: (2)**

Support Courses (16 credit hours)

- RADT 3003 - Psycho-Social Medicine **Credits: (3)**
- RADT 3043 - Medical Ethics and Law **Credits: (3)**
- RADT 3243 - Community-Based Patient Care II **Credits: (2)**
- RADT 3423 - Federal Regulations **Credits: (2)**
- RADT 3563 - Managing Clinical Information **Credits: (3)**
- RADT 4203 - Patient Education in Radiology **Credits: (2)**

Elective Courses (13 credit hours)

- RADT 3123 - Sectional Anatomy **Credits: (2)**
- RADT 3143 - Imaging Pathophysiology I **Credits: (2)**
- RADT 3144 - Imaging Pathophysiology II **Credits: (2)**
- RADT 3263 - Diagnostic Services Pharmacology **Credits: (2)**
- RADT 3403 - Radiobiology & Health Physics **Credits: (3)**
- RADT 3443 - Quality Assurance in Radiology **Credits: (3)**
- RADT 3463 - Computerized Imaging **Credits: (3)**
- RADT 4213 - Supervision and Staff Development **Credits: (3)**
- RADT 4223 - Promotional Strategies **Credits: (3)**
- RADT 4233 - Fiscal Analysis in Radiology **Credits: (3)**
- RADT 4243 - Quality Management in Radiology **Credits: (3)**
- RADT 4253 - Risk Management **Credits: (3)**

- RADT 4303 - Cardiology **Credits: (3)**
- RADT 4413 - Forensic Radiology **Credits: (3)**
- RADT 4433 - PACS Administration **Credits: (3)**
- RADT 4443 - Imaging Informatics **Credits: (3)**
- RADT 4543 - Bone Densitometry **Credits: (3)**
- RADT 4572 - Advanced Breast Imaging **Credits: (3)**
- RADT 4573 - The Female Patient and Medical Imaging **Credits: (3)**
- RADT 4803 - Individual Research **Credits: (1-3)**
- RADT 4833 - Directed Readings and Research **Credits: (3)**
- RADT 4922 - Workshop, Conferences and Telecourses **Credits: (2)**
- RADT 4992 - Seminar **Credits: (1-2)**

Diagnostic Medical Sonography (BS)

- **Program Prerequisite:** Must be an ARRT registered technologist or acceptable equivalent as determined by the School of Radiologic Sciences, make application and be accepted to the program of choice (refer to Admission Process below).
- **Minor:** The Advanced Radiologic Sciences minor is automatically satisfied by the requirements for the Diagnostic Medical Sonography major.
- **Grade Requirements:** After admittance to the program, a GPA of 2.0 or a grade of "C" is required in all professional courses.
- **Credit Hour Requirements:** Credit hours required will vary according to the chosen emphasis. Consult with a faculty member to complete an academic contract.
- **Program Code:** Major Diagnostic Medical Sonography (2069BS) with one or more of the following emphases: Cardiac (2070), Medical (2071), Cardiovascular(2090)
- **CIPC:** Major Diagnostic Medical Sonography (510910) with one or more of the following: Cardiac (510910), Medical (510910), Cardiovascular(510910)

Advisement

Students should meet with the admissions counselor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Process

To be eligible for admission to the Diagnostic Medical Sonography program, the following criteria must be met:

1. Application must be made to Weber State.
2. Demonstrate ability to achieve scholastically.
3. Complete an application to the desired program and pay the \$25 application fee.
4. Provide the following with the application
 - a. transcripts from hospital certificate program or colleges and universities;
 - b. high school transcripts if no previous college experience; and
 - c. copy of ARRT certification or equivalent.
5. Have all pertinent material on file January 10.
6. The Program of Study within the Diagnostic Medical Sonography emphasis area will be declared upon acceptance into modality.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Program Learning Outcomes

- Demonstrate proper use of imaging equipment
- Demonstrate proper selection of technical factors to produce diagnostic images
- Demonstrate and accurately interpret quality assurance testing.
- Demonstrate proper evaluation and critique of diagnostic images for accuracy of technical factors, patient positioning, anatomy, contrast injection and pathology.

Major Course Requirements for BS Degree

DMS Courses Required (6 credit hours)

- DMS 4100 - Introduction to Sonography Principles and Instrumentation **Credits: (1)**
- DMS 4110 - Sonography Principles & Instrumentation **Credits: (3)**
- DMS 4120 - Quality Assurance **Credits: (1)**
- DMS 4820 - Orientation to Clinical Education **Credits: (1)**

Radiography Courses Required (22 credit hours)

- RADT 3003 - Psycho-Social Medicine **Credits: (3)**
- RADT 3123 - Sectional Anatomy **Credits: (2)**
- RADT 3143 - Imaging Pathophysiology I **Credits: (2)**
- RADT 3144 - Imaging Pathophysiology II **Credits: (2)**
- RADT 3563 - Managing Clinical Information **Credits: (3)**
- RADT 3243 - Community-Based Patient Care II **Credits: (2)**
- RADT 3253 - Specialty-Based Patient Care II **Credits: (2)**
- RADT 4942 - Transition to Specialty Practice **Credits: (2)**
- RADT 4933 - Research Methods **Credits: (2)**
- RADT 4943 - Baccalaureate Thesis **Credits: (2)**

Emphasis Requirements

Complete the courses for one of the following three emphasis areas: Cardiac Emphasis (25 credit hours), Medical Emphasis (24 credit hours), or Vascular Emphasis (16 credit hours).

Cardiac Emphasis (28 credit hours)

- DMS 4210 - Cardiac Sonography I **Credits: (3)**
- DMS 4220 - Cardiac Sonography II **Credits: (3)**
- DMS 4230 - Cardiac Sonography III **Credits: (3)**
- DMS 4240 - Fundamentals for Cardiac Sonography Certification **Credits: (2)**
- DMS 4410 - Vascular Sonography I **Credits: (2)**

- DMS 4420 - Vascular Sonography II **Credits: (2)**
- DMS 4610 - Cardiac Sonography - Clinical Simulation I **Credits: (2)**
- DMS 4811 INT - Cardiac Clinical I **Credits: (3)**
- DMS 4812 INT - Cardiac Clinical II **Credits: (3)**
- DMS 4813 INT - Cardiac Clinical III **Credits: (3)**
- RADT 3263 - Diagnostic Services Pharmacology **Credits: (2)**

Medical Emphasis (31 credit hours)

- DMS 4310 - Abdominal Sonography **Credits: (3)**
- DMS 4320 - Superficial Structure and Special Study Sonography **Credits: (3)**
- DMS 4330 - Gynecologic Sonography **Credits: (1)**
- DMS 4340 - Obstetric Sonography **Credits: (3)**
- DMS 4350 - Fundamentals for Abdominal Sonography Certification **Credits: (2)**
- DMS 4360 - Fundamentals for OB/GYN Sonography Certification **Credits: (2)**
- DMS 4410 - Vascular Sonography I **Credits: (2)**
- DMS 4420 - Vascular Sonography II **Credits: (2)**
- DMS 4620 - Medical Sonography - Clinical Simulation I **Credits: (2)**
- DMS 4621 - Medical Sonography - Clinical Simulation II **Credits: (1)**
- DMS 4622 - Medical Sonography - Clinical Simulation III **Credits: (1)**
- DMS 4821 INT - Medical Clinical I **Credits: (3)**
- DMS 4822 INT - Medical Clinical II **Credits: (3)**
- DMS 4823 INT - Medical Clinical III **Credits: (3)**

Cardiovascular Emphasis (30 credit hours)

- DMS 4210 - Cardiac Sonography I **Credits: (3)**
- DMS 4220 - Cardiac Sonography II **Credits: (3)**
- DMS 4230 - Cardiac Sonography III **Credits: (3)**
- DMS 4240 - Fundamentals for Cardiac Sonography Certification **Credits: (2)**
- DMS 4410 - Vascular Sonography I **Credits: (2)**
- DMS 4420 - Vascular Sonography II **Credits: (2)**
- DMS 4430 - Fundamentals for Vascular Sonography Certification **Credits: (2)**
- DMS 4630 - Cardiovascular Sonography - Clinical Simulation I **Credits: (2)**
- DMS 4831 INT - Cardiovascular Clinical I **Credits: (3)**
- DMS 4832 INT - Cardiovascular Clinical II **Credits: (3)**
- DMS 4833 INT - Cardiovascular Clinical III **Credits: (3)**
- RADT 3263 - Diagnostic Services Pharmacology **Credits: (2)**

Nuclear Medicine (BS)

- **Program Prerequisite:** Must be an ARRT registered technologist or acceptable equivalent as determined by the School of Radiologic Sciences, make application and be accepted to the program of choice (refer to the Admission Process below).
- **Minor:** The Advanced Radiologic Sciences minor is automatically satisfied by the requirements for the Nuclear Medicine major.
- **Grade Requirements:** After admittance to the program, a GPA of 2.0 is required in all professional courses.
- **Credit Hour Requirements:** A total of 52 credit hours in didactic courses and clinical education are required. The support courses or the equivalent must be completed to obtain the degree.
- **Program Code:** 2011BS
- **CIPC:** 510905

Advisement

Students should meet with a faculty advisor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Process

To be eligible for admission to the Nuclear Medicine program, the following criteria must be met:

1. Application and admission to Weber State University.
2. Demonstrate ability to achieve scholastically.
3. Complete an application to the desired program and pay the \$25 application fee.
4. Provide the following with the application:
 - a. transcripts from hospital certificate programs or colleges and universities;
 - b. high school transcripts, if no previous college experience; and
 - c. copy of ARRT certification or equivalent.
5. Have all pertinent material on file by January 10.
6. The Program of Study for Nuclear Medicine will be declared upon acceptance into modality.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Program Learning Outcomes

- Demonstrate proper use of imaging equipment
- Demonstrate proper selection of radiopharmaceuticals and technical factors to produce diagnostic images
- Demonstrate and accurately interpret quality assurance testing.
- Demonstrate proper evaluation and critique of diagnostic images for accuracy of technical factors, patient positioning, anatomy, nuclide injection and pathology.

Major Course Requirements for BS Degree

Nuclear Medicine Courses Required (27 credit hours)

- NUCM 4103 - Radiopharmaceuticals and Dosages **Credits: (3)**
- NUCM 4203 - Scanning and Imaging Procedures I **Credits: (3)**
- NUCM 4213 - Scanning and Imaging Procedures II **Credits: (3)**
- NUCM 4223 - Nuclear Cardiology **Credits: (3)**
- NUCM 4303 - Radionuclide Physics & Instrumentation **Credits: (3)**
- NUCM 4333 SI - Quality Assurance **Credits: (3)**
- NUCM 4861 INT - Clinical Education **Credits: (3)**
- NUCM 4862 INT - Clinical Education **Credits: (3)**
- NUCM 4863 INT - Clinical Education **Credits: (3)**

Radiography Courses Required (25 credit hours)

- RADT 3003 - Psycho-Social Medicine **Credits: (3)**
- RADT 3263 - Diagnostic Services Pharmacology **Credits: (2)**
- RADT 3143 - Imaging Pathophysiology I **Credits: (2)**
- RADT 3144 - Imaging Pathophysiology II **Credits: (2)**
- RADT 3253 - Specialty-Based Patient Care II **Credits: (2)**
- RADT 3423 - Federal Regulations **Credits: (2)**
- RADT 3563 - Managing Clinical Information **Credits: (3)**
- RADT 4303 - Cardiology **Credits: (3)**
- RADT 4933 - Research Methods **Credits: (2)**
- RADT 4943 - Baccalaureate Thesis **Credits: (2)**
- RADT 4942 - Transition to Specialty Practice **Credits: (2)**

Radiation Therapy (BS)

- **Program Prerequisite:** Must be an ARRT registered technologist or acceptable equivalent as determined by the School of Radiologic Sciences, make application and be accepted to the program of choice (refer to the Admission Process below).
- **Minor:** The Advanced Radiologic Sciences minor is automatically satisfied by the requirements for the Radiation Therapy major.
- **Grade Requirements:** After admission to the program, a GPA of 2.0 or a "C" is required in the professional courses.
- **Credit Hour Requirements:** A total of 46 credit hours in didactic courses and clinical education are required. The support courses or the equivalent must be completed to obtain the degree.
- **Program Code:** 2018BS
- **CIPC:** 510907

Advisement

Students should meet with a faculty advisor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Process

To be eligible for admission to the Radiation Therapy program, the following criteria must be met:

1. Application and admission to Weber State University.

2. Demonstrate ability to achieve scholastically.
3. Complete an application to the desired program and pay the \$25 application fee.
4. Provide the following with the application:
 - a. transcripts from hospital certificate programs or colleges and universities;
 - b. high school transcripts, if no previous college experience; and
 - c. copy of ARRT certification or equivalent.
5. Have all pertinent material on file by January 10.
6. The Program of Study for Radiation Therapy will be declared upon acceptance into modality.

General Education

Refer to Degree Requirements for Bachelor of Science requirements.

Program Learning Outcomes

- Demonstrate proper use of treatment equipment
- Demonstrate proper interpretation of treatment prescriptions, treatment fields and procedures
- Demonstrate and accurately interpret quality assurance testing.
- Demonstrate proper evaluation and critique of treatment simulation and delivery, patient positioning and protection, anatomy, and pathology.

Major Course Requirements for BS Degree

Radiation Therapy Courses Required (33 credit hours)

- RATH 4330 - Radiation Therapy Physics **Credits: (3)**
- RATH 4342 - Introduction to Treatment Planning **Credits: (3)**
- RATH 4410 - Radiation Oncology I **Credits: (3)**
- RATH 4412 - Radiation Oncology II **Credits: (3)**
- RATH 4414 - Radiation Oncology III **Credits: (3)**
- RATH 4444 - Advanced Treatment Planning/Brachytherapy **Credits: (3)**
- RATH 4446 - Quality Assurance **Credits: (3)**
- RATH 4448 - New Technology in Radiation Therapy **Credits: (3)**
- RATH 4861 INT - Clinical Education I **Credits: (3)**
- RATH 4862 INT - Clinical Education II **Credits: (3)**
- RATH 4863 INT - Clinical Education III **Credits: (3)**

Radiography Courses Required (13 credit hours)

- RADT 3253 - Specialty-Based Patient Care II **Credits: (2)**
- RADT 3563 - Managing Clinical Information **Credits: (3)**
- RADT 4933 - Research Methods **Credits: (2)**
- RADT 4943 - Baccalaureate Thesis **Credits: (2)**
- RADT 4942 - Transition to Specialty Practice **Credits: (2)**
- RADT 4992 - Seminar **Credits: (1-2)**

Minor

Advanced Radiologic Sciences, Minor Emphasis

- **Grade Requirements:** A GPA of 2.0 in all courses used toward the minor.
- **Credit Hour Requirements:** 18-24 credit hours in Advanced Radiologic Sciences. An academic contract must be generated with a faculty advisor for a minimum of 18 credit hours from the RADT upper division courses. Courses required for certification cannot be used to fulfill minor requirements.
- **Program Code:** 2016
- **CIPC:** 510911

Students may select any approved minor in consultation with a faculty advisor and the completion of an academic contract. A minor is not required for the Radiology Assistant (RA) program.

Post Master's Certificate

Advanced Pediatric Imaging Post Master's Certificate

The Advanced Pediatric Imaging Post-Master's Certificate is a program offered by the School of Radiologic Sciences. The program provides integrated didactic instruction with the utilization of imaging simulation. During the course of the program, imaging of the pediatric GI system, GU system, respiratory system, musculoskeletal (MSK) system, and neurologic system will be taught. A simulation of imaging procedures relative to each pediatric body system will also be included. Pediatric sedation and physical exam relative to pediatric imaging procedures are also taught in this program.

The program is two (2) semesters and is offered during the fall and spring semesters. The student qualifies for a certificate of proficiency upon completion of the program.

- **Program Prerequisite:** Graduate of a regionally accredited master or doctorate program with the associated Radiologist Assistant (RA) and/or Radiology Practitioner Assistant (RPA) credentials.
- **Grade Requirements:** Demonstrate ability to achieve scholastically with grades of B or better.
- **Credit Hour Requirements:** The credit hours required for completion of the certificate will include the 24 credit hours (6 courses) within the Advanced Pediatric Imaging Post-Master's Certificate program
- **Program Code:** 2088PMC
- **CIPC:** 510911

Advisement

Students enrolled in the Advanced Pediatric Imaging Post-Master's Degree Certificate will receive continuous advisement from individual instructors throughout the duration of the program.

Admission Requirements

- Admission to Weber State University and online application for the MSRS Post-Master's Certificate Program.
- Graduate of a regionally accredited master or doctorate academic program in advanced imaging.
- Official transcripts from all institutions attended
- A cumulative graduate GPA of at least 3.0. If the graduate GPA is below 3.0, consideration may be based on GPA calculation on the last 60 semester hours (90 quarter hours) of graduate work.
- Recommendation forms (3).

Program Learning Outcomes

- Understanding the unique aspects of pediatric GI, GU, Respiratory, Musculoskeletal and Neurologic anatomy, and disease processes
- Evaluation of neonatal, infant, and pediatric fluoroscopic imaging studies
- Identification of normal and pathologic radiographic, ultrasonographic, and additional imaging appearance of pediatric body systems
- Understanding of the sedation continuum
- Assisting or performing various pediatric imaging studies that involve sedation
- Support the pre-sedation, procedural, and recovery assessment of patients
- Application of monitoring and care of pediatric patients receiving sedation
- Identification of various sedation medications
- Review of airway maneuvers and the use of airway adjuncts used in the management of airway obstruction
- Identification of common complications and adverse events associated with sedation
- Understanding of pediatric sedation guidelines and regulatory issues
- Constructive evaluation of pediatric imaging procedures
- Management of pediatric imaging emergencies

Required Courses

The program provides integrated didactic instruction with the utilization of imaging simulation. During the course of the program, imaging of the pediatric GI system, GU system, respiratory system, musculoskeletal system, and the neurologic system will be taught. A simulation of imaging procedures relative to each pediatric body system will also be included. Pediatric sedation and physical exam relative to pediatric imaging procedures are also taught in this program.

- MSRS 6507 - Pediatric GI and GU Imaging **Credits: (6)**
- MSRS 6508 - Pediatric Respiratory and Musculoskeletal Imaging **Credits: (6)**
- MSRS 6505 - Pediatric Simulation Imaging I **Credits: (3)**
- MSRS 6506 - Pediatric Simulation Imaging II **Credits: (3)**
- MSRS 6509 - Pediatric Neurologic Imaging **Credits: (3)**
- MSRS 6504 - Pediatric Sedation and Physical Exam **Credits: (3)**

Engaged Learning, Honors, and Interdisciplinary Programs

Weber State University has a long history of engaging students in learning both inside and outside the classroom. Engaged learning fosters intellectual and personal growth, critical thinking, problem solving, civic engagement, and professional and career development opportunities. Students engage with faculty members in small groups or one-on-one, for an intellectually challenging experience that is enhanced by professional and real world application of knowledge.

The Office of Undergraduate Research, the Center for Community Engaged Learning, the Sustainability Practices and Research Center, and Honors Program continue to facilitate the engaged learning of WSU students by collaborating with disciplines across colleges. These programs offer engaged learning opportunities in undergraduate research, community engaged learning, and classes that provide a stimulating, creative and supportive learning environment.

Interdisciplinary programs provide students the opportunity to expand their learning across different subject areas, and contribute to a well-rounded educational experience. Students who want to individualize or create a unique academic program resulting in an interdisciplinary degree can do so through the Bachelor of Integrated Studies program.

- **Dean of Engaged Learning, Honors, and Interdisciplinary Programs:** Brenda Kowalwski
- **Telephone Contact:** Dana Gibson, 801-626-6006

Program Chairs/Directors/Coordinators

Office of Undergraduate Research (OUR): Dr. Therese Cavlovic	801-626-7567
Center for Community Engaged Learning (CCEL): Dr. Alexis Bucknam	801-626-7705
Honors Program: Dr. Christy Call	801-626-7591
Bachelor of Integrated Studies (BIS): Dr. Susan Matt	801-626-7713
Sustainability Practices and Research Center (SPARC): Dr. Alice Mulder	801-626-6326
Library Teaching & Information Services Department: Dr. Shaun Adamson	801-626-6827
Asian Studies: Dr. Greg Lewis	801-626-6781
Environmental Studies: Dr. Mikel Vause	801-626-6659
Ethnic Studies: Dr. Eric Ewert	801-626-6197
European Studies: Dr. Thomas Mathews	801-626-6345
Latin American Studies: Dr. Isabel Asensio	801-626-6777
Legal Studies: Dr. Richard Price	801-626-6694
Linguistics: Dr. Mark LeTourneau	801-626-6386
Neuroscience: Dr. Aminda O'Hare	801-626-6729

Urban and Regional Planning: Dr. Bryan Dorsey

801-626-6944

Women & Gender Studies: Dr. Melina Alexander

801-626-7632

Office of Community Development (OCD)

Executive Director: Bill Cook

Telephone Contact: Bill Cook (801) 721-9382

Location: Community Education Center, 115

Internet Address: weber.edu/OgdenCAN

The Office of Community Development at Weber State University acts as a catalyst for fostering collaboration and partnerships between anchor institutions and partner organizations that address social determinants of health in education, health, housing and financial stability. The mission includes engaging residents, community leaders, political leaders, students, faculty and staff to develop and implement evidence-based interventions and systemic adaptive changes. Through the evidence-based interventions opportunities are offered to faculty and students to advance their teaching, learning and research agendas in the community (weber.edu/OgdenCAN).

The Office is responsible for developing, facilitating and maintaining critical partnerships for the university with local, regional and national partners and their networks including: The Democracy Collaborative, Coalition of Urban and Metropolitan Universities, Anchor Learning Network, Promise Partnership Regional Council and the United Partnership Council. The Office also leads the university's anchor-mission committees and coordinates with multiple areas of campus including the development of core metrics and business practice improvements related to community wealth building in the areas of hiring, purchasing and investing.

The Ogden Civic Action Network (OgdenCAN) is a program within the Office of Community Development. OgdenCAN is a consortium of anchor institutions, partners, allies and residents that is determined to create comprehensive neighborhood revitalization in the East Central Neighborhood of Ogden, Utah. This initiative is designed to remove barriers, create opportunities, align available resources and provide funding for evidence-based interventions. A Board of Directors is responsible for setting priorities and allocating funds. Weber State University serves as the fiscal agent for OgdenCAN.

Asian Studies Minor Program

Minor

Asian Studies Minor

Coordinator: Dr. Greg Lewis; Dr. Youn Soo Kim Goldstein

Location: Lindquist Hall, Room 252

Telephone: 801-626-6707

The Asian Studies Minor is an interdisciplinary program offered through several WSU Departments. The minor will cooperate with the BIS program to offer an emphasis in Asian Studies. Cooperating Departments and programs include Anthropology, Chinese, English, Foreign Languages, Geography, Health, History, Honors, Japanese, Philosophy, Political Sciences, Sociology, and Visual Arts.

- **Prerequisite Courses:** Completion of first and second-year courses in an Asian language, or equivalent proficiency.
- **Grade Requirements:** A grade of "C" or above in each course used toward the Asian Studies Minor (a grade of C- is not acceptable).
- **Credit Hour Requirements:** A minimum of 18 credit hours in addition to two years of college study of an Asian language, or the equivalent.
- **Program Code:** 7023
- **CIPC:** 050103

Courses taken which are part of the student's major will not count as fulfillment of the minor requirement.

Learning Outcomes

- Students will demonstrate knowledge of diverse philosophical, communicative, linguistic, geographic, historic, or literary traditions in various regions in Asia, as well as of key themes, concepts, issues, and terminology in Asian Studies.
- Students will analyze cultural artifacts of various regions of Asia.
- Students will demonstrate the ability to effectively communicate their understandings of various regions of Asia in written, oral, or graphic forms.
- Students will describe how individual Asian nations influence and are influenced by social contexts, institutions, physical environments, history, and/or global processes.
- Students will apply basic concepts, theories, and/or methods of social science and/or humanities to a particular issue in various regions of Asia.

Course Requirements for Minor

In addition to the following requirements, two years of college study of an Asian language, or equivalent proficiency, must be demonstrated by the student.*

Course Requirements for Minor

Required Courses (18 credit hours)

Select 18 credit hours from at least three of the following departments. No more than 9 credit hours from one department may be applied to the minor.

- ARTH 2040 - Art and Architecture of Asia **Credits: (4)**
- ARTH 3060 - The Art and Architecture of India **Credits: (4)**
- ARTH 3070 - The Art and Architecture of China **Credits: (4)**
- ARTH 3080 - The Art and Architecture of Japan **Credits: (4)**
- ARTH 3100 - The Art and Architecture of the Byzantine and Islamic Worlds **Credits: (4)**
- CHNS 3000 - Proficiency Development **Credits: (3)**
- CHNS 3060 - Grammar & Composition **Credits: (3)**

- CHNS 3116 - DLI Bridge Course I **Credits: (3)**
- CHNS 3117 - DLI Bridge Course II **Credits: (3)**
- CHNS 3118 - DLI Bridge Course III **Credits: (3)**
- CHNS 3320 - Applied Language Studies **Credits: (1-3)**
- CHNS 3550 - Cultural Heritage I **Credits: (3)**
- CHNS 3631 - Literature: Prose **Credits: (3)**
- CHNS 3632 - Literature: Drama **Credits: (3)**
- CHNS 3680 - Literature: Film **Credits: (3)**
- CHNS 3710 - Business Language I **Credits: (3)**
- CHNS 3850 - Study Abroad **Credits: (1-6)**
- CHNS 4830 - Directed Readings **Credits: (1-3)**

- ENGL 2710 HU/CC - Perspectives on Women's Literature **Credits: (3)** **
- ENGL 3730 - Literatures of Cultures and Places **Credits: (3)** **

- WLC 3420 GLB - Introduction to Translation **Credits: (3)**
- WLC 4860 INT - Foreign Language Internship **Credits: (1-3)**

- GEOG 3640 - Geography of Asia: Development, Geopolitics and Environment **Credits: (3)**
- GEOG 3780 - Geographic Area Studies **Credits: (1-3)** **
- GEOG 4800 - Individual Research **Credits: (1-3)** **

- HIST 4530 - Far Eastern History **Credits: (3)**
- HIST 4550 - Southeast Asian History **Credits: (3)**
- HIST 4570 - Islamic Civilization **Credits: (3)**
- HIST 4590 GLB - Middle Eastern History **Credits: (3)**
- HIST 4730 - Special Issues and Topics in Global and Comparative History **Credits: (3)** **

- HNRS 2130 HU/SS - Intellectual Traditions: Great Ideas of the East **Credits: (3)**

- JPNS 3060 - Grammar & Composition **Credits: (3)**
- JPNS 3160 - Introduction to Literature **Credits: (3)**
- JPNS 3116 - DLI Bridge Course I **Credits: (3)**
- JPNS 3117 - DLI Bridge Course II **Credits: (3)**
- JPNS 3118 - DLI Bridge Course III **Credits: (3)**
- JPNS 3220 - Phonetics and Phonology **Credits: (3)**
- JPNS 3320 - Applied Language Studies **Credits: (1-3)**
- JPNS 3550 - Cultural Heritage I **Credits: (3)**
- JPNS 3560 - Cultural Heritage II **Credits: (3)**
- JPNS 3570 - Special Topics in Culture **Credits: (3)**
- JPNS 3610 - Literature Survey I **Credits: (3)**
- JPNS 3620 - Literature Survey II **Credits: (3)**
- JPNS 3630 - Literature Poetry **Credits: (3)**
- JPNS 3631 - Literature: Prose **Credits: (3)**
- JPNS 3632 - Literature: Drama **Credits: (3)**
- JPNS 3650 - Literature Periods **Credits: (3)**
- JPNS 3670 - Literature Authors **Credits: (3)**
- JPNS 3710 - Business Language I **Credits: (3)**

- JPNS 3715 - Business Language II **Credits: (3)**
- JPNS 3720 - Language for Specific Purposes I **Credits: (3)**
- JPNS 3730 - Language for Specific Purposes II **Credits: (3)**
- JPNS 3740 - Translation I **Credits: (3)**
- JPNS 3750 - Introduction to Interpreting **Credits: (3)**
- JPNS 3850 - Study Abroad **Credits: (1-6)**
- JPNS 4620 - Survey of Literature I **Credits: (3)**
- JPNS 4630 - Survey of Literature II **Credits: (3)**
- JPNS 4690 - Special Topics in Literature **Credits: (3)**
- JPNS 4740 - Translation II **Credits: (3)**
- JPNS 4830 - Directed Readings **Credits: (1-3)**
- JPNS 4850 - Study Abroad **Credits: (3)**
- KOR 4830 - Directed Readings **Credits: (1-3)**
- PHIL 3550 - Philosophy of Eastern Religion **Credits: (3)**
- SOC 4990 - Seminar in Sociology **Credits: (3)** **
- WGS 2900 - Topics in Women's Studies **Credits: (1-3)** **
- WGS 4900 - Topics in Women's Studies **Credits: (1-3)** **

Note:

*Language proficiency can be demonstrated by completing a fourth semester language course (i. e., CHNS 2020 or JPNS 2020), by taking an upper-division class in an Asian language and earning a "C" grade or better, or with an examination administered through the Foreign Language Department.

**Acceptable when the emphasis and/or content are basically Asian Studies/Language or Middle East Studies/Language.

Should other courses relating specifically to Asia or the Middle East, either of an experimental or of a permanent nature, be added to the curriculum, these courses will be accepted as part of the Asian Studies Minor. To be a part of the Asian Studies curriculum, a course must have two-thirds Asian content.

Bachelor of Arts/Science in Interdisciplinary Studies (BIS)

Bachelor of Arts

Interdisciplinary Studies (BA)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Coordinator:** Dr. Susan Matt
- **Location:** Stewart Library, Room 326
- **Telephone Contact:** Beth Thompson 801-626-7713

- **Website:** weber.edu/bis
- **Program Code:** 1016BA with three concentration codes
- **CIPC:** 30.0000

The Bachelor of Arts/Bachelor of Sciences in Interdisciplinary Studies (BIS) is an interdisciplinary degree program that serves the needs of students who want to create a specific academic program, obtain a broad liberal education, prepare for particular career goals, or go to graduate school. The program best suits students who have developed a sense of their educational and life goals, and who are looking for ways to express those values through an individualized university program.

To accomplish these general outcomes, BIS students complete course work in three different disciplines. As a culminating experience, students then synthesize the three areas in a capstone project. The BIS degree option is available to students in good standing at Weber State University with a GPA of 2.5 or above. Students must formally apply for admittance into the BIS program, and must take 15 credit hours in the program after they are accepted.

Program Requirements

- BIS applicants must earn and maintain a 2.5 GPA to graduate with a Bachelors of Arts/Bachelors of Science in Interdisciplinary Studies degree.
- The institution requires that every bachelor's degree candidate earn a total of 120 credit hours, 40 of which must be upper division hours.
- A BIS student can expect to take a minimum of 18 credit hours in each of three areas of emphasis, plus 1 hour for the Introduction to Interdisciplinary Studies and 5 hours for the capstone preparation and project, for a minimum of 60 credits in the BIS program.
- All contract and BIS courses must receive a minimum grade of "C" in order to count towards the BIS degree.
- Only graded classes can be included in the course contract (special exams, CLEP, or credit/no credit may not be included in the BIS contract).
- Courses which are used to satisfy General Education may not be used again in the BIS contract.

Advisement

All prospective students must meet with the BIS Coordinator to plan a course of study, and be admitted into the program. Call 801-626-7713 to schedule an appointment. For more information, see the BIS Web page (weber.edu/bis).

General Education

Refer to Degree Requirements for BA and BS degree requirements. Honors students may elect to fulfill this requirement through the Honors general education option.

Course Requirements for BIS Degree

- BIS 2800 - Foundations of Integrated Studies **Credits: (1)**

Contract of three areas of emphasis: (54 credit hours minimum)

Every BIS student will take a minimum of 18 credit hours in three different academic departments or institutionally recognized disciplines (two of which must offer upper division credit) as approved by the department and the BIS Coordinator. Any change in the course contract must be approved by the chair of the appropriate department and the BIS coordinator.

BIS Capstone and Graduation Preparation Class (3 credit hours)

This class will prepare students to successfully complete the BIS capstone thesis project, and to prepare themselves professionally for careers and graduate school. (Required prerequisite for capstone)

- BIS 3800 - BIS Capstone and Graduation Preparation **Credits: (2)**

BIS Capstone Project: (3 credit hours)

The BIS capstone project gives students the opportunity to integrate their three areas of emphasis into a single thesis. (Required for graduation)

- BIS 4800 - Bachelor of Integrated Studies Senior Capstone **Credits: (3)**

Internship Option

Elective - BIS Internship (1-3 credit hours)

The opportunity to earn 1 to 3 credits for an internship is available to students in the BIS program. Please contact the BIS coordinator for more information.

- BIS 3850 - BIS Internship **Credits: (1-3)**

BIS Departmental Honors

Please see weber.edu/honors/contracts.html for a list of current Departmental Honors contracts and Departmental Honors Advisors. For additional information about the Honors Program, please refer to the Honors Program section of the WSU Catalog.

Bachelor of Science

Interdisciplinary Studies (BS)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Coordinator:** Dr. Susan Matt
- **Location:** Stewart Library, Room 326
- **Telephone Contact:** Beth Thompson 801-626-7713
- **Website:** weber.edu/bis
- **Program Code:** 1016BS with three concentration codes
- **CIPC:** 30.0000

The Bachelor of Arts/Bachelor of Sciences in Interdisciplinary Studies (BIS) is an interdisciplinary degree program that serves the needs of students who want to create a specific academic program, obtain a broad liberal education, prepare for particular career goals, or go to graduate school. The program best suits students who have developed a sense of their educational and life goals, and who are looking for ways to express those values through an individualized university program.

To accomplish these general outcomes, BIS students complete course work in three different disciplines. As a culminating experience, students then synthesize the three areas in a capstone project. The BIS degree option is

available to students in good standing at Weber State University with a GPA of 2.5 or above. Students must formally apply for admittance into the BIS program, and must take 15 credit hours in the program after they are accepted.

Program Requirements

- BIS applicants must earn and maintain a 2.5 GPA to graduate with a Bachelors of Arts/Bachelors of Science in Interdisciplinary Studies degree.
- The institution requires that every bachelor's degree candidate earn a total of 120 credit hours, 40 of which must be upper division hours.
- A BIS student can expect to take a minimum of 18 credit hours in each of three areas of emphasis, plus 1 hour for the Introduction to Interdisciplinary Studies and 5 hours for the capstone preparation and project, for a minimum of 60 credits in the BIS program.
- All contract and BIS courses must receive a minimum grade of "C" in order to count towards the BIS degree.
- Only graded classes can be included in the course contract (special exams, CLEP, or credit/no credit may not be included in the BIS contract).
- Courses which are used to satisfy General Education may not be used again in the BIS contract.

Advisement

All prospective students must meet with the BIS Coordinator to plan a course of study, and be admitted into the program. Call 801-626-7713 to schedule an appointment. For more information, see the BIS Web page (weber.edu/bis).

General Education

Refer to Degree Requirements for BA and BS degree requirements. Honors students may elect to fulfill this requirement through the Honors general education option.

Course Requirements for BIS Degree

- BIS 2800 - Foundations of Integrated Studies **Credits: (1)**

Contract of three areas of emphasis: (54 credit hours minimum)

Every BIS student will take a minimum of 18 credit hours in three different academic departments or institutionally recognized disciplines (two of which must offer upper division credit) as approved by the department and the BIS Coordinator. Any change in the course contract must be approved by the chair of the appropriate department and the BIS coordinator.

BIS Capstone and Graduation Preparation Class (3 credit hours)

This class will prepare students to successfully complete the BIS capstone thesis project, and to prepare themselves professionally for careers and graduate school. (Required prerequisite for capstone)

- BIS 3800 - BIS Capstone and Graduation Preparation **Credits: (2)**

BIS Capstone Project: (3 credit hours)

The BIS capstone project gives students the opportunity to integrate their three areas of emphasis into a single thesis. (Required for graduation)

- BIS 4800 - Bachelor of Integrated Studies Senior Capstone **Credits: (3)**

Internship Option

Elective - BIS Internship (1-3 credit hours)

The opportunity to earn 1 to 3 credits for an internship is available to students in the BIS program. Please contact the BIS coordinator for more information.

- BIS 3850 - BIS Internship **Credits: (1-3)**

BIS Departmental Honors

Please see weber.edu/honors/contracts.html for a list of current Departmental Honors contracts and Departmental Honors Advisors. For additional information about the Honors Program, please refer to the Honors Program section of the WSU Catalog.

Emphasis Option for Bachelor of Interdisciplinary Studies

Occupational and Environmental Health and Safety (BIS)

- **Grade Requirements:** C or better is required in the BIS-emphasis courses. Elected credit/no credit courses may not be counted toward BIS-emphasis hours
- **Credit Hour Requirements:** 18 Credits required
- **Program Code:** 1017
- **CIPC:** 15070

The Occupational and Environmental Health and Safety (OEHS) emphasis is the first part of a two part BIS to prepare the students for a professional career in Occupational Health and Safety. The emphasis will provide the student with basics in occupational safety and health, workplace hazard recognition, ergonomics and human factors, workplace health exposures, risk assessment, and management of OEHS programs.

Required Courses

- OEHS 3520 - Introduction to Occupational Safety and Health **Credits: (3)**
- OEHS 3530 - Workplace Hazard Recognition **Credits: (3)**
- OEHS 3540 - Ergonomics and Human Factors **Credits: (3)**
- OEHS 3550 - Workplace Health Exposures **Credits: (3)**
- OEHS 3560 - Managing Occupational Safety & Health Programs **Credits: (3)**
- OEHS 3570 - Risk Assessment and Management **Credits: (3)**

Occupational Safety (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** C or better is required
- **Credit Hour Requirements:** 18 Credits required
- **Program Code:** 1018
- **CIPC:** 15070

The Occupational Safety (SAFE) emphasis builds upon the Occupational and Environmental Health and Safety (OEHS) emphasis to prepare the student for a professional career in Occupational Health and Safety. The SAFE emphasis explores management topics in greater depth for students to become familiar with safety regulations in industry and construction, accident investigation and prevention, fire safety, hazardous materials management, product stewardship and safety, and environmental management.

Required Courses

- SAFE 3610 - Occupational Safety Regulatory and Legal Compliance **Credits: (3)**
- SAFE 3620 - Occupational Safety Incident Investigation and Analysis **Credits: (3)**
- SAFE 3630 - Environmental Management **Credits: (3)**
- SAFE 3640 - Construction Safety **Credits: (3)**
- SAFE 3650 - Fire Safety and Emergency Management **Credits: (3)**
- SAFE 3660 - Hazardous Materials Management **Credits: (3)**

Minor

Occupational and Environmental Health and Safety Minor

- **Grade Requirements:** The student must earn a grade of C or better
- **Credit Hour Requirements:** 21 (6 classes plus 3 hour internship for the OEHS minor).
- **Program Code:** 1017
- **CIPC:** 150701

The minor in OEHS is earned by taking 7 courses, 3 semester hours each for total of 21 hours. There are 6 didactic courses in addition to a practical internship in occupational health and safety. The courses are held at the University of Utah (UU), taught by instructors at the UU. Students will enroll at WSU and pay WSU tuition, with no requirement to be admitted to the University of Utah. Students from both institutions will attend. Courses are taught in blocks in evenings to accommodate student schedules and to make travel more efficient. Distance based attendance is possible for much of the program.

Students that complete the 6 didactic classes and internship will earn the minor in OEHS. This program is exactly the same courses and requirements for a minor in OEHS at the University of Utah. However, WSU students can complete another 6 didactic courses that are proposed separately for Fall 2024 start date to complete the BIS with OEHS emphasis. There is no equivalent pathway at the University of Utah, Utah State University or other public institution in Utah.

Required Courses

- OEHS 3520 - Introduction to Occupational Safety and Health **Credits: (3)**
- OEHS 3530 - Workplace Hazard Recognition **Credits: (3)**
- OEHS 3540 - Ergonomics and Human Factors **Credits: (3)**
- OEHS 3550 - Workplace Health Exposures **Credits: (3)**
- OEHS 3560 - Managing Occupational Safety & Health Programs **Credits: (3)**
- OEHS 3570 - Risk Assessment and Management **Credits: (3)**
- OEHS 3580 - Occupational and Environmental Health and Safety Internship **Credits: (1-3)**

Center for Community Engaged Learning (CCEL)

Executive Director: Dr. Becky Jo Gesteland

Telephone Contact: Ella Mitchell (801) 626-7737

Location: Center for Community Engaged Learning, Shepherd Union, 324

Website: weber.edu/CCEL

The Center for Community Engaged Learning at Weber State University facilitates both curricular and co-curricular community engaged learning experiences. The main mission of the center is to engage students, faculty and staff members in direct service, civic engagement, and community research to promote civic participation, build community capacity, and enhance the educational process. Community engagement describes the collaboration between Weber State University and our larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity (Carnegie Foundation). Courses designated with the Community Engaged Learning (CEL) attribute are designed to provide students with a structured approach to learning and teaching that connects meaningful community experience with intellectual development, personal growth, and active citizenship. CEL enriches coursework by encouraging students to apply the knowledge and analytic tools gained in the classroom to the pressing issues affecting local communities. Therefore CEL is defined as an activity that involves a collaborative, reciprocal relationship with the community that prepares our students, faculty, staff, and alumni to be engaged citizens by strengthening their democratic values and civic responsibility as they address community issues.

Community engaged learning can be facilitated through one of our three pathways: direct service, civic engagement and community research.

Direct Service experiences often involve working directly with community residents to meet an immediate need. Examples of direct service include, but are not limited to: volunteering to serve meals at a homeless shelter, using academic knowledge to develop an electronic food-monitoring database for a food pantry, serving as a mentor or tutor in a local school or youth development program, cleaning up the banks of the Ogden River, or coaching a city youth sport.

Civic engagement experiences often involve raising awareness about issues of public concern and working more systematically through both political and non-political processes to create change. Examples of civic engagement include, but are not limited to: attending organized discussions about pollution; community organizing; writing a letter to an elected official; engaging others in the process of deliberative democracy; or producing information about community issues.

Community research experiences often involve gathering information *with* and *for* community organizations to solve a pressing community problem or create change. Examples of community research include, but are not limited to: community needs assessment survey; water quality or scientific assessment; or program evaluation for non-profit organizations.

Regardless of the type of community engaged learning experience, students are expected to acquire four CEL outcomes through their experiences: civic knowledge, civic skills, civic values, and civic action. Student learning outcomes, definitions, and measurement rubrics can be found at www.weber.edu/CCEL.

Courses

Community engaged learning is not specific to any one discipline; in fact, CEL courses exist in many disciplines across campus. For example, an Athletic Training class incorporates a service component wherein students are utilizing their knowledge and skills gleaned from class to serve patrons at a local free medical clinic.

Community Engaged Learning courses are designated with the CEL attribute and are listed in the course schedule published online each semester.

Ethnic Studies Program

European Studies Minor Program

Minor

European Studies Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

Coordinator: Dr. Kacy Peckenpaugh

Location: Elizabeth Hall, Room 420

Telephone: 801-626-6345

The European Studies Minor is an interdisciplinary program offered through several WSU departments. Students wishing to minor in European Studies must have their course selection approved by the program coordinator.

- **Grade Requirements:** A grade of "C" or better in each course used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 18 credit hours in addition to two years of college study (or the equivalent) of a European language. Courses taken which are part of the student's major will not count as fulfillment of the minor requirement. Of the total 18 credit hours, only six may be taken in the same department.
- **Program Code:** 3036
- **CIPC:** 050106

Advisement

All students electing the minor are required to meet with the coordinator for approval of all courses to be counted toward fulfillment of the requirements. The coordinator will ascertain that the individual courses selected are eligible to be counted, and that together they form a coherent curriculum of sufficient breadth.

Course Requirements for Minor

The following are required in addition to two years of college study in a European language other than the student's native language, or equivalent proficiency to be demonstrated by the student.

Core requirements (6 credit hours)

Two courses (six credit hours) from the following; courses may not be from the same department:

- WLC 3320 - Applied Language Studies **Credits: (1-3)**
Approved titles offered under FL 3320 are: European Language & Society and European Culture & Community
- HIST 4220 - History of the Middle Ages 300-1300 **Credits: (3)**
- HIST 4230 - Renaissance and Reformation - Europe: 1300-1660 **Credits: (3)**
- HIST 4240 - Absolutism, Enlightenment and Revolution - Europe: 1660-1815 **Credits: (3)**
- HIST 4250 - Nineteenth-Century Europe **Credits: (3)**
- HIST 4260 - Europe in the Age of Total War **Credits: (3)**
- HIST 4280 - History of Christianity in Europe **Credits: (3)**
- GEOG 3590 - Geography of Europe: the Land and People who Built a World Power **Credits: (3)**
- POLS 3210 GLB - Politics in the European Union **Credits: (3)**

Elective requirements (12 credit hours)

Select twelve additional credit hours from the following programs and departments as approved by the program coordinator: Anthropology, Communication, English, Foreign Language, Performing Arts, Business & Economics, Geography, History, Political Science, Philosophy, Sociology, Honors. Courses selected and approved from these departments must have explicit European emphasis and content.

Environmental Studies Minor Program (see Geography)

Emphasis Option for Bachelor of Interdisciplinary Studies

Environmental Studies (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Code:** 3063
- **CIPC:** 030104

The Environmental Studies Minor is an interdisciplinary degree that focuses on the work of science in human activity. The curriculum is rooted in science to ground factual knowledge. However, its trunk is solidly comprised of social science and humanities courses because they teach the application of science in policy-making, business decisions and historical precedent even as they call upon the arts for their expression and upon ethics in consideration of health and social justice issues. The minor reaches across campus because all disciplines play an essential role in shaping environmental thought and action.

Honors Program

Director: (801) 626 6186
Honors Program Coordinator: (801) 626-7591
Administrative Specialist: (801) 626-6230
Location: Stewart Library, Room 324
Website: weber.edu/honors

Honors classes are not harder, just better! We hear this from students in the program all the time. The professors who teach in Honors come from every department and discipline on campus, but they design custom courses for Honors. All of our classes are small, discussion-based, and interdisciplinary. When you take an Honors class, you join faculty and students who think critically and creatively about big ideas and consequential issues. Your learning will be deep and expansive.

Beyond the classroom experience, the Honors Center offers a space to relax and recharge. You'll find that the staff know you and care genuinely about your success.

We don't have restrictions on who can join Honors. If you want to learn, you belong. If you want to be challenged intellectually and inspired, you belong. If you want a meaningful college experience, this program is for you

Mission Statement

The WSU Honors Program is a home to all for intellectually curious and academically adventurous inquisitive students, faculty, and staff. Honors Provides supportive, high-quality interdisciplinary experiences for intellectual and affective development, for academic and cultural expansion. We build habits of learning that support and sustain lifelong engagements with complex questions, issues, and ideas.

Entrance and Exit Requirements

Entrance:

A student may enroll in the Honors Program at any time after enrolling at formal acceptance by the Weber State University Admissions Office and before completion of their final semester. However, in order to take advantage of the many options available, early entrance is recommended. There is not a GPA requirement to join. There are no fees, dues, or pre-requisites.

Exit:

Students must notify their Honors advisor to finalize their Honors contract prior to the fall or spring break of anticipated graduation. Students may view Honors advisors and enroll via the Honors Portal accessible through the eWeber portal or at weber.edu/honors.

Honors Designations

The Honors Program offers three types of Honors designation: Foundation, University and Departmental Honors. Requirements for each are described below.

Foundation Honors

Foundation Honors is available to students earning an associate's or a bachelor's degree, with a GPA of 3.3 or above at time of graduation.

Students must successfully complete 10 credit hours of Honors classes. Check out weber.edu/honors/courses for upcoming classes and weber.edu/honors/requirements for requirements. Contact honors@weber.edu for questions.

University Honors

University Honors is available to students earning an associate's or bachelor's degree, with a GPA of 3.3 or above at time of graduation.

Students must successfully complete 15 credit hours of Honors classes. Check out weber.edu/honors/courses for upcoming classes weber.edu/honors/requirements for requirements. Contact honors@weber.edu for questions.

Departmental Honors

Departmental Honors is available to students majoring in departments with designated Departmental Honors contracts. Specific requirements for participating departments are found in these contracts. Please see the list of current Departmental Honors contracts and Departmental Honors Advisors.

Official recognition for the completion of an Honors designation is subject to timely finalization of the Honors contract as coordinated by the student and verified by the Departmental Honors advisor, and Honors Program Coordinator.

Recognition of the designation will be made on the graduating Honors student's transcript and diploma and will also be entered into the university's commencement program. In the event a student completes Departmental Honors in more than one department, notation of each will be made on the transcript, diploma, and commencement program.

Honors, University

Honors Program: Foundation Honors Requirements

Honors Program Course-Based Learning Outcomes

- Students will demonstrate critical thinking that is curious, open-minded, persistent, and interrogative.
- Students will analyze familiar cultural assumptions and views in context of the world's diverse values, traditions, and belief systems.
- Students will adapt and apply ideas, concepts, skills, methodologies, and/or theories across disciplines.
- Students will write and communicate in clear and compelling ways.

Foundation Honors Requirements

Select one of the following 3-credit intro-level courses:

- HNRS 1110 HU - Introduction to Honors **Credits: (3)**
- HNRS 2110 HU/SS - Intellectual Traditions: Great Ideas of the West in the Classical and Medieval Eras **Credits: (3)**
- HNRS 2120 HU/SS - Intellectual Traditions: Great Ideas of the West in the Modern Era **Credits: (3)**
- HNRS 2130 HU/SS - Intellectual Traditions: Great Ideas of the East **Credits: (3)**

Additional Required courses

Select one of the following 1-credit course required options:

- HNRS 2830 - Directed Readings, Projects, and Research **Credits: (1-3)**
- HNRS 2900 - Honors Colloquium **Credits: (1-3)**
- HNRS 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

And finally, select a total of 6 credit hours from any of the following courses:

Please note that not every course listed is taught this semester. To find the current listing of courses offered in your desired semester, check out weber.edu/honors/courses to see offerings, descriptions, dates, times, and professors.

- HNRS 1110 HU - Introduction to Honors **Credits: (3)**
- HNRS 1500 PS - Perspectives in the Physical Sciences **Credits: (3)**
- HNRS 1510 LS - Perspectives in the Life Sciences **Credits: (3)**
- HNRS 1520 SS - Perspectives in the Social Sciences **Credits: (3)**
- HNRS 1530 CA - Perspectives in the Creative Arts **Credits: (3)**
- HNRS 1540 HU - Perspectives in the Humanities **Credits: (3)**
- HNRS 2010 HU - Exploring Key Concepts in the Disciplines: Humanities **Credits: (3)**
- HNRS 2020 CA - Exploring Key Concepts in the Disciplines: Creative Arts **Credits: (3-6)**
- HNRS 2030 PS - Exploring Key Concepts in the Disciplines: Physical Sciences **Credits: (3)**
- HNRS 2040 LS - Exploring Key Concepts in the Disciplines: Life Sciences **Credits: (3)**
- HNRS 2050 SS/CRE - Exploring Key Concepts in the Disciplines: Social Science **Credits: (3)**
- HNRS 2110 HU/SS - Intellectual Traditions: Great Ideas of the West in the Classical and Medieval Eras **Credits: (3)**
- HNRS 2120 HU/SS - Intellectual Traditions: Great Ideas of the West in the Modern Era **Credits: (3)**
- HNRS 2130 HU/SS - Intellectual Traditions: Great Ideas of the East **Credits: (3)**
- HNRS 2830 - Directed Readings, Projects, and Research **Credits: (1-3)**
- HNRS 2900 - Honors Colloquium **Credits: (1-3)**
- HNRS 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- HNRS 3110 - Great Books **Credits: (3)**
- HNRS 3900 - Honors Colloquium **Credits: (3)**
- HNRS 4830 - Directed Readings: Senior Project Research **Credits: (1-3)**
- HNRS 4990 - Honors Senior Project **Credits: (1-3)**

Honors Program: University Honors Requirements

Honors Program Course-Based Learning Outcomes

- Students will demonstrate critical thinking that is curious, open-minded, persistent, and interrogative.
- Students will analyze familiar cultural assumptions and views in context of the world's diverse values, traditions, and belief systems.
- Students will adapt and apply ideas, concepts, skills, methodologies, and/or theories across disciplines.
- Students will write and communicate in clear and compelling ways.

University Honors Requirements

First, complete Foundation Honors.

- HNRS 1110 HU - Introduction to Honors **Credits: (3)**
- HNRS 2110 HU/SS - Intellectual Traditions: Great Ideas of the West in the Classical and Medieval Eras **Credits: (3)**
- HNRS 2120 HU/SS - Intellectual Traditions: Great Ideas of the West in the Modern Era **Credits: (3)**
- HNRS 2130 HU/SS - Intellectual Traditions: Great Ideas of the East **Credits: (3)**

Then, Complete the following requirements not already taken with Foundation Honors:

Select 3 credits of any course:

- HNRS 1110 HU - Introduction to Honors **Credits: (3)**
- HNRS 1500 PS - Perspectives in the Physical Sciences **Credits: (3)**
- HNRS 1510 LS - Perspectives in the Life Sciences **Credits: (3)**
- HNRS 1520 SS - Perspectives in the Social Sciences **Credits: (3)**
- HNRS 1530 CA - Perspectives in the Creative Arts **Credits: (3)**
- HNRS 1540 HU - Perspectives in the Humanities **Credits: (3)**
- HNRS 2010 HU - Exploring Key Concepts in the Disciplines: Humanities **Credits: (3)**
- HNRS 2020 CA - Exploring Key Concepts in the Disciplines: Creative Arts **Credits: (3-6)**
- HNRS 2030 PS - Exploring Key Concepts in the Disciplines: Physical Sciences **Credits: (3)**
- HNRS 2040 LS - Exploring Key Concepts in the Disciplines: Life Sciences **Credits: (3)**
- HNRS 2050 SS/CRE - Exploring Key Concepts in the Disciplines: Social Science **Credits: (3)**
- HNRS 2110 HU/SS - Intellectual Traditions: Great Ideas of the West in the Classical and Medieval Eras **Credits: (3)**
- HNRS 2120 HU/SS - Intellectual Traditions: Great Ideas of the West in the Modern Era **Credits: (3)**
- HNRS 2130 HU/SS - Intellectual Traditions: Great Ideas of the East **Credits: (3)**
- HNRS 2830 - Directed Readings, Projects, and Research **Credits: (1-3)**
- HNRS 2900 - Honors Colloquium **Credits: (1-3)**
- HNRS 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- HNRS 3110 - Great Books **Credits: (3)**
- HNRS 3900 - Honors Colloquium **Credits: (3)**
- HNRS 4830 - Directed Readings: Senior Project Research **Credits: (1-3)**
- HNRS 4990 - Honors Senior Project **Credits: (1-3)**

Take an additional 1-credit group discussion course:

- HNRS 2830 - Directed Readings, Projects, and Research **Credits: (1-3)**
- HNRS 2900 - Honors Colloquium **Credits: (1-3)**
- HNRS 2920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

Finish University Honors With:

Finish University Honors with HNRS 4990. This course is named "Trajectories" and is a reflective portfolio course.

- HNRS 4990 - Honors Senior Project **Credits: (1-3)**

Interdisciplinary Center for Applied Research

Latin American Studies Minor Program

Minor

Latin American Studies Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

Coordinator: Dr. Isabel Asensio

Location: Elizabeth Hall, 230

Telephone: 801-626-6777

The Latin American Studies Minor is an interdisciplinary program offered through a number of cooperating departments and programs including Foreign Languages, History, Geography, Political Science and Philosophy, Psychology, Sociology, Anthropology, Child and Family Studies, English, and Women Studies.

- **Grade Requirements:** A grade of "C" or better in each course used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 18 credit hours in addition to two years of college Portuguese or Spanish or their equivalent.
- **Program Code:** 3000
- **CIPC:** 050107

Courses taken which are part of the student's major will not count as fulfillment of the minor requirement.

Course Requirements for Minor in Latin American Studies

The following are required in addition to two years of college study in Portuguese or Spanish or equivalent proficiency to be demonstrated by the student. Select 18 credit hours chosen from at least three of the following departments.

Child & Family Studies

- FAM 4300 - Latino Child and Family Development **Credits: (3)**

World Languages and Cultures

- SPAN 3060 - Grammar & Composition **Credits: (3)** or
- PTGS 3060 - Grammar & Composition **Credits: (3)**
- SPAN 3160 - Introduction to Literature **Credits: (3)** or
- PTGS 3160 - Introduction to Literature **Credits: (3)**
- SPAN 3320 - Applied Language Studies **Credits: (1-3)** or
- PTGS 3320 - Applied Language Studies **Credits: (1-3)**

- SPAN 3360 - Advanced Grammar **Credits: (3)** or
- PTGS 3360 - Advanced Grammar **Credits: (3)**
- SPAN 3540 - Latin American Environment and Cultures **Credits: (3)** or
- PTGS 3540 - Latin American Environment and Cultures **Credits: (3)**
- SPAN 3550 GLB - Cultural Heritage of Spain **Credits: (3)** or
- PTGS 3550 - Cultural Heritage I **Credits: (3)**
- SPAN 3560 - Cultural Heritage of Latin America **Credits: (3)** or
- PTGS 3560 - Cultural Heritage II **Credits: (3)**
- SPAN 3610 - Peninsular Literature I **Credits: (3)** or
- PTGS 3610 - Literature Survey I **Credits: (3)**
- PTGS 3620 - Literature Survey II **Credits: (3)** or
- SPAN 3620 - Peninsular Literature II **Credits: (3)**
- PTGS 3710 - Business Language I **Credits: (3)** or
- SPAN 3710 - Business Language I **Credits: (3)**
- PTGS 3720 - Language for Specific Purposes I **Credits: (3)** or
- SPAN 3720 CEL - Medical Spanish I **Credits: (3)**
- PTGS 3730 - Language for Specific Purposes II **Credits: (3)** or
- SPAN 3730 CEL - Spanish for Specific Purposes **Credits: (3)**
- PTGS 3740 - Translation I **Credits: (3)** or
- SPAN 3740 - Translation I **Credits: (3)**
- SPAN 4690 - Special Topics in Literature **Credits: (3)**
- PTGS 3715 - Business Language II **Credits: (3)** or
- SPAN 4710 - Business Language II **Credits: (3)**
- PTGS 4740 - Translation II **Credits: (3)** or
- SPAN 4740 - Translation II **Credits: (3)**
- PTGS 4850 - Study Abroad **Credits: (3)** or
- SPAN 4850 - Study Abroad **Credits: (3)**
- SPAN 3615 - Latin American Literature I **Credits: (3)**
- SPAN 3625 - Latin American Literature II **Credits: (3)**
- SPAN 3630 - Literature Poetry **Credits: (3)**
- SPAN 3650 - Literature Periods **Credits: (3)**
- SPAN 3670 - Literature Authors **Credits: (3)**
- SPAN 3690 - Special Topics in Literature **Credits: (1-3)**
- SPAN 4830 - Directed Readings **Credits: (1-3)**

- PTGS 3570 - Special Topics in Culture **Credits: (3)**
- PTGS 3850 - Study Abroad **Credits: (1-6)**

English

- ENGL 3730 - Literatures of Cultures and Places **Credits: (3)** **

History

- HIST 3050 - History of U.S. Latinos **Credits: (3)**
- HIST 4410 - History of Spain and Portugal **Credits: (3)**
- HIST 4630 - Latin American History: Pre-Columbian to Independence **Credits: (3)**
- HIST 4650 - Latin American History Since Independence **Credits: (3)**
- HIST 4670 - History of Mexico **Credits: (3)**
- HIST 4830 - Directed Readings **Credits: (1-3)** **

Geography

- GEOG 3540 - Geography of Latin America and the Caribbean **Credits: (3)**
- GEOG 4800 - Individual Research **Credits: (1-3)** **
- GEOG 4950 - Advanced Regional Field Studies or Field Trips **Credits: (1-3)** **

Political Science

- POLS 3290 GLB - Democratization and Political Transitions **Credits: (3)** **
- POLS 4830 - Directed Readings **Credits: (3)** **
- POLS 4990 - Senior Seminar/Senior Thesis **Credits: (3)** **

Anthropology

- ANTH 3600 - Culture Area Studies **Credits: (1-3)** **
- ANTH 4830 INT - Readings and/or Projects **Credits: (1-3)** **

Note:

*** Acceptable when the emphasis and content are basically Latin American.*

Should other courses relating specifically to Latin America, either of an experimental or of a permanent nature, be added to the curriculum, these courses will be accepted as part of the Latin American Studies Minor Program. Should such courses be part of an academic area not listed above, the new academic area will be added to those presently constituting the Latin American Studies Minor.

Legal Studies Minor Program

Minor

Legal Studies Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

Contact: Dr. Richard Price

Office: Lindquist Hall 146

Website: richardprice@weber.edu

Phone: 801-626-6694

The Legal Studies Minor Program introduces students to the study of law in society from a broad, interdisciplinary perspective.

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" will not be accepted).
- **Credit Hour Requirements:** A minimum of 18 credit hours.
- **Program Code:** 7025
- **CIPC:** 229999

Course Requirement for Minor

Core Course Required (3 credit hours)

- POLS 2400 SS - Introduction to Law and Courts **Credits: (3)**

Additional Courses Required (15 credit hours)

Students must take 15 additional hours with at least two courses from each area. No more than 6 hours (excluding the core requirement) may be lower division. No more than 6 hours (excluding the core requirement) may be taken in any one discipline.

Area I: Contextualizing the Law

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2270 - Argumentation and Debate **Credits: (3)**
- CJ 3270 - Theories of Crime and Delinquency **Credits: (3)** or
- SOC 3270 - Criminology **Credits: (3)**
- CJ 4000 - Critical Legal Studies **Credits: (3)**
- CJ 4065 - Law and Society **Credits: (3)** or
- SOC 4270 - Law and Society **Credits: (3)**
- ECON 1010 SS - Economics as a Social Science **Credits: (3)**
- ENGL 3210 - Advanced College Writing **Credits: (3)** or
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**

- HIST 3210 - U.S. Constitutional History **Credits: (3)**
- PHIL 1250 HU - Critical Thinking **Credits: (3)** or
- PHIL 2200 - Deductive Logic **Credits: (3)**
- PHIL 3200 - Philosophy of Democracy **Credits: (3)**
- PHIL 4600 - Ethical Theory **Credits: (3)**
- POLS 1100 AI - American National Government **Credits: (3)**
- POLS 3330 - American Political Thought: Contemporary **Credits: (3)**
- POLS 4380 - Modern Political Thought **Credits: (3)**
- POLS 4600 - American Congress **Credits: (3)**
- POLS 4620 - The U.S. Supreme Court **Credits: (3)**
- POLS 4640 - American Presidency **Credits: (3)**
- POLS 4750 - Public Policy Analysis **Credits: (3)**
- PSY 3850 - Forensic Psychology **Credits: (3)**
- WGS 3050 - Introduction to Feminist Theories 1700 -- Present **Credits: (3)**
- HIST 3220 - History of the Bill of Rights **Credits: (3)**

Area 2: Law Courses

- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- FAM 3150 - Consumer Rights and Responsibilities **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- CJ 1330 - Criminal Law and Courts **Credits: (3)**
- CJ 2350 - Laws of Evidence **Credits: (3)**
- CJ 4165 - Constitutional Rights **Credits: (3)**
- CJ 4700 - International Criminal Justice **Credits: (3)**
- PHIL 3250 - Philosophy of Law **Credits: (3)**
- POLS 3400 - LGBTQ Politics **Credits: (3)**
- POLS 4020 - Constitutional Law: Powers **Credits: (3)**
- POLS 4030 - Constitutional Law: Rights **Credits: (3)**
- POLS 4100 - Free Speech **Credits: (3)**
- POLS 4180 GLB - International Law and Organization **Credits: (3)**

Note:

Other courses may be approved by the program director on an individual basis.

See also:

International Politics Minor

Public Administration Minor

Library Teaching & Information Services Department

- **Dean of the Library:** Wendy Holliday
- **Location:** Stewart Library, Room 108A
- **Telephone:** Cathy Christensen 801-626-6405
- **Head of Teaching and Information Services:** Nicole Beatty
- **Telephone:** 801-626-7034

Professors: Shaun Adamson, Wade Kotter; **Associate Professors:** Nicole Beatty, Jason Francis, Edward Hahn; **Assistant Professors:** Ernesto Hernandez, Miranda Kispert, Sarah Langsdon, Diana Meiser, Jamie Weeks

To be successful in a global information society, students must understand how to identify, locate, and critically evaluate information. The Library Teaching & Information Service Department provides instruction and assistance that enable students to effectively access and utilize digital and print information resources to meet their academic, professional and life-long learning needs.

Linguistics Minor Program

Minor

Linguistics Minor/BIS

This program has been suspended pending formal discontinuance and is no longer accepting new students.

Coordinator: John C. Trimble

Location: Elizabeth Hall, Room 422

Telephone: 801-626-6780

The Linguistics Minor is an interdisciplinary program that introduces students the scientific study of language as a complement to a broad range of majors.

- **Grade Requirements:** A grade of "C" or better is required for all courses used toward the minor (a grade of "C-" is not acceptable.)
- **Credit Hour Requirements:** A total of 18.5 credit hours is required for this minor.
- **Program Code:** 3057
- **CIPC:** 239999

Course Requirements for Minor

1. Foundation Course (3 credit hours)

- ENGL 3010 - Introduction to Linguistics **Credits: (3)**

2. Language Structures Course (3-4 credit hours)

Select one of the following

- CS 4110 - Concepts of Formal Languages and Algorithms for Computing **Credits: (4)**

- ENGL 3030 - Structure of English **Credits: (3)**
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing **Credits: (3)**
- PHIL 2200 - Deductive Logic **Credits: (3)**
- FRCH 3220 - Phonetics and Phonology **Credits: (3)** or
- GRMN 3220 - Phonetics and Phonology **Credits: (3)** or
- JPNS 3220 - Phonetics and Phonology **Credits: (3)** or
- PTGS 3220 - Phonetics and Phonology **Credits: (3)** or
- SPAN 3220 - Phonetics and Phonology **Credits: (3)**
- FRCH 3360 - Advanced Grammar **Credits: (3)** or
- GRMN 3360 - Advanced Grammar **Credits: (3)** or
- JPNS 3360 - Advanced Grammar **Credits: (3)** or
- PTGS 3360 - Advanced Grammar **Credits: (3)** or
- SPAN 3360 - Advanced Grammar **Credits: (3)**

3. Sub-Disciplines and Applications of Linguistics Courses (11-12 credit hours)

Select from the following

- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- CS 4500 - Introduction to Artificial Intelligence **Credits: (4)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- EDUC 4250 - Second Language Acquisition: Theories and Implementation **Credits: (3)**
- EDUC 4270 - Literacy Strategies for Teaching English Language Learners **Credits: (3)**
- ENGL 3040 - History of the English Language **Credits: (3)**
- ENGL 4410 - Strategies and Methodology of Teaching ESL/Bilingual **Credits: (3)**
- ENGL 4420 - English Phonology and Syntax for ESL/Bilingual Teachers **Credits: (3)**
- ENGL 4450 - ESL/Bilingual Assessment: Theory, Methods, and Practices **Credits: (3)**
- WLC 3320 - Applied Language Studies **Credits: (1-3) ***
- PSY 3450 - Psychology of Language **Credits: (3)**
- LING 4830 - Directed Readings in Linguistics **Credits: (1-3)**
- LING 4900 - Variable Topics in Linguistics **Credits: (1-3)**

Note:

** "Applied Language Studies" shall be understood to include any version of WLC 3320 whose linguistic content is at least 50%. The coordinator of the minor will make that determination in consultation with the chair of Foreign Languages and the Linguistics Minor Committee.*

4. Senior Reflection (.5 credit hours)

- LING 4990 - Centering Experience **Credits: (.5)**

Note:

Students may take no more than eight hours with the same prefix (beyond the Foundations course).

Neuroscience Minor Program

Minor

Neuroscience Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

Neuroscience is the interdisciplinary scientific study of the central and peripheral nervous systems in an effort to understand the biological basis of behavior, thinking, emotion, memory, and perception.

- **Credit Hour Requirements:** A minimum of 18 credit hours as described below.
- **Grade Requirements:** A grade of "C" or better in courses used toward the Minor (a grade of "C-" is not acceptable). Two courses with the "NEUR" prefix must be completed. Courses cannot count for both your major and the Neuroscience minor if they are required for your major (the 18 credits for the Neuroscience minor must be unique with the exception of ZOOL 3300 - Genetics).
- **Program Code:** 7044
- **CIPC:** 261599

Advisement

For advisement, contact the Neuroscience Program Director who will help you select courses that will compliment your major.

- **Director:** Dr. Aminda O'Hare, 801-626-6729
- **Location:** Lindquist Hall 391
- **Telephone Contact:** Roe Schoof, 801-626-6293

Requirements

To complete the Neuroscience Minor, the student must complete a minimum of 18 credit hours as follows: a) Introduction to Neuroscience (NEUR 2950), b) one course each from the three content areas (Cognitive/Behavioral, Cellular/Molecular, and Clinical/Medical), c) 6 credits of electives, and d) one science lab course. Students are required to complete at least 2 NEUR-prefix courses (one is NEUR 2950).

With approval of the Neuroscience Program Director and the applicable Department Chair, students may apply credits from one of the required courses of either Area 3 or Area 5 towards both their minor and major to offset the number of prerequisites necessary for courses in these areas. Only one course total may be applied to the minor and major, and only after the appropriate approvals have been received.

1. Foundation Course

- NEUR 2950 - Introduction to Neuroscience **Credits: (3)**

2. Cognitive and Behavioral Area

Select one of the following courses:

- NEUR 3750 - Cognitive and Behavioral Neuroscience **Credits: (3)**
- PSY 3730 - Perception **Credits: (3)**

3. Cellular and Molecular Area

Select one of the following courses:

- CHEM 3070 - Biochemistry I **Credits: (3)**
- CHEM 3075 - Biochemistry I Lab **Credits: (1)**
- NEUR 3950 - Cellular and Molecular Neuroscience **Credits: (3)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**
- ZOOL 4100 - Vertebrate Embryology **Credits: (4)**

4. Clinical and Medical Area

Select one of the following courses:

- HTHS 2240 - Introduction to Pharmacology **Credits: (3)**
- HTHS 3240 - Pharmacology Principles and Clinical Applications **Credits: (3)**
- NEUR 3850 - Clinical Neuroscience **Credits: (3)**
- PSY 3740 - Neuropsychopharmacology **Credits: (3)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**

5. Electives

Select six (6) credit hours from the following options:

- BTNY 2600 - Laboratory Safety **Credits: (1)** or
- CHEM 2600 - Laboratory Safety **Credits: (1)** or
- GEO 2600 - Laboratory Safety **Credits: (1)** or
- PHYS 2600 - Laboratory Safety **Credits: (1)** or
- MICR 2600 - Laboratory Safety **Credits: (1)**
- ANTH 1020 LS/SUS - Biological Anthropology **Credits: (3)**
- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- BTNY 2303 - Ethnobotany **Credits: (3)**
- CHEM 1120 - Elementary Organic Bio-Chemistry **Credits: (4)** and
- CHEM 1125 - Elementary Organic Bio-Chemistry Lab **Credits: (1)**
- CHEM 1130 PS - Introduction to General, Organic & Biochemistry **Credits: (4)** and
- CHEM 1135 - Introduction to General, Organic & Biochemistry Lab **Credits: (1)**
- CHEM 2310 - Organic Chemistry I **Credits: (4)** and

- CHEM 2315 - Organic Chemistry I Lab **Credits: (1)**
- CHEM 2320 - Organic Chemistry II **Credits: (4)** and
- CHEM 2325 - Organic Chemistry II Lab **Credits: (1)**
- CHEM 3070 - Biochemistry I **Credits: (3)**
- CHEM 3080 - Biochemistry II **Credits: (3)**
- CHEM 3090 - Biochemical Techniques **Credits: (1)**
- CHEM 4250 CRE - Medicinal Chemistry **Credits: (3)**
- CS 4500 - Introduction to Artificial Intelligence **Credits: (4)**
- EET 1110 - Basic Electronics **Credits: (2)**
- AVET 4040 - Signals and Systems **Credits: (4)**
- HLTH 3100 - Applications of Technology in Health Promotion **Credits: (3)**
- HLTH 3160 - Principles of Health Behavior **Credits: (3)**
- HLTH 4013 - Health Promotion Research and Assessment **Credits: (3)**
- HTHS 1101 - Medical Terminology **Credits: (2)**
- HTHS 2110 LS - Integrated Human Anatomy and Physiology I **Credits: (4)** and
- HTHS 2111 - Integrated Human Anatomy and Physiology II **Credits: (4)**
- HTHS 2230 - Introductory Pathophysiology **Credits: (3)**
- HTHS 2240 - Introduction to Pharmacology **Credits: (3)** or
- HTHS 3240 - Pharmacology Principles and Clinical Applications **Credits: (3)**
- MICR 3254 - Immunology **Credits: (4)**
- MICR 3305 - Medical Microbiology **Credits: (5)**
- MICR 4154 - Microbial Genetics **Credits: (4)**
- MICR 4253 - Cell Culture **Credits: (3)** (*crosslisted with BTNY*)
- MICR 4554 - Virology **Credits: (4)**
- MLS 1113 - Introduction to Medical Laboratory Practices **Credits: (4)**
- MLS 4803 CRE - Research Projects in Medical Laboratory Sciences I **Credits: (2)**
- MLS 4804 CRE - Research Projects in Medical Laboratory Sciences II **Credits: (2)**
- NEUR 4800 CRE - Projects and Research **Credits: (1-3)**
- NEUR 4830 - Directed Readings **Credits: (1-3)**
- NEUR 4900 - Topics in Neuroscience **Credits: (1-3)**
- NEUR 4949 - The Neuroscience of Sex, Romance, and Gender **Credits: (3)** (*Crosslisted with QS*)
- PHIL 3350 - Medical Ethics **Credits: (3)**
- PHYS 3190 CRE - Applied Optics **Credits: (3)**
- PHYS 3410 - Electronics for Scientists **Credits: (4)**
- PHYS 3420 - Data Analysis, Statistics, and Instrumentation **Credits: (3)**

- PSY 2710 - Biopsychology **Credits: (3)**
- PSY 2830 CRE - Directed Readings **Credits: (1-3)** (3 credit hours required)
- PSY 3240 - The Psychology of Drug Use and Abuse **Credits: (3)**
- PSY 3730 - Perception **Credits: (3)**
- PSY 3740 - Neuropsychopharmacology **Credits: (3)**
- PSY 4800 INT CRE - Projects and Research **Credits: (1-3) ‡**
- PSY 4830 INT CRE - Directed Readings **Credits: (1-3) ‡**
- PSY 4900 - Selected Topics in Psychology **Credits: (2-3) ‡**
- PSY 4910 - Senior Thesis **Credits: (3) ‡**

- ZOOL 2320 - Human Anatomy **Credits: (4)**
- ZOOL 2420 LS - Human Physiology **Credits: (4)**
- ZOOL 3200 - Cell Biology **Credits: (4)**
- ZOOL 3300 - Genetics **Credits: (4)**
- ZOOL 3600 - Comparative Physiology **Credits: (4)**
- ZOOL 4050 - Comparative Vertebrate Anatomy **Credits: (4)**
- ZOOL 4100 - Vertebrate Embryology **Credits: (4)**
- ZOOL 4120 - Histology **Credits: (4)**
- ZOOL 4220 - Endocrinology **Credits: (4)**
- ZOOL 4300 - Research Applications in Genetics **Credits: (4)**
- ZOOL 4350 - Animal Behavior **Credits: (4)**
- ZOOL 4800 - Research in Zoology **Credits: (1-4) ‡**
- ZOOL 4830 - Readings in Zoology **Credits: (1-4) ‡**
- ZOOL 4700 - Topics in Zoology **Credits: (1-4) ‡**
- NEUR 4444 - Human Neuroanatomy **Credits: (3)**

‡Note:

Courses denoted with ‡ must have a significant neuroscience focus in order to qualify as an elective towards the neuroscience minor. Approval by the Neuroscience Program Director is required in advance.

Area 6: Lab Requirement

Students must complete at least one science lab course (in any subject) to complete the neuroscience minor. This can be included as part of a course or as a separate lab course.

Area 7: Graduation Sign Off

Students must meet with the program director.

Office of Undergraduate Research (OUR)

Director: Therese Cavlovic

Telephone Contact: Erin Kendall (801) 626-8541

Location: Stewart Library, 318
Internet Address: weber.edu/OUR

Weber State University offers undergraduates the opportunity to work directly with faculty on projects that involve research, scholarly and creative activities. These projects are designed and implemented by students with the support and guidance of WSU faculty. Undergraduate research, and scholarly and creative activities must include:

- inquiry, study or investigation of a question or problem;
- methodology, including safety and ethical practices, appropriate to the discipline;
- relevant, meaningful, and engaging intellectual or creative contribution and/or application to the discipline which is of high-quality and which results in a tangible product (abstract, paper, performance, object) which can be shared or disseminated; and
- on-going supervision and mentoring by individuals with appropriate expertise.

Undergraduate research has long been an important part of the college experience at Weber State University. The Office of Undergraduate Research (OUR) supports students by offering grants for research and travel for dissemination of results; scholarships for a research fellowship program; and financial support for summer research opportunities for students and their mentors. OUR publishes *Ergo*, WSU's undergraduate research journal, sponsors the fall research and engagement symposium, and is a key stakeholder in the spring research and engagement symposium.

Students can enroll in courses with the CRE (curriculum based research experience) attribute. The CRE attribute will be included on the student's transcript along with their course credit. In addition, students can receive recognition on their transcripts (under non-credit course section) with the CRE attribute by participating in a co-curricular undergraduate research experiences.

Sustainability Practices for Research Center (SPARC)

Director: Dr. Alice Mulder
Telephone Contact: Bonnie Christiansen(801) 626-6326
Location: Stewart Library 147
Website: <https://weber.edu/sustainability/sustainability-practices-research-center.html>

Mission Statement

The mission of the Weber State University Sustainability Practices and Research Center is to inform and educate WSU students, faculty, staff and the local and statewide community in order to ensure the sustainability of our region and our world for future generations. The Center serves as a hub to connect campus activities, programs, departments and community partners in order to advance a commitment to sustainability on campus and in the region. It facilitates curricular and co-curricular learning experiences related to sustainability toward the goals of both understanding and working to address the sustainability challenges of our time.

Sustainability at WSU

Weber State is committed to sustainability education and to sustainability in its own operations and practices on its campuses. We are all global and local citizens, intricately interconnected to both natural and human systems.

"Sustainability" is considered at Weber State in an inclusive, holistic sense, recognizing that that environmental, social, and economic health are interdependent and interconnected in both simple and complex ways. Below is WSU's general curriculum-focused definition of sustainability (approved by the Environmental Initiatives Committee (EIC) in 2010):

At Weber State University the goal of sustainability education is for students to gain knowledge and understanding of the intricate linkages between human and natural systems. This includes a recognition that healthy human societies (physically, socially, culturally, politically, and economically) are fundamentally dependent on healthy ecosystems and the sustainable use of natural resources, such that they are available indefinitely for future generations to meet their needs. Included in this goal is for students to learn how to achieve sustainability across these areas.

Learning about the concepts, challenges and potential solutions for sustainability can occur in classes and departments across the university. Many disciplines consider and address issues pertinent to sustainability such as anthropology, automotive technology, botany, construction management, earth science, economics, electrical engineering technology, English, geography, graphic arts, history, interior design, nursing, nutrition, philosophy, political science, physics, sociology, zoology, and many others.

Sustainability Course Designation

The SUS designation on courses stands for "sustainability" and indicates that a course involves some sustainability components, which aim to both further students' understanding of and ability to address real world sustainability challenges. As noted above, sustainability is defined in a pluralistic and inclusive way, encompassing human and ecological health, social justice, secure livelihoods, and a better world for all generations. Learning about sustainability in an array of courses across the curriculum will increase students' awareness and comprehension that healthy human societies are fostered and supported through a complex web of interconnections between their physical, social and economic dimensions.

To see a list of courses that either focus on or include some component related to sustainability (e.g., a case study, module, readings) please visit <https://www.weber.edu/sustainability/courses>.

Urban and Regional Planning Emphasis

Emphasis Option for Bachelor of Interdisciplinary Studies

Urban and Regional Planning Emphasis (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

Coordinator: Dr. Bryan Dorsey

Location: Lindquist Hall 363

Telephone: 801-626-6944

This program provides a special emphasis in Urban and Regional Planning for majors in Botany, Sociology, Geography, Geosciences, Microbiology, Politics, Economics, Zoology, and related fields. The planning emphasis offers students a background in planning by adding a set of core courses to the major of their choice. This allows each student to pursue his discipline and still gain a general understanding of the field of planning.

- **Grade Requirements:** A grade of "C" or better is required for all courses in Urban and Regional Planning (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 18 credit hours.
- **Program Code:** 7037
- **CIPC:** 451201

Urban and Regional Planning Emphasis

Courses Required (6 credit hours)

- GEOG 4410 SUS - Sustainable Land Use Planning **Credits: (3)**
- GEOG 4420 - Advanced Urban and Regional Planning **Credits: (3)**

Electives (12 credit hours)

For students completing both a major and a minor, the requirements of the major field will be reduced by fifteen hours. They will be replaced by 12 hours of interdisciplinary courses selected outside the major field from the following.

- BTNY 1403 LS SUS - Principles of Environmental Science **Credits: (4)** (3 credit hours required)
- GEOG 4400 - Cartography and Map Design **Credits: (3)**
- GEOG 3210 - Urban Geography: The How and Why of Cities **Credits: (3)**
- GEOG 3360 - Economic Geography: Globalization, Development and Conflict **Credits: (3)**
- GEO 3710 - Introduction to Geographic Information Systems **Credits: (4)**
- MICR 1153 LS - Public Health: Sex, Travel, Food, & Drugs **Credits: (3)**
- POLS 3700 - Bureaucratic Politics **Credits: (3)**
- POLS 3750 - Urban Government and Politics **Credits: (3)**
- SOC 3840 - Cities and Urban Life **Credits: (3)**
- SOC 3850 - Race & Ethnicity **Credits: (3)**
- SOC 3300 SUS - Environment and Society **Credits: (3)**

Note:

And a basic statistics course taken in a department of the student's choice.

For students who wish to complete the Planning Emphasis Program in lieu of a minor, GEOG 4410 and GEOG 4420 will be required as well as 12 hours of interdisciplinary courses from the above list outside the major field.

Other courses related to land use planning not listed here are acceptable with approval of advisor. This includes courses transferred in from other colleges or universities and any directed reading or individual research courses in any department where the topic deals primarily with land use planning.

Goddard School of Business & Economics

Dr. Jeremy Oller, Dean

The John B. Goddard School of Business & Economics is a leader in preparing students for careers in business. The Goddard School attracts students from across the nation and around the world who desire a quality education.

Nearly 2000 students are enrolled in undergraduate programs in accounting, finance, business administration [with an emphasis in human resource management], marketing, economics, supply chain management, and management information systems; and more than 240 students pursue degrees in the Master of Accounting and Master of Taxation programs, as well as the Master of Business Administration program. Students should note that the Goddard School is accredited by the Association to Advance Collegiate Schools of Business (AACSB) International, the premier global accrediting agency in business and accounting education.

Courses are designed to reflect the rapidly changing business environment. Dedicated faculty use innovative teaching and learning methods throughout the curriculum. The consequences of the global economic environment and international competitive advantage are addressed at the onset of the curriculum and discussed throughout the program. The key issues of technology, analytics, quality management, ethics, and entrepreneurship are applied in many contexts.

A unique feature in the curriculum is the endowed Ralph Nye Lecture Series. In this Series, business leaders visit Weber State University campus to serve as guest lecturers. A wide variety of speakers include executives who have risen to the top of corporate worlds, entrepreneurs who have nurtured an idea into a viable business, and authors and opinion leaders with special insight into the business environment. These speakers make an invaluable contribution to our educational programs.

Dean: Dr. Jeremy Oller

Location: Wattis Building, Room 201

Telephone Contact: Mary Ann Boles 801-626-7307

Associate Dean: TBA

Location: Wattis Building, Room 201

Telephone Contact: Mary Ann Boles 801-626-7307

Academic Advisors: Natalie Peterson, Erik Hogge, Amanda Feld & Rachel Madden

Telephone: 801-626-6534

Location: Wattis Building, Room 211

Director of Career Services: Brett Merrell 801-626-7914

Location: Wattis Building, Room 213

Department Chairs/Directors

Accounting, Taxation & Finance: Dr. Darcie Costello, 801-626-6433

Business Administration & Marketing: Dr. Jennifer Anderson, 801-332-9706

Supply Chain & Management Information Systems: Dr. Seokwoo Song, 801-626-6462

Economics: Dr. Gavin Roberts, 801-648-9535

Graduate Program Directors

MTax Program: Dr. Eric Smith, 801-626-7562

MAcc Program: Dr. Valerie Chambers, 801-626-6433

MBA Program: Dr. François Carrier, 217-553-1892

Goddard Business Centers Directors

Jerry & Vickie Moyes Center for Supply Chain Excellence: Dr. Benjamin Neve, 801-626-6258

Center for Tax Education & Research: Dr. Eric Smith, 801-626-6041

Center for Leadership in Corporate Social Responsibility

Hall Global Entrepreneurship Center: Dr. Brandon Stoddard, 801-243-0663

Crossroads Economics Center: Dr. Andrew Keinsley and Dr. Valentinas Rudys, 801-626-6066

John B. Goddard School of Business & Economics Mission Statement

Mission

The John B. Goddard School of Business & Economics provides quality undergraduate and graduate education for developing professionals and career-oriented students. Degree programs are grounded in the university's liberal arts tradition and focused on synthesis of theory across disciplines, the application of theory to practice and the enhancement of professional skills. While we are primarily a regional institution, we seek to prepare our students to succeed in the global economy.

Three principles are central to our mission:

Learning

We champion continuous learning through excellent teaching, close student-faculty interaction, small class sizes, assurance of learning processes, and faculty scholarship designed to improve effective teaching.

Research

Our portfolio of faculty intellectual contributions is diverse including application of theory to practice, advancement within and across disciplines, and utilization of research outcomes to further learning.

Community

We enhance our community through the dissemination of best practices, the provision of economic information and analysis, the engagement in professional organizations and societies, and the creation of strategic relationships which expand life-long learning opportunities for our stakeholders.

Vision

We will be a leader among our peer institutions in providing undergraduate and masters level business and economics education. Through the educational experiences we create, our students will be able to transform themselves into leaders who grow their communities and positively impact the world. We will be known for our scholarship, our commitment to the communities we serve, and our ability to prepare capable graduates.

Graduation Requirements

1. **GPA Requirement:** Candidates for Goddard School minors, associate degrees, and bachelor of science degrees must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative Goddard School (major) GPA, must be 2.5 or higher. The WSU grade point average must meet university requirements. *[Students who completed required business or economics coursework before the summer semester of 2025 are allowed a C- as the minimum grade.]*
2. **Residency Requirement:** Any student wishing to attain a certificate, minor, associate's degree, or bachelor's degree from the Goddard School must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Any student pursuing a graduate degree from the Goddard School may apply a maximum of 6 credit hours of graduate credit taken at other AACSB International accredited institutions and completed with a grade of B- or better to the Goddard School's graduate degree requirements. Furthermore, the transferred credit must be approved prior to beginning the program of study. All candidates for degrees must be registered at WSU at least one semester following the last commencement prior to graduation.

Foundations Check

Students are admitted to the John B. Goddard School of Business & Economics upon declaring a degree of study within the school. To ensure progress towards the degree, students intending to pursue a Bachelor of Science, Associate of Science in Business & Economics or minors in Accounting, Economics or Finance must successfully complete BSAD 2899 or ECON 2899.

Criteria for completing BSAD 2899 or ECON 2899:

- Formal admission to Weber State University (WSU)
- Successful completion of ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 (or their equivalent) with a "C" grade or higher
- Successful completion ("C" grade or higher) of Business or Economics Foundations courses
- Declaration of business major, minor or emphasis

Process for completing the Foundations Check:

1. Register for BSAD 2899 or ECON 2899 (for non-business Economics majors only) concurrent with (same semester as) or after final required Business or Economics Foundations courses.
 - a. Complete assignments found in Canvas.

A grade of CR (credit) for 2899 equates to completing the Foundations Check.

2. If you do not meet the criteria to complete the Foundations Check, you will be notified by email on next steps to complete it in the following semester(s).

Advisement

John B. Goddard School of Business & Economics majors are strongly encouraged to pursue advising opportunities in the Goddard School. Receiving timely advisement at critical junctures in an academic program will assist students in choosing the appropriate classes, in the appropriate sequence, and in preparing for employment opportunities.

Advising for:

- Transfer credits, general education, business foundation courses, admission into the Goddard School, major selection, major requirements, minors, second degrees and certificates is provided by the Goddard School's Advising Team: Amanda Feld, WB 211A; Rachel Madden, WB 211B; Natalie Peterson, WB 211C; and Erik Hogge, WB 215. (801) 626-6534 or advisebusiness@weber.edu.

- Major declaration is provided by the Goddard School Advising Center online at <https://weber.edu/business/advising.html>
- Major selection, employment preparation, including internships and resumes, and business etiquette is provided by the Goddard School Career Center, Brett Merrell, WB 213, (801) 626-7914.

Credit Policy

1. **Obsolete Credit:** John B. Goddard School of Business & Economics credits and certain MATH courses (MATH 1050, 1080, 1090, or 1210) earned more than ten (10) years earlier than the proposed date of graduation will not be accepted toward University or major requirements unless validated through a challenge examination or approved by the appropriate academic department chair.
2. **Waiver Requests:** Any exceptions to the printed Goddard School graduation requirements must be approved by the appropriate academic department chair prior to waiving, substituting, or taking the course(s) in question.

Transfer Credit Policy

1. Transfer students should submit transcripts from all institutions of higher education to the Weber State University Admissions office. Student Recruitment at (801) 626-6050 will consult with Admissions to determine which general education credits will be accepted by Weber State. Most courses with a grade of "C" or higher are eligible for credit, including General Education MATH and ENGL Core requirements.
2. Students should establish transfer of general education work prior to meeting with the John B. Goddard School of Business & Economics Advisement Center. The Advising Center will consult with Goddard School academic departments to determine credit toward specific Goddard School requirements and address further transfer issues.
3. The Utah System of Higher Education (USHE) Transfer Credit Guide has been established to indicate articulation of equivalent courses between the in-state public colleges and universities. Credits from business courses transferred from institutions not covered by the USHE Transfer Credit Guide are accepted only if approved by the appropriate Goddard School academic departments. Documentation which allows the Advising Center and department chairs to assess the content of courses taken may be required. This documentation may include: catalogs or bulletins; course outlines or syllabi; and transcripts. In the majority of cases, course credit which is not obsolete (see above) taken at institutions accredited by AACSB International will be accepted and applied to the Goddard School's graduation requirements.
4. The Goddard School may require validation for courses taken at other institutions before credit is applied to Goddard School requirements. This validation may consist of either: passing a challenge exam; or completing the next course in a related sequence with a grade of "C" or better. Validation may be required where upper division credit is sought for lower division course work taken at another institution.
5. Students are reminded that the Weber State catalog states, "Acceptance of credit should not be confused with its application. Transfer credit may or may not apply to Weber State's graduation requirements, regardless of the number of credits transferred. Credit other than that intended wholly to meet general education requirements, will be applied to Weber State's specific degree program requirements upon the recommendation of the appropriate department chair." This means credit that is accepted by Weber State may, or may not, apply to specific requirements within the Goddard School.
6. Students transferring credits from institutions outside the U.S. should follow the guidelines for International Students. Transfer credits should appear on the student's WSU transcript before meeting with the Goddard School Advising Center or major department chair.

Jerry & Vickie Moyes Center for Supply Chain Excellence

The Jerry & Vickie Moyes Center for Supply Chain Excellence provides outstanding educational and professional development opportunities for the Weber State Community. For instance, the Center sponsors a broad range of experiential learning activities including case competitions, international study abroad tours, field consulting studies, and mentored-student-led research. The Center also works closely with the business community to advance supply

chain thinking and practice, offering development seminars on the "Whole-Brain Supply Chain". Finally, the Center funds research in the areas of supply chain collaboration, process improvement, risk, and sustainability. The Center is located in room 205 of the E.O. Wattis Business Building.

Center for Tax Education & Research

The primary mission of the Center for Tax Education & Research is to provide high quality tax education to WSU students, interested members of the community and business professionals. The Center also actively supports tax research efforts by tax faculty, works with employers to supply jobs to Master of Taxation graduates, fosters relationships with alumni, and supports student recruiting efforts. Additionally, the Center offers continuing education programs to tax professionals and engages in other tax-related activities such as providing tax return preparation assistance to qualifying members of the public at no cost through the Volunteer Income Tax Assistance (VITA) program, hosting student tax competitions, and organizing seminars to discuss contemporary issues in taxation.

Center for Leadership in Corporate Social Responsibility

The Center for Leadership in Corporate Social Responsibility is an action-research center within John B. Goddard School of Business & Economics. We work closely with academia, business, partner organizations, and students to understand and promote socially responsible decision-making and research across the 3Ps (People, Planet, Profit). The Center will inspire students and leaders to engage fully with all of the dimensions of socially responsible decision-making in the workplace.

Crossroads Economics Center

We foster an inclusive and dynamic environment where students and the community explore diverse perspectives. We are dedicated to providing complementary educational opportunities related to economic and social issues. We help the community navigate the crossroads of current discussions. We are a catalyst for critical thinking and informed debate, empowering students and the community to engage with nationally and regionally relevant economic, social, and cultural topics. We aim to support our students and the broader community in their pursuit of lifelong learning by offering balanced and diverse perspectives and providing the tools to make meaningful contributions.

Hall Global Entrepreneurship Center

The Hall Global Entrepreneurship Center offers a wide-range of opportunities to motivate, inspire, and provide unique resources to help students achieve their dream of starting a business, or increase their creativity and develop an entrepreneurial mindset, which is highly sought after by today's employers. Entrepreneurship students can qualify for up to \$15,000 in seed funding to help launch a new business. Each year, our center also offers several full-tuition scholarships and nearly \$40,000 in prize money from our various business competitions. Students can also attend our lecture series each semester and learn first-hand about the unique challenges and successes from inspirational, local entrepreneurs.

Bill Child Start-Up Center

The Bill Child Start-Up Center provides entrepreneurship students with a comfortable, collaborative space in which to work on their fledgling businesses. The Center also hosts activities for student clubs, such as the Weber Entrepreneurs Association (WEA), and the Young Subaru Entrepreneurship Lecture Series. Each week, Entrepreneurs-in-Residence hold office hours so that students can talk about their start-ups with entrepreneurs, angel investors, venture capitalists, startup lawyers and other key professionals. The Center is located in room 203 of the E.O. Wattis Building.

Crossroads Economics Center

We foster an inclusive and dynamic environment where students and the community explore diverse perspectives. We are dedicated to providing complementary educational opportunities related to economic and social issues. We help the community navigate the crossroads of current discussions. We are a catalyst for critical thinking and informed debate, empowering students and the community to engage with nationally and regionally relevant economic, social, and cultural topics. We aim to support our students and the broader community in their pursuit of lifelong learning by offering balanced and diverse perspectives and providing the tools to make meaningful contributions.

International Programs

The John B. Goddard School of Business & Economics offers a number of curricular programs and study opportunities designed to enhance the global expertise of our students.

- The Goddard School annually offers faculty-led study abroad programs to countries all over the world. Typical programs are 10 to 14 days in duration.
- The Goddard School is a member of the TransAtlantic Business School Alliance (TABSA), an alliance that unites four European and four U.S. business schools to enable students to have cultural and educational experiences across geographic boundaries. Students may study in a two-to-four-week summer program, in a semester or year-long exchange, or in a double-degree two-year program in which students earn a degree in Business Administration from Weber State University, and a second bachelor's degree from the foreign partner university in international business. The European partners are: KEDGE Business School (Marseille, France); Bremen University of Applied Sciences (Bremen, Germany); University of Hertfordshire (Hatfield, England); and University of Valencia (Valencia, Spain). With respect to tuition, Goddard students attend foreign partner universities as pure exchange students. This means that they pay normal Weber State tuition and fees without any additional tuition charge at the partner institution.
- In addition to TABSA partners, the Goddard School has signed cooperative agreements that allow for student exchanges with universities in the following countries: Austria (IMC University of Applied Science Krems); Belgium (Université Catholique de Louvain); China (Shanghai Normal University); Germany (Hof University of Applied Sciences); Japan (Konan University); South Korea (University of Seoul, Incheon National University, Sookmyung Women's University, Sangmyung University, Kyungpook National University); Poland (University of Warsaw); Spain (University of Alicante). As with TABSA partners, Goddard School students pay normal Weber State tuition without any additional tuition charge.
- The Goddard School offers an International Certificate which may be awarded with a baccalaureate degree offered by the School. This program description can be found under Institutional Certificate in the Degrees and/or Major Minor list.

Department of Business Administration and Marketing

Department Chair: Jennifer Anderson

Location: Wattis Business Building, Room 216

Telephone Contact: 801-626-6075

Email: bsad@weber.edu

Professors: Anthony Allred, Clinton Amos, Michael J. Stevens; **Associate Professors:** Alicia Ingersoll, Jennifer Anderson, Skyler King, David Noack, Bryant Thompson; **Assistant Professor:** Atmadeep Mukherjee, Benjamin Phifer; **Instructors:** Brandon Stoddard, Matthew Thue

Business Administration

The Business Administration (BSBA) degree is a general management degree. This major has been described as an undergraduate MBA because of its emphasis on breadth of education across all of the functional areas of business. This degree would be especially appropriate for students who wish to prepare for a generalist career in management rather than a focused career in a specialized area of business such as finance or marketing. It is also a very appropriate degree for the entrepreneurial students who aspire to start or run their own business one day.

Business Administration Human Resource Management (HRM) Emphasis

The student who concentrates in Human Resource Management prepares to apply the knowledge and skills needed to design, manage and deliver key organizational HRM functions. Through this, the HRM professional aids the effective alignment of people management objectives with organizational strategy for the purpose of increasing organizational efficiency and effectiveness. In addition to the John B. Goddard School of Business & Economics core requirements, the HRM student studies organizational behavior, leadership and teamwork skills, continuous improvement, effective communication, and information technology. HRM students will also take specialized courses in employment and labor law, employee training & development, recruitment & hiring decisions, and compensation & benefits.

Marketing

This is the only marketing program on WSU's campus. Students concentrating in marketing specialize in course work that deals with business activities involved in developing, communicating, delivering, and exchanging value for all stakeholders.

Courses provide students with traditional and digital marketing concepts and experience in applying them. These courses prepare students to assume responsible positions in industry. Those desiring careers in marketing research or higher levels of corporate management are well prepared to enter graduate programs of their choice.

Associate of Science

Entrepreneurship (AS)

The Hall Global Entrepreneurship Center in the Goddard School of Business and Economics at Weber State University offers an Associate of Science (AS) degree in Entrepreneurship that partners with various Departments and Colleges across campus to deliver a more effectual and compelling learning opportunity for students. In addition to a 16-credit entrepreneurial core, this new degree will allow learners the opportunity to select a predetermined nine-credit emphasis they are interested in studying (e.g. Business, Communications, Computing, Outdoor Recreation, and Product Design and Development). This along with the already required general education course load will fulfill AS expectations. The degree will give students the opportunity to explore a major study area, learn how to think and act more innovatively and encourage them to continue their education and work towards a Bachelor's Degree.

- **Program Prerequisites:** Acceptance into Weber State University.
- **Credit Hour Requirements:** A total of 60 credit hours is required; a minimum of 20 of these is required in residence (for transfer students).
- **Grade Requirements:** A minimum grade of "C" will be accepted in courses used to satisfy the associate's degree requirements, the WSU overall GPA requirements must also be met.
- **Program Code:** 4010AS with one of the following emphasis codes: 4058(Product Design and Development), 4059(Computer Science), 4060(Communications), 4061 (Outdoor & Community Recreation), 4062 (Psychological Science), 4063 (Business)
- **CIPC:** 520701

Advisement

- Students should contact advisors in the college of their emphasis area.
- Students interested in continuing studies in the in the Goddard School of Business and Economics beyond an Associate's Degree in Entrepreneurship should select the following General Education courses:
 1. General Education Core - Quantitative Literacy (QL) requirement: MATH 1050 College Algebra OR MATH 1090 Business College Algebra.
 2. General Education Breadth - Social Science (SS) 1 of 2 needed requirements: ECON 2010 Principles of Microeconomics OR ECON 2020 Principles of Macroeconomics.

Admission Requirements

- Students who plan to complete an A.S. in Entrepreneurship should meet with the relevant program advisor. Refer to Degree Requirements for Associate of Science requirements. The following courses required for the Entrepreneurship AS program will satisfy general education as we all required and optional entrepreneurship and specific track courses.
- Students should complete the AS program in two years.

Program Learning Outcomes

1. Satisfy student demand for Associate of Science-level programs that are supported by the Utah Department of Workforce Services.
2. Provide students with shorter-term goals or milestones along the way to a 4-year degree.
3. Contribute to Weber State University's vision in achieving transformative experiences for students as it looks to promote student achievement, equity and inclusion, as well as create transformative and experiential learning opportunities, and vibrant community relationships through this unique pathway.
4. Enable students to obtain positive labor market outcomes with respect to earnings and unemployment rates for associate's degrees compared to those with some college but no awarded degree.
5. Allow students to refine critical thinking and problem solving skills and improve creative and innovative thinking ability as they utilize an entrepreneurial mindset.

Entrepreneurship Core

- ENTR 1002 - Startup Innovation **Credits: (3)**
- ENTR 2002 - Marketing Strategy for Small Business **Credits: (1)**
- ENTR 2003 - Marketing Execution for Small Business **Credits: (1)**
- ENTR 2004 - Branding for Small Business **Credits: (1)**
- ENTR 2005 - Product to Market **Credits: (1)**
- ENTR 2006 - E-Commerce for Small Business **Credits: (1)**
- ENTR 2007 - Product Design & Prototyping for Small Business **Credits: (1)**
- ENTR 2008 - Legal Foundations for Small Business **Credits: (1)**
- ENTR 2009 - Money Management for Small Business **Credits: (1)**
- ENTR 2010 - Funding For Small Business **Credits: (1)**
- ENTR 2011 - Results-Focused Leadership **Credits: (1)**
- ENTR 2012 - People Management for Small Business **Credits: (1)**
- ENTR 2550 - Scale & Exit **Credits: (3)**

Select an Emphasis:

- Business Emphasis
- Communications Emphasis
- Computer Science Emphasis
- Outdoor & Community Recreation Education Emphasis
- Product Design and Development Emphasis
- Psychological Science Emphasis

Bachelor of Science

Business Administration (BS)

- **Program Prerequisites:** Most business and economics courses with numbers above 3000 require formal admission to the John B. Goddard School of Business & Economics and completion of ACTG 2010, ACTG 2020, BSAD 2620, ECON 2010, ECON 2020, MIS 2010, and QUAN 2600. These seven courses are referred to collectively as "Business Foundations." (Refer to John B. Goddard School of Business & Economics Requirements.)
- **Minor:** Not required.
- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative John B. Goddard School of Business & Economics (major) GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Website:** <https://weber.edu/business/business-administration-marketing.html>
- **Program Code:** 4011BS
- **CIPC:** 520201

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements. The following courses required for the Business Administration major will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (English Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

Program Learning Outcomes

- Graduates will be able to demonstrate proficient communication skills.

- Graduates will exhibit knowledge of theoretical concepts, ideas, and topics taught in the areas of Business Administration & Management, Human Resource Management, Management Information Systems, Marketing, Finance, and Supply Chain Management.
- Graduates will become proficient in interpersonal/human relation skills while acquiring the ability to effectively work in a team environment.

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. All degree programs within the Goddard School follow the same general pattern which is composed of five required elements: (1) Liberal Support Curriculum, (2) Business Foundations, (3) Admission and Major Declaration, (4) Business Core, and (5) Major Discipline.

1. Liberal Support Curriculum (6-7 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

Complete one of the following English courses:

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- ENGL 2015 EN2 - Intermediate College Writing & Research **Credits: (4)**

Complete one of the following Math courses:

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1090 QL - Business College Algebra **Credits: (3)**

ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

2. Business Foundations Curriculum (17 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the Major course work required. Generally, students should begin taking courses within their major area *before* completing all of the courses in the Business Core. Refer to department degree maps for assistance in course sequencing.

The Business Foundations Curriculum provides the base for all business and economic degree programs and should be completed early in the student's academic studies. To satisfy the Business Foundations requirement, courses must be completed with a grade of "C" or higher.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**

- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**

3. Foundation Check (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate foundations check course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate foundations check course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **Credits: (0)** or
- ECON 2899 - Economics Foundations Check **Credits: (0)** (*for non-business Economics majors only*)

Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

4. Business Core (33-34 credit hours)

The Business Core exposes students to the traditional areas of business and provides the competencies needed to analyze problems and interact with individuals from different units of an organization.

Everyone working in business needs a knowledge of these areas. Students should take course work within the Business Core as they are completing the courses within the Major Discipline. Many of the courses in the Business Core are prerequisites for other classes. Keeping this in mind and using department degree maps will assist students in course sequencing.

Required Core Courses

- QUAN 3610 - Business Statistics II **Credits: (3)**
- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)**
- FIN 3200 - Financial Management **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- BSAD 4780 - Strategic Management **Credits: (3)** *

**BSAD 4780 should be taken near the conclusion of the program of study.*

One of the following Communication courses:

- MGMT 3200 - Managerial Communications **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**

- SCM 3200 - Supply Chain Relational Skills **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3530 - The Literature of Business and Economics **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)** and
- ECON 4980 CRE - Research Methods **Credits: (3)**

One of the following International courses:

- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- MIS 3710 GLB - Global Issues in Information Technology **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**

Note

The International Core Course requirement may be fulfilled by a Study Abroad or Exchange Program. See the chair of the program for approval.

5. Major Course Requirements for BS Degree (27 credit hours)

Major Courses Required (12 credit hours)

- MGMT 3300 - Human Resource Management **Credits: (3)**
- MGMT 4300 - Leadership and Group Effectiveness **Credits: (3)**
- MGMT 4400 - Advanced Organizational Behavior **Credits: (3)**
- MIS 2030 - Introduction to Business Analytics **Credits: (3)**

Major Electives (9 credit hours)

One Marketing course

- MKTG 3100 - Consumer Behavior **Credits: (3)**
- MKTG 3200 - Selling and Sales Management **Credits: (3)**
- MKTG 3450 - Promotion Management **Credits: (3)**
- MKTG 3500 - Services and Sports Marketing **Credits: (3)**
- MKTG 4400 - Marketing Strategy **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)** (if not used above as International course)
- MKTG 4200 - Digital Marketing **Credits: (3)**
- BSAD 3500 - Introduction to Business Research **Credits: (3)**

One Supply Chain Management Course

- SCM 3500 - Spreadsheet Modeling for Prescriptive Analytics **Credits: (3)**
- SCM 3400 - Quality Management and Process Improvement **Credits: (3)**

One other course from Accounting/Economics/Finance

- FIN 3350 - Financial Institutions **Credits: (3)**
- FIN 3500 - Capital Budgeting **Credits: (3)**
- FIN 4400 - Financial Problems - Corporate Finance **Credits: (3)**
- ECON 3400 - Labor Economics **Credits: (3)**
- ECON 3200 - Money and Banking **Credits: (3)**
- ACTG 3750 - Accounting & Information Systems **Credits: (3)**

Two General Electives (6 credit hours) from list of approved courses

- MGMT 3350 - Employment and Labor Law **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)** (if not used above as International course)
- MGMT 3450 - Business Studies Abroad-International Management **Credits: (3)** (if not used above as International course)
- MGMT 3550 - The Cultural Environment of International Business **Credits: (3)** (if not used above as International course)
- MGMT 4310 - Compensation and Benefits **Credits: (3)**
- MGMT 4320 - Staffing Organizations **Credits: (3)**
- MGMT 4350 - Training **Credits: (3)**
- MGMT 4860 - Management Internship **Credits: (3)**
- MGMT 4865 INT - Human Resource Internship **Credits: (3)**
- MGMT 4650 - Negotiations **Credits: (3)**
- SCM 3500 - Spreadsheet Modeling for Prescriptive Analytics **Credits: (3)** (if not used above as Supply Chain Management course)
- SCM 3400 - Quality Management and Process Improvement **Credits: (3)** (if not used above as Supply Chain Management course)
- BSAD 3500 - Introduction to Business Research **Credits: (3)** (if not used above as Marketing course)
- BSAD 3600 - [World Region] Business and Society **Credits: (3)** (if not used above as International course)
- BSAD 4210 - Survey of Business Law **Credits: (3)**
- BSAD 4500 - Entrepreneurship **Credits: (3)**

Business Administration (BS), Human Resource Management Emphasis

- **Program Prerequisites:** Most business and economics courses with numbers above 3000 require formal admission to the John B. Goddard School of Business & Economics and completion of ACTG 2010, ACTG 2020, BSAD 2620, ECON 2010, ECON 2020, MIS 2010, and QUAN 2600. These seven courses are referred to collectively as "Business Foundations." (Refer to John B. Goddard School of Business & Economics Requirements.)
- **Minor:** Not required.
- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative John B.

Goddard School of Business & Economics (major) GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.

- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Website:** <https://weber.edu/business/business-administration-marketing.html>
- **Program Code:** 4009BS
- **CIPC:** 521001

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section in this catalog.

General Education

Refer to the University Degree Requirements for Bachelor of Science requirements. The following courses required for the Business Administration, Human Resource Management emphasis major (BS) will also satisfy general education requirements: ENGL 2010 EN2 or ENGL 2015 (English Composition); MATH 1050 QL or MATH 1090 (Quantitative Literacy); ECON 2010 SS or ECON 2020 SS (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

Program Learning Outcomes

- Graduates will be able to demonstrate proficient communication skills.
- Graduates will exhibit knowledge of theoretical concepts, ideas, and topics taught in the areas of Business Administration & Management, Human Resource Management, Management Information Systems, Marketing, Finance, and Supply Chain Management.
- Graduates will become proficient in interpersonal/human relation skills while acquiring the ability to effectively work in a team environment.

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. All degree programs within the Goddard School follow the same general pattern which is composed of five required elements: (1) Liberal Support Curriculum, (2) Business Foundations, (3) Admission and Major Declaration, (4) Business Core, and (5) Major Discipline.

1. Liberal Support Curriculum (6-7 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

Complete one of the following English courses:

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- ENGL 2015 EN2 - Intermediate College Writing & Research **Credits: (4)**

Complete one of the following Math courses:

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1090 QL - Business College Algebra **Credits: (3)**

ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

2. Business Foundations Curriculum (17 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the Major course work required. Generally, students should begin taking courses within their major area *before* completing all of the courses in the Business Core. Refer to department degree maps for assistance in course sequencing.

The Business Foundations Curriculum provides the base for all business and economic degree programs and should be completed early in the student's academic studies. To satisfy the Business Foundations requirement, courses must be completed with a grade of "C" or higher.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**

3. Foundation Check (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate foundations check course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate foundations check course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **Credits: (0)** or
- ECON 2899 - Economics Foundations Check **Credits: (0)** *(for non-business Economics majors only)*

Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

4. Business Core (33-34 credit hours)

The Business Core exposes students to the traditional areas of business and provides the competencies needed to analyze problems and interact with individuals from different units of an organization.

Everyone working in business needs a knowledge of these areas. Students should take course work within the Business Core as they are completing the courses within the Major Discipline. Many of the courses in the Business Core are prerequisites for other classes. Keeping this in mind and using department degree maps will assist students in course sequencing.

Required Core Courses

- QUAN 3610 - Business Statistics II **Credits: (3)**
- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)**
- FIN 3200 - Financial Management **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- BSAD 4780 - Strategic Management **Credits: (3)** *

**BSAD 4780 should be taken near the conclusion of the program of study.*

One of the following Communication courses:

- MGMT 3200 - Managerial Communications **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**
- SCM 3200 - Supply Chain Relational Skills **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3530 - The Literature of Business and Economics **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)** and
- ECON 4980 CRE - Research Methods **Credits: (3)**

One of the following International courses:

- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- MIS 3710 GLB - Global Issues in Information Technology **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**

Note

The International Core Course requirement may be fulfilled by a Study Abroad or Exchange Program. See the chair of the program for approval.

5. Major Course Requirements for BS Degree (27 credit hours)

Major Courses Required (12 credit hours)

- MGMT 3300 - Human Resource Management **Credits: (3)**
- MGMT 4300 - Leadership and Group Effectiveness **Credits: (3)**
- MGMT 4400 - Advanced Organizational Behavior **Credits: (3)**
- MIS 2030 - Introduction to Business Analytics **Credits: (3)**

Major Required for Emphasis (12 credit hours)

- MGMT 4310 - Compensation and Benefits **Credits: (3)**
- MGMT 4350 - Training **Credits: (3)**
- MGMT 3350 - Employment and Labor Law **Credits: (3)**
- MGMT 4320 - Staffing Organizations **Credits: (3)**

One General Elective (3 credit hours) from list of approved courses

- MGMT 3400 - International Business **Credits: (3)** (if not used above as International course)
- MGMT 3450 - Business Studies Abroad-International Management **Credits: (3)** (if not used above as International course)
- MGMT 3550 - The Cultural Environment of International Business **Credits: (3)** (if not used above as International course)
- MGMT 4860 - Management Internship **Credits: (3)** OR
- MGMT 4865 INT - Human Resource Internship **Credits: (3)**
- MGMT 4650 - Negotiations **Credits: (3)**
- SCM 3500 - Spreadsheet Modeling for Prescriptive Analytics **Credits: (3)**
- SCM 3400 - Quality Management and Process Improvement **Credits: (3)**
- BSAD 3500 - Introduction to Business Research **Credits: (3)**
- BSAD 3600 - [World Region] Business and Society **Credits: (3)** (if not used above as International course)
- BSAD 4210 - Survey of Business Law **Credits: (3)**
- BSAD 4500 - Entrepreneurship **Credits: (3)**

Marketing (BS)

- **Program Prerequisites:** Most business and economics courses with numbers above 3000 require formal admission to the John B. Goddard School of Business & Economics and completion of ACTG 2010, ACTG 2020, BSAD 2620, ECON 2010, ECON 2020, MIS 2010, and QUAN 2600. These seven courses are referred to collectively as "Business Foundations." (Refer to the John B. Goddard School of Business & Economics Requirements.)
- **Minor:** Not required.

- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative Goddard School (major) GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Website:** <https://weber.edu/business/business-administration-marketing.html>
- **Program Code:** 4044BS
- **CIPC:** 521401

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements. The following courses required for the Marketing major (BS) will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (English Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

Program Learning Outcomes

- Understand the contribution of marketing to the business enterprise
- Identify a marketing problem and key influences on that problem, to use appropriate qualitative and quantitative analysis and market research techniques to evaluate the marketing problem, and to evaluate alternative solutions
- Use marketing terminology correctly
- Understand how elements of the marketing mix are influenced by problem/opportunity
- Describe major bases for segmenting consumer and business markets; define and be able to apply the three steps of target marketing: market segmentation, target marketing, and market positioning; understand how different situations in the competitive environment will affect choices in target marketing
- Illustrate how the international trade system, economic, political-legal, and cultural environments in a foreign country affect a company's international marketing decisions
- Identify the major ethical and social concerns associated with marketing

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. All degree programs within the Goddard School follow the same general pattern which is composed of five required elements: (1) Liberal Support Curriculum, (2) Business Foundations, (3) Admission and Major Declaration, (4) Business Core, and (5) Major Discipline.

1. Liberal Support Curriculum (6-7 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

Complete one of the following English courses:

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- ENGL 2015 EN2 - Intermediate College Writing & Research **Credits: (4)**

Complete one of the following Math courses:

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1090 QL - Business College Algebra **Credits: (3)**

ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

2. Business Foundations Curriculum (17 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the Major course work required. Generally, students should begin taking courses within their major area *before* completing all of the courses in the Business Core. Refer to department degree maps for assistance in course sequencing.

The Business Foundations Curriculum provides the base for all business and economic degree programs and should be completed early in the student's academic studies. To satisfy the Business Foundations requirement, courses must be completed with a grade of "C" or higher.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**

3. Foundation Check (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate foundations check course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate foundations check course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **Credits: (0)** or

- ECON 2899 - Economics Foundations Check **Credits: (0)** *(for non-business Economics majors only)*

Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

4. Business Core (33-34 credit hours)

The Business Core exposes students to the traditional areas of business and provides the competencies needed to analyze problems and interact with individuals from different units of an organization.

Everyone working in business needs a knowledge of these areas. Students should take course work within the Business Core as they are completing the courses within the Major Discipline. Many of the courses in the Business Core are prerequisites for other classes. Keeping this in mind and using department degree maps will assist students in course sequencing.

Required Core Courses

- QUAN 3610 - Business Statistics II **Credits: (3)**
- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)**
- FIN 3200 - Financial Management **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- BSAD 4780 - Strategic Management **Credits: (3)** *

**BSAD 4780 should be taken near the conclusion of the program of study.*

One of the following Communication courses:

- MGMT 3200 - Managerial Communications **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**
- SCM 3200 - Supply Chain Relational Skills **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3530 - The Literature of Business and Economics **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)** and
- ECON 4980 CRE - Research Methods **Credits: (3)**

One of the following International courses:

- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- MIS 3710 GLB - Global Issues in Information Technology **Credits: (3)**

- MGMT 3400 - International Business **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**

Note

The International Core Course requirement may be fulfilled by a Study Abroad or Exchange Program. See the chair of the program for approval.

5. Major Course Requirements for BS Degree (27 credit hours)

Major Courses Required (21 credit hours)

- MKTG 3100 - Consumer Behavior **Credits: (3)**
- MKTG 3200 - Selling and Sales Management **Credits: (3)**
- BSAD 3500 - Introduction to Business Research **Credits: (3)**
- MKTG 3450 - Promotion Management **Credits: (3)**
- MKTG 4400 - Marketing Strategy **Credits: (3)**
- MIS 2030 - Introduction to Business Analytics **Credits: (3)**
- MKTG 4200 - Digital Marketing **Credits: (3)**

Elective Courses (6 credit hours)

- MKTG 3500 - Services and Sports Marketing **Credits: (3)**
- MKTG 4300 - Social Media Marketing & Strategy **Credits: (3)**
- COMM 3850 - Advertising **Credits: (3)**
- MKTG 4860 INT - Marketing Internship **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Entrepreneurship (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** A minimum GPA of 2.5 in the minor courses. A course grade of "C" or higher is required for all business and economics courses.
- **Credit Hour Requirements:** A total of 18 credit hours are required for all registered students.
- **Program Code:** 4038
- **CIPC:** 520701

This minor is available to all students. Approval of a minor program by the John B. Goddard School of Business is required.

See the Goddard School Advising Center, WB 211, (801) 626-6534 for advisement.

Required Courses for BIS Entrepreneurship (18)

Students must choose a minimum of 18 credit hours from any of the following courses:

- BSAD 3000 - Small Business Management **Credits: (3)**
- ENTR 1002 - Startup Innovation **Credits: (3)**
- ENTR 2002 - Marketing Strategy for Small Business **Credits: (1)**
- ENTR 2003 - Marketing Execution for Small Business **Credits: (1)**
- ENTR 2004 - Branding for Small Business **Credits: (1)**
- ENTR 2005 - Product to Market **Credits: (1)**
- ENTR 2006 - E-Commerce for Small Business **Credits: (1)**
- ENTR 2007 - Product Design & Prototyping for Small Business **Credits: (1)**
- ENTR 2008 - Legal Foundations for Small Business **Credits: (1)**
- ENTR 2009 - Money Management for Small Business **Credits: (1)**
- ENTR 2010 - Funding For Small Business **Credits: (1)**
- ENTR 2011 - Results-Focused Leadership **Credits: (1)**
- ENTR 2012 - People Management for Small Business **Credits: (1)**
- ENTR 2550 - Scale & Exit **Credits: (3)**

Marketing (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

The marketing BIS examines the process of creating, promoting, and delivering value that builds lasting relationships with customers and stakeholders. The minor offers students an education in the best practices of traditional and digital marketing. The minor is designed to meet the needs and expectations of employers and prepare WSU students for career opportunities in a rapidly expanding field of business.

- **Grade Requirements:** All classes must be passed with a C or higher.
- **Credit Hour Requirements:** A total of 18 credit hours are required for all registered students.

This program is available to all students. BSAD 2899 will be waived for all non-business majors. All courses subject to capacity limitations.

Required Courses for all majors (6 hours):

- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- MKTG 3100 - Consumer Behavior **Credits: (3)**

Elective Courses for all majors (12 hours):

- MKTG 4200 - Digital Marketing **Credits: (3)**
- MKTG 4300 - Social Media Marketing & Strategy **Credits: (3)**
- MKTG 3450 - Promotion Management **Credits: (3)**
- MKTG 3200 - Selling and Sales Management **Credits: (3)**
- MKTG 3500 - Services and Sports Marketing **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- BSAD 3500 - Introduction to Business Research **Credits: (3)**

- MKTG 4400 - Marketing Strategy **Credits: (3)**

Minor

Business Administration for Non-Business Majors Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A cumulative GPA of 2.5 or higher in courses used toward the minor with no grade lower than a 'C' in any course used toward the minor.
- **Credit Hour Requirements:** Minimum of 19 credit hours in approved courses. See the John B. Goddard School of Business & Economics advisor for requirements.
- **Program Code:** 4011
- **CIPC:** 520201

Students pursuing this business administration minor must major in a nonbusiness field.

See the Goddard School Advising Center, WB 211, (801) 626-6534 for advisement.

Courses Requirements for Minor

Required Courses (19 credit hours)

- BSAD 1010 - Introduction to Business **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**

Students choose two from the following (6):

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- BSAD 3200 - Legal Environment of Business **Credits: (3)** or
- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)**
Students choose either BSAD 3200 or BSAD 3330

Students choose three of the following (9):

- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**

Note:

All course prerequisites must also be completed.

Entrepreneurship Minor

- **Grade Requirements:** A minimum GPA of 2.5 in the minor courses. A course grade of "C" or higher is required for all business and economics courses.
- **Credit Hour Requirements:** A total of 15 credit hours are required for all registered students.
- **Program Code:** 4038
- **CIPC:** 520701

See the Goddard School Advising Center, WB 211, (801) 626-6534 for advisement.

Required Courses for Entrepreneurship (15)

Student must choose a minimum of 15 credit hours from any of the following courses:

- BSAD 3000 - Small Business Management **Credits: (3)**
- ENTR 1002 - Startup Innovation **Credits: (3)**
- ENTR 2002 - Marketing Strategy for Small Business **Credits: (1)**
- ENTR 2003 - Marketing Execution for Small Business **Credits: (1)**
- ENTR 2004 - Branding for Small Business **Credits: (1)**
- ENTR 2005 - Product to Market **Credits: (1)**
- ENTR 2006 - E-Commerce for Small Business **Credits: (1)**
- ENTR 2007 - Product Design & Prototyping for Small Business **Credits: (1)**
- ENTR 2008 - Legal Foundations for Small Business **Credits: (1)**
- ENTR 2009 - Money Management for Small Business **Credits: (1)**
- ENTR 2010 - Funding For Small Business **Credits: (1)**
- ENTR 2011 - Results-Focused Leadership **Credits: (1)**
- ENTR 2012 - People Management for Small Business **Credits: (1)**
- ENTR 2550 - Scale & Exit **Credits: (3)**

Leadership Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A minimum GPA of 2.5 in the minor courses. A course grade of "C" or higher is required for all business and economics courses.
- **Credit Hour Requirements:** A total of 18 credit hours are required for all registered students.
- **Program Code:** 4043
- **CIPC:** 521003

Required Courses for all Business Administration Majors (18):

Core Courses (12):

- MGMT 4300 - Leadership and Group Effectiveness **Credits: (3)**
- MGMT 4400 - Advanced Organizational Behavior **Credits: (3)**
- MGMT 4410 - Leadership Through Character **Credits: (3)**

- MGMT 4420 - Critical Thinking for Leaders **Credits: (3)**

Elective Courses (6):

- Students select two leadership-related courses university wide. Approval of elective courses by the Business Administration department is required. Students are responsible for understanding any pre-requisites or conditions for chosen electives.

Required Courses for all Non-Business Administration Majors (18):

Pre-requisite (3):

- COMM 3550 - Organizational Communication **Credits: (3)** or
- HAS 3260 - Healthcare Leadership and Management **Credits: (3)** or
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**

Core Courses (12):

- MGMT 4300 - Leadership and Group Effectiveness **Credits: (3)**
- MGMT 4400 - Advanced Organizational Behavior **Credits: (3)**
- MGMT 4410 - Leadership Through Character **Credits: (3)**
- MGMT 4420 - Critical Thinking for Leaders **Credits: (3)**

Elective Courses (3):

- Students select one leadership-related course university wide. Approval of elective courses by the Business Administration department is required. Students are responsible for understanding any pre-requisites or conditions for chosen electives.

Note:

This minor is available to all students. Approval of a minor program by the John B. Goddard School of Business is required. Approval of elective courses by the Business Administration department is required.

Examples of pre-approved elective courses include:

- Business Administration: Human Resource Management (MGMT 3300); Business Ethics & Environmental Responsibility (BSAD 3330); Management Internship (MGMT 4860); Human Resource Internship (MGMT 4865)
- **Child and Family Studies**: Early Childhood Coaching (ECED 4201, 4202, 4203)
- **Communication**: Interpersonal Communication and Conflict Management (COMM 3050), Listening and Interviewing (COMM 3060), Small Group Facilitation and Leadership (COMM 3100), Advanced Public Speaking (COMM 3120), Organizational Communication (COMM 3550)
- Criminal Justice: Criminal Justice Management (CJ 3020)
- Health Administrative Services: Health Care Administrative and Supervisory Theory (HAS 3260)
- Honors: Great Ideas of the West (HNRS 2110, 2120); Great Ideas of the East (HNRS 2130)

- **Military Science:** Introduction to the Army and Critical Thinking (MILS 1010); Introduction to the Profession of Arm (MILS 1020); Leadership and Decision Making (MILS 2010); Army Doctrine and Team Development (MILS 2020); Leadership Under Fire (MILS 2600)
- **Political Science and Philosophy:** Leadership and the Political Life (POLS 1520); Lobbying: Theory and Practice (POLS 3780); American Presidency (POLS 4640); Classical Political Thought (POLS 4360)
- **Professional Sales:** Developing Team Leadership Skills (PS 3702); Sales Presentation Strategies (PS 3903)
- **Psychology:** Theories of Personality (PSY 3430); Social Psychology (PSY 3460); Psychology of Human Relationships (PSY 2000)
- **Sociology:** Self & Society (SOC 3000); Organizations in Society (SOC 3550); Sociology of Globalization (SOC 4410); Sociology of Work (SOC 4550)

Courses not appearing on the list of pre-approved courses may also be considered as electives pending approval by the Business Administration Department.

See the Goddard School Advising Center, WB 211, (801) 626-6534 for advisement.

Marketing Minor

The marketing minor examines the process of creating, promoting, and delivering value that builds lasting relationships with customers and stakeholders. The minor offers students an education in the best practices of traditional and digital marketing. The minor is designed to meet the needs and expectations of employers and prepare WSU students for career opportunities in a rapidly expanding field of business.

- **Grade Requirements:** A minimum GPA of 2.5 in the minor courses. A course grade of "C" or higher is required for all business and economics courses.
- **Credit Hour Requirements:** A total of 15 credit hours are required for all registered students.
- **Program Code:** 4044
- **CIPC:** 521401

Note: This minor is available to all students. BSAD 2899 will be waived for all non-business majors. Non-business majors please contact Amy Holmes for enrollment. All courses are subject to capacity limitations.

Required Courses for all Majors (6 credit hours)

- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- MKTG 3100 - Consumer Behavior **Credits: (3)**

Elective Courses for all Majors (9 credit hours)

- MKTG 4200 - Digital Marketing **Credits: (3)**
- MKTG 4300 - Social Media Marketing & Strategy **Credits: (3)**
- MKTG 3450 - Promotion Management **Credits: (3)**
- MKTG 3200 - Selling and Sales Management **Credits: (3)**
- MKTG 3500 - Services and Sports Marketing **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- BSAD 3500 - Introduction to Business Research **Credits: (3)**
- MKTG 4400 - Marketing Strategy **Credits: (3)**

MBA Prerequisite Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A minimum GPA of 2.5 in the minor courses. A course grade of "C" or higher is required for all business and economics courses.
- **Credit Hour Requirements:** A total of 25 credit hours is required. Of the 25 hours, 21 hours are required classes and the remaining class of 4 hours is a support course.
- **Program Code:** 4047
- **CIPC:** 520101

Completion of this minor will satisfy the Prerequisite Courses required for Weber State's MBA program. This program will prepare undergraduate students to move directly into an MBA program; at WSU, this will allow students to enter the 39 credit Fast Track program in the Goddard School MBA degree. Note also that neither this minor nor any of the courses within it, guarantee any student admission to WSU's MBA program, or any other MBA program.

All math and Goddard School courses expire after 10 years from the date of completion.

For advising, please contact the Goddard School Advising Center at 801-626-6534 or email advisebusiness@weber.edu

Course Requirements for MBA Prerequisite Minor

Courses Required (21 credit hours)

- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- ACTG 2010 - Survey of Accounting I **Credits: (3) ***
- ACTG 2020 - Survey of Accounting II **Credits: (3) ***
- ECON 2010 SS - Principles of Microeconomics **Credits: (3) ***
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3) ***
- QUAN 2600 SUS - Business Statistics I **Credits: (3) ***
- QUAN 3610 - Business Statistics II **Credits: (3)**

Support Courses Required (4 credit hours)

- MATH 1050 QL - College Algebra **Credits: (4)** OR
- MATH 1090 QL - Business College Algebra **Credits: (3)**

Note:

*MATH 1050 or MATH 1090 can also be completed with a MATH ACT of 26 or higher, ALEKS score of 65-100, Math Accuplacer score of 70 or higher in College Level Math, or a score of 3 or higher on the MATH: Calc AB or BC AP exams.

Department of Economics

Department Chair: Gavin Roberts

Location: Wattis Business Building, Room 226

Telephone Contact: 801-626-6066

Professors: Nazneen Ahmad, Doris Geide-Stevenson, Therese Grijalva, Brandon Koford, John Mbaku, Jeff Steagall; **Associate Professors:** Matthew Gnagey, Andrew Keinsley, Álvaro La Parra-Pérez, Sandeep Rangaraju, Gavin Roberts; **Assistant Professor:** Valentinas Rudys

The Department of Economics offers six different degree programs. The career field selected will determine the educational goals a student must set and will be an important element in deciding which of the many avenues towards a bachelor's degree available in economics is best suited for you.

Economics provides general analysis of decision making where resource constraints are present. Within the area of business, the fields of economics and finance are perhaps the most rigorous in terms of the use and application of mathematical and statistical reasoning. Students with a bachelor's degree in Business Economics are generally prepared to start their careers in any area of business, but are particularly prepared for jobs that call for data analysis, pricing, purchasing, and report writing. Business economists are often employed in private business firms in the financial, retailing, and industrial sectors. A complete career guide is available from the department chairperson. A degree in Business Economics is also regarded by graduate business schools as excellent preparation for advanced work toward an MBA, as well as advanced degrees in other business related disciplines such as human resource management, public administration, finance, and international business. Students seeking an advanced degree in economics, law, other social and behavioral sciences, urban and regional planning, actuarial science, etc., should also investigate the Economics Major.

Center for Economic Education

The Department has established a Center for Economic Education. Its basic function is to help educators in secondary and elementary schools improve their understanding and knowledge of economics. This will assist them in providing their students with the fundamental economic tools needed to evaluate complex national and international events that are a part of their daily existence.

Associate of Science

Business and Economics (AS)

- **Program Description:** The Associate of Science (AS) degree in Business and Economics provides foundational skills and knowledge in accounting, economics, statistics, management information systems, as well as other functional business areas of the students' choice. This skill- and knowledge set will make students more effective business professionals as it introduces communication and analysis tools critical in a professional business environment.
- **Grade Requirements:** Even though a minimum grade of "C" will be accepted in courses used to satisfy the associate's degree requirements, the WSU overall GPA requirements must also be met.
- **Credit Hour Requirements:** A total of 60 credit hours is required; a minimum of 20 of these is required in residence (for transfer students).
- **Program Code:** 4041AS
- **CIPC:** 520601

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

Admission Requirements

Acceptance to the John B. Goddard School of Business & Economics is required for all business majors, minors, emphases and certificates. To be admitted, students must register for BSAD 2899. Students may obtain information regarding admissions from the Goddard School Advising Center, WB 211, (801) 626-6534.

General Education

Refer to Degree Requirements for Associate of Science requirements. The following courses required for the Business and Economics associates will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

Program Learning Outcomes

- Be numerically literate.
- Be able to use the concepts of supply and demand to analyze current economic issues.
- Be able to use the aggregate demand/aggregate supply framework.
- Understand the professional role played by accountants in society
- Effectively utilize the accounting cycle

Major Course Requirements for AS Degree

Courses Required (26 credit hours)

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- BSAD 2899 - Business Foundations Check **Credits: (0)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- QUAN 2400 - Business Calculus **Credits: (3)** or
- MIS 2030 - Introduction to Business Analytics **Credits: (3)** or
- MATH 1210 - Calculus I **Credits: (4)**
- **Elective Credits (3)**

Institutional Certificate

Basic Economic Analysis Certificate of Proficiency

- **Program pre-requisite:** MATH 1050, MATH 1080, MATH 1090, or MATH 1210 with a "C" or higher grade.
- **Grade Requirements:** Students must complete all certificate courses with a grade of "C" or higher.
- **Credit Hours Requirements:** 15 credit hours.

- **Program Code:** 4057CP
- **CIPC:** 450603

Students earning an Economics Analysis Certificate will understand the basic analytical and empirical tools that analysts apply to economic problems. Students will learn how to analyze the choices of firms and consumers in principles microeconomics, will learn how to interpret economy-wide trends in principles of macroeconomics, and will learn to analyze the theoretical economics predictions using data in the statistics classes. For the final class, students will choose an upper division economic course to advance their knowledge further.

The Economics Analysis Certificate is stackable with other credentials that can be earned in the Goddard School of Business & Economics. The certificate earns students credit toward the business core and business fundamentals required for most degrees in the Goddard School of Business & Economics. It also stacks to an Economics Minor. Students will earn 3 SS general education credits in the program, and can also earn 3 AI general education credits if they take ECON 1740.

All courses that make up the Economics Analysis Certificate are offered in Fall and Spring every year. Most of the courses are also offered during the Summer semester. Most course are also offered both face-to-face and virtually on a regular basis.

Advisement

- **Economics Department Chair:** Dr. Gavin Roberts, 801-648-9535
- **Economics Department Administrative Specialist:** Alexa Jones, 801-626-6066
- **Mailing Address:** 1337 Edvalson St., Dept. 3805, Ogden UT 84408
- **Campus Location:** Ogden Campus, Wattis Building, Room 226

Program Prerequisites (3 credit hours)

Complete one of the following courses:

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1080 QL - Pre-calculus **Credits: (5)**
- MATH 1090 QL - Business College Algebra **Credits: (3)**
- MATH 1210 - Calculus I **Credits: (4)**

Required Courses (15 credit hours)

- ECON 1010 SS - Economics as a Social Science **Credits: (3)** or
- ECON 1100 SS - Environmental Issues and Economic Policy **Credits: (3)** or
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)** Or
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- QUAN 3610 - Business Statistics II **Credits: (3)** Or
- MATH 3420 - Probability and Statistics II **Credits: (3)**
- Any ECON Upper Division Elective **Credits: (3)**

International Business & Economics Certificate of Proficiency

- **Program Code:** 4024CP
- **CIPC:** 520601

A student graduating with a Bachelor's Degree in Business or Economics may apply for a certificate of competency in International Business & Economics provided he or she has fulfilled the following criteria:

Program Learning Outcomes

- Recognize and Anticipate how sociocultural differences shape institutions and business decisions
- Recognize and Anticipate how political / economic forces shape institutions and Business Decisions
- Identify the Benefits and Costs of a global economy

Course Requirements for Institutional Certificate of Proficiency

Completion of a program of study approved by the International Program Advisor. This will entail a minimum of 12 credit hours of course work at a GPA of at least 2.5 from the following list of courses:

- ACTG 4801 - Individual Study **Credits: (1-3)**
- ACTG 4802 - Individual Study **Credits: (1-3)**
- ACTG 4803 - Individual Study **Credits: (1-3)**
- ACTG 4810 - Experimental Course **Credits: (1-6)**
- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- BSAD 3600 - [World Region] Business and Society **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- ECON 4800 - Independent Research **Credits: (1-3)**
- ECON 4810 - Experimental Course **Credits: (1-6)**
- MIS 3710 GLB - Global Issues in Information Technology **Credits: (3)**
- MIS 4801 - Individual Projects **Credits: (1)**
- MIS 4802 - Individual Projects **Credits: (2)**
- MIS 4803 - Individual Projects **Credits: (3)**
- MIS 4810 - Experimental Course **Credits: (1-6)**
- MGMT 3400 - International Business **Credits: (3)**
- MGMT 3550 - The Cultural Environment of International Business **Credits: (3)**
- MGMT 4800 - Independent Research **Credits: (1-3)**
- MGMT 4810 - Experimental Course **Credits: (1-6)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**

International Business & Economics Certificate of Proficiency Language Emphasis

A student graduating with a Bachelor's Degree in Business or Economics may apply for a certificate of proficiency in International Business & Economics (Language Emphasis) provided he or she has fulfilled the following criteria:

1. Satisfaction of the requirements for the Certificate in International Business (see International Business & Economics Certificate of Proficiency).
2. Testing at the "Intermediate High" level, or better, on the ACTFL (American Council on Teaching of Foreign Languages) exam, or the departmental language proficiency test, in the chosen language.
3. Completion of the appropriate language for business sequence (2 courses). If the chosen language has only one language for business course, completion of a substitute course approved by the Department of Foreign Languages.
4. Completion of CHNS 3550, FRCH 3550, GRMN 3550, JPNS 3550, PTGS 3550, or SPAN 3550.
 - **Program Code:** 4025CP
 - **CIPC:** 520601

Bachelor of Science

Economics (BS)

- **Program Prerequisite:** Not required.
- **Minor:** A minor taken from the College of Behavioral and Social Sciences, or other minor program approved in advance by the department chairperson is required.
- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative John B. Goddard School of Business & Economics (major) GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation. A total of 40 upper division credit hours are required (courses numbered 3000 and above).
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Website:** <https://weber.edu/business/department-of-economics.html>
- **Program Code:** 4022BS
- **CIPC:** 450603

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements. The following courses required for the Economics major (BS) will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

Program Learning Outcomes

- Economics majors will be numerically literate, and possess strong written and oral communication skills.
- All Economics majors should be able to use statistical methods for problem solving (e.g., hypothesis testing, regression analysis).
- All Economics majors should be able to use the concepts of supply and demand to analyze current economic issues.
- All Economics majors should be able to use the aggregate demand/aggregate supply framework.
- All Economics majors should be able to identify the benefits and costs of a global economy.

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. Non business Economics degree programs within the Goddard School follow the same general pattern which is composed of four required elements: (1) Liberal Support Curriculum, (2) Economics Foundations Curriculum, (3) Admission and Major Declaration, and (4) Major Discipline.

1. Liberal Support Curriculum (7-8 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

- ECON 2010 SS - Principles of Microeconomics **(3)**
- MATH 1050 QL - College Algebra **(4)** or MATH 1090 QL - Business College Algebra **(3)**
- ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.
- MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

*NOTE: Students looking at Quantitative Economics should take MATH 1050 **NOT** MATH 1090 as MATH 1090 does not meet the prerequisite requirement for MATH 1210 Calculus I.*

2. Economics Foundations Curriculum (9 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the major course work required. Refer to department degree maps for assistance in course sequencing.

The Economics Foundations Curriculum provides the base for all economic degree programs and should be completed early in the student's academic studies. To satisfy the Economics Foundations requirement, courses must be completed with a grade of "C" or higher. However, admittance to the Goddard School requires a cumulative GPA of 2.5 or higher for the three Economics Foundation courses.

- ECON 2010 SS - Principles of Microeconomics **(3)**
- ECON 2020 SS - Principles of Macroeconomics **(3)**
- QUAN 2600 SUS - Business Statistics I **(3)**

3. Admissions Process (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate admissions course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate admissions course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **(0)** or
- ECON 2899 - Economics Foundations Check **(0)** *(for non-business Economics majors only)*

4. Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

Major Course Requirements for Economics BS Degree (31 credit hours)

Major Courses Required (16 credit hours)

- ECON 4010 - Intermediate Microeconomic Theory **Credits: (3)**
- ECON 4020 - Intermediate Macroeconomic Theory **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)**
- ECON 4980 CRE - Research Methods **Credits: (3)**
- QUAN 2400 - Business Calculus **Credits: (3)** or
- MATH 1210 - Calculus I **Credits: (4)**
- QUAN 3610 - Business Statistics II **Credits: (3)**

Upper Division Elective Courses (15 credit hours)

Select from the following

- ECON 3090 - History of Economic Thought **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 3200 - Money and Banking **Credits: (3)**
- ECON 3400 - Labor Economics **Credits: (3)**
- ECON 3410 - Women in the World Economy **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- ECON 4320 - Industrial Organization **Credits: (3)**
- ECON 4520 - Public Finance **Credits: (3)**
- ECON 4550 - Introduction to Econometrics **Credits: (3)**
- ECON 4560 - Mathematical Economics **Credits: (3)**
- ECON 4800 - Independent Research **Credits: (1-3)**
- ECON 4810 - Experimental Course **Credits: (1-6)**
- ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ECON 3300 - Environmental Economics **Credits: (3)**

- ECON 4330 - Game Theory **Credits: (3)**

Minor Required (credit hours vary by minor)

*A **minor** taken from the College of Behavioral and Social Sciences, or other minor program approved in advance by the department chairperson is required.*

Economics and Legal Studies (BS)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Not required.
- **Minor:** None required.
- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required economics courses with a grade of "C" or higher. In addition, major GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation. A total of 40 upper division credit hours are required (courses numbered 3000 and above).
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- Website: <https://weber.edu/business/department-of-economics.html>
- **Program Code:** 4049BS
- **CIPC:** 450601

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

Use Grad MAPs to plan your degree

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements. The following courses required for the Economics and Legal Studies major (BS) will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. Non business Economics degree programs within the Goddard School follow the same general pattern which is composed of four required elements: (1) Liberal Support Curriculum, (2) Economics Foundations Curriculum, (3) Admission and Major Declaration, and (4) Major Discipline.

1. Liberal Support Curriculum (7-8 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

- ECON 2010 SS - Principles of Microeconomics **(3)**
- MATH 1050 QL - College Algebra **(4)** or MATH 1090 QL - Business College Algebra **(3)**
- ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.
- MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

*NOTE: Students looking at Quantitative Economics should take MATH 1050 **NOT** MATH 1090 as MATH 1090 does not meet the prerequisite requirement for MATH 1210 Calculus I.*

2. Economics Foundations Curriculum (9 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the major course work required. Refer to department degree maps for assistance in course sequencing.

The Economics Foundations Curriculum provides the base for all economic degree programs and should be completed early in the student's academic studies. To satisfy the Economics Foundations requirement, courses must be completed with a grade of "C" or higher. However, admittance to the Goddard School requires a cumulative GPA of 2.5 or higher for the three Economics Foundation courses.

- ECON 2010 SS - Principles of Microeconomics **(3)**
- ECON 2020 SS - Principles of Macroeconomics **(3)**
- QUAN 2600 SUS - Business Statistics I **(3)**

3. Admissions Process (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate admissions course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate admissions course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **(0)** or
- ECON 2899 - Economics Foundations Check **(0)** *(for non-business Economics majors only)*

4. Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

3. Major Course Requirements for BS Degree (58 credit hours)

Required Courses (31 credit hours)

- ECON 4010 - Intermediate Microeconomic Theory **Credits: (3)**
- ECON 4020 - Intermediate Macroeconomic Theory **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)**
- ECON 4980 CRE - Research Methods **Credits: (3)**
- QUAN 2400 - Business Calculus **Credits: (3)** or
- MATH 1210 - Calculus I **Credits: (4)**
- QUAN 3610 - Business Statistics II **Credits: (3)**
- ENGL 3210 - Advanced College Writing **Credits: (3)**

- PHIL 1250 HU - Critical Thinking **Credits: (3)** or
- PHIL 2200 - Deductive Logic **Credits: (3)**

- MGMT 3200 - Managerial Communications **Credits: (3)** or
- PS 3250 - Business Communication **Credits: (3)** or
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**

- CJ 4065 - Law and Society **Credits: (3)**
or
- SOC 4270 - Law and Society **Credits: (3)**
- POLS 2400 SS - Introduction to Law and Courts **Credits: (3)**

Upper Division Economics Elective Courses (6 credit hours)

Select from the following:

- ECON 3090 - History of Economic Thought **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 3200 - Money and Banking **Credits: (3)**
- ECON 3400 - Labor Economics **Credits: (3)**
- ECON 3410 - Women in the World Economy **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- ECON 4320 - Industrial Organization **Credits: (3)**
- ECON 4520 - Public Finance **Credits: (3)**
- ECON 4550 - Introduction to Econometrics **Credits: (3)**
- ECON 4560 - Mathematical Economics **Credits: (3)**
- ECON 4800 - Independent Research **Credits: (1-3)**
- ECON 4810 - Experimental Course **Credits: (1-6)**
- ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ECON 3300 - Environmental Economics **Credits: (3)**
- ECON 4330 - Game Theory **Credits: (3)**

Law Courses (6 credit hours)

Select from the following:

- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- BSAD 4210 - Survey of Business Law **Credits: (3)**
- FAM 3150 - Consumer Rights and Responsibilities **Credits: (3)**
- CJ 1330 - Criminal Law and Courts **Credits: (3)**
- CJ 2350 - Laws of Evidence **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- POLS 4020 - Constitutional Law: Powers **Credits: (3)**

Law Electives (6 credit hours)

Select from the following:

- COMM 1270 - Analysis of Argument **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- CJ 3270 - Theories of Crime and Delinquency **Credits: (3)**
- HIST 3210 - U.S. Constitutional History **Credits: (3)**
- POLS 4380 - Modern Political Thought **Credits: (3)**
- POLS 4600 - American Congress **Credits: (3)**
- POLS 4750 - Public Policy Analysis **Credits: (3)**

Note:

Due to the cross-disciplinary nature of this program, no minor is required.

Economics, Business (BS)

- **Program Prerequisites:** Most business and economics courses with numbers above 3000 require formal admission to the John B. Goddard School of Business & Economics and completion of ACTG 2010, ACTG 2020, BSAD 2620, ECON 2010, ECON 2020, MIS 2010, and QUAN 2600. These seven courses are referred to collectively as "Business Foundations." (Refer to the John B. Goddard School of Business & Economics Requirements.)
- **Minor:** None required.
- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative John B. Goddard School of Business & Economics (major) GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper division credit hours are required (courses numbered 3000 and above).
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Website:** <https://weber.edu/business/departments-of-economics.html>
- **Program Code:** Business Economics (4017BS)
- **CIPC:** 450603

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements. The following courses required for the Business Economics major (BS) will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

Program Learning Outcomes

- Economics majors will be numerically literate, and possess strong written and oral communication skills.
- All Economics majors should be able to use statistical methods for problem solving (e.g., hypothesis testing, regression analysis).
- All Economics majors should be able to use the concepts of supply and demand to analyze current economic issues.
- All Economics majors should be able to use the aggregate demand/aggregate supply framework.
- All Economics majors should be able to identify the benefits and costs of a global economy.

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. All degree programs within the Goddard School follow the same general pattern which is composed of five required elements: (1) Liberal Support Curriculum, (2) Business Foundations, (3) Admission and Major Declaration, (4) Business Core, and (5) Major Discipline.

1. Liberal Support Curriculum (6-7 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

Complete one of the following English courses:

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- ENGL 2015 EN2 - Intermediate College Writing & Research **Credits: (4)**

Complete one of the following Math courses:

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1090 QL - Business College Algebra **Credits: (3)**

ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard

School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

2. Business Foundations Curriculum (17 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the Major course work required. Generally, students should begin taking courses within their major area *before* completing all of the courses in the Business Core. Refer to department degree maps for assistance in course sequencing.

The Business Foundations Curriculum provides the base for all business and economic degree programs and should be completed early in the student's academic studies. To satisfy the Business Foundations requirement, courses must be completed with a grade of "C" or higher.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**

3. Foundation Check (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate foundations check course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate foundations check course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **Credits: (0)** or
- ECON 2899 - Economics Foundations Check **Credits: (0)** (*for non-business Economics majors only*)

Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

4. Business Core (33-34 credit hours)

The Business Core exposes students to the traditional areas of business and provides the competencies needed to analyze problems and interact with individuals from different units of an organization.

Everyone working in business needs a knowledge of these areas. Students should take course work within the Business Core as they are completing the courses within the Major Discipline. Many of the courses in the Business Core are prerequisites for other classes. Keeping this in mind and using department degree maps will assist students in course sequencing.

Required Core Courses

- QUAN 3610 - Business Statistics II **Credits: (3)**

- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)**
- FIN 3200 - Financial Management **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- BSAD 4780 - Strategic Management **Credits: (3) ***

**BSAD 4780 should be taken near the conclusion of the program of study.*

One of the following Communication courses:

- MGMT 3200 - Managerial Communications **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**
- SCM 3200 - Supply Chain Relational Skills **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3530 - The Literature of Business and Economics **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)** and
- ECON 4980 CRE - Research Methods **Credits: (3)**

One of the following International courses:

- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- MIS 3710 GLB - Global Issues in Information Technology **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**

Note

The International Core Course requirement may be fulfilled by a Study Abroad or Exchange Program. See the chair of the program for approval.

5. Major Course Requirements for BS Degree (24-25 credit hours)

Major Courses Required (12-13 credit hours)

- ECON 4010 - Intermediate Microeconomic Theory **Credits: (3)**
- ECON 4020 - Intermediate Macroeconomic Theory **Credits: (3)**
- QUAN 2400 - Business Calculus **Credits: (3)** or
- MATH 1210 - Calculus I **Credits: (4)**

- ECON 4980 CRE - Research Methods **Credits: (3)** (Prerequisite ECON 4970 (Credits: (1)) * OR
- ECON 4860 INT - Economics Internship **Credits: (1-3)** (3 credit option must be used to fulfill requirement)

Note:

*ECON 4970 and 4980 will complete the communication requirement as part of the business core as well as the required business course for the Business Economics major.

Elective Courses (12 credit hours)

Select from the following:

- ECON 3090 - History of Economic Thought **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 3200 - Money and Banking **Credits: (3)**
- ECON 3400 - Labor Economics **Credits: (3)**
- ECON 3410 - Women in the World Economy **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- ECON 4320 - Industrial Organization **Credits: (3)**
- ECON 4520 - Public Finance **Credits: (3)**
- ECON 4550 - Introduction to Econometrics **Credits: (3)**
- ECON 4560 - Mathematical Economics **Credits: (3)**
- ECON 4800 - Independent Research **Credits: (1-3)**
- ECON 4810 - Experimental Course **Credits: (1-6)**
- ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ECON 3300 - Environmental Economics **Credits: (3)**
- ECON 4330 - Game Theory **Credits: (3)**

International Business Economics (BS)

The International Business Economics program is intended for business and economics majors who are strongly interested in working for a multinational business organization or in employment outside of the United States. Apart from building strong foundations in all business disciplines, the program is designed to provide students with study abroad and professional experiences that are complemented with foreign language skills.

- **Program Prerequisites:** Most business and economics courses with numbers above 3000 require formal admission to the John B. Goddard School of Business & Economics and completion of ACTG 2010, ACTG 2020, BSAD 2620, ECON 2010, ECON 2020, MIS 2010, and QUAN 2600. These seven courses are referred to collectively as "Business Foundations".
- **Minor:** None required.
- **Grade Requirements:** Candidates for the Bachelor of Science degree must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative John B. Goddard School (major) GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.

- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Website:** <https://weber.edu/business/department-of-economics.html>
- **Program Code:** 4040BS
- **CIPC:** 450603

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements. The following courses required for the International Business Economics major (BS) will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

Program Learning Outcomes

- Economics majors will be numerically literate, and possess strong written and oral communication skills.
- All Economics majors should be able to use statistical methods for problem solving (e.g., hypothesis testing, regression analysis).
- All Economics majors should be able to use the concepts of supply and demand to analyze current economic issues.
- All Economics majors should be able to use the aggregate demand/aggregate supply framework.
- All Economics majors should be able to identify the benefits and costs of a global economy.

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. All degree programs within the Goddard School follow the same general pattern which is composed of five required elements: (1) Liberal Support Curriculum, (2) Business Foundations, (3) Admission and Major Declaration, (4) Business Core, and (5) Major Discipline.

1. Liberal Support Curriculum (6-7 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

Complete one of the following English courses:

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- ENGL 2015 EN2 - Intermediate College Writing & Research **Credits: (4)**

Complete one of the following Math courses:

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1090 QL - Business College Algebra **Credits: (3)**

ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

2. Business Foundations Curriculum (17 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the Major course work required. Generally, students should begin taking courses within their major area *before* completing all of the courses in the Business Core. Refer to department degree maps for assistance in course sequencing.

The Business Foundations Curriculum provides the base for all business and economic degree programs and should be completed early in the student's academic studies. To satisfy the Business Foundations requirement, courses must be completed with a grade of "C" or higher.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**

3. Foundation Check (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate foundations check course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate foundations check course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **Credits: (0)** or
- ECON 2899 - Economics Foundations Check **Credits: (0)** *(for non-business Economics majors only)*

Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

4. Business Core (33-34 credit hours)

The Business Core exposes students to the traditional areas of business and provides the competencies needed to analyze problems and interact with individuals from different units of an organization.

Everyone working in business needs a knowledge of these areas. Students should take course work within the Business Core as they are completing the courses within the Major Discipline. Many of the courses in the Business Core are prerequisites for other classes. Keeping this in mind and using department degree maps will assist students in course sequencing.

Required Core Courses

- QUAN 3610 - Business Statistics II **Credits: (3)**
- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)**
- FIN 3200 - Financial Management **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- BSAD 4780 - Strategic Management **Credits: (3) ***

**BSAD 4780 should be taken near the conclusion of the program of study.*

One of the following Communication courses:

- MGMT 3200 - Managerial Communications **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**
- SCM 3200 - Supply Chain Relational Skills **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3530 - The Literature of Business and Economics **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)** and
- ECON 4980 CRE - Research Methods **Credits: (3)**

One of the following International courses:

- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- MIS 3710 GLB - Global Issues in Information Technology **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**

5. Major Course Requirements for BS Degree

This program of study requires students to complete a study abroad experience (at least one semester of study at an accredited university outside of the United States or participation in a minimum of 6 credits of study abroad courses) AND completion of the (Foreign) Language Requirement as defined for the Bachelor of Arts Degree (can be up to 12 credits).

Major Courses Required (15-16 credit hours)

- ECON 4010 - Intermediate Microeconomic Theory **Credits: (3)**
- ECON 4020 - Intermediate Macroeconomic Theory **Credits: (3)** OR
- ECON 3200 - Money and Banking **Credits: (3)** OR
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4980 CRE - Research Methods **Credits: (3)** (Prerequisite ECON 4970 **Credits: (1)**)* OR
- ECON 4860 INT - Economics Internship **Credits: (1-3)** (3 credit option must be used to fulfill requirement)
- MIS 2020 - Introduction to Information Systems **Credits: (3)** OR
- MIS 4850 - Information Systems & Technology Study Abroad **Credits: (1-3)**
- QUAN 2400 - Business Calculus **Credits: (3)** OR
- MATH 1210 - Calculus I **Credits: (4)**

Note:

*ECON 4970 and 4980 will complete the Communication requirement as part of the business core as well as the required business course for the International Business Economics major. MIS 2020 will complete the MIS 2020 requirement as part of the business core as well as the required business course of the International Business Economics major.

Economics Elective Courses (6 credit hours)

Select from the following:

- ECON 3090 - History of Economic Thought **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)** (if not chosen as an international elective)
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)** (if not chosen as a required business course or international elective)
- ECON 3200 - Money and Banking **Credits: (3)** (if not chosen as a required business course)
- ECON 3400 - Labor Economics **Credits: (3)**
- ECON 3410 - Women in the World Economy **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- ECON 4320 - Industrial Organization **Credits: (3)**
- ECON 4520 - Public Finance **Credits: (3)**
- ECON 4550 - Introduction to Econometrics **Credits: (3)**
- ECON 4560 - Mathematical Economics **Credits: (3)**
- ECON 4800 - Independent Research **Credits: (1-3)**
- ECON 4810 - Experimental Course **Credits: (1-6)**
- ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**

- ECON 3300 - Environmental Economics **Credits: (3)**
- ECON 4330 - Game Theory **Credits: (3)**

International Elective Courses (6 credit hours)

Select from the following:

- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3) additional pre-requisites apply**
- ECON 3110 - International Trade **Credits: (3) (if not chosen as an economics elective)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3) OR**
- ECON 3150 - Business Studies Abroad-International Finance **Credits: (3) (if not chosen as a required business course or economics elective)**
- ECON 4170 - Economic Development **Credits: (3) (if not chosen as an economics elective)**
- MIS 3710 GLB - Global Issues in Information Technology **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3) OR**
- BSAD 4850 - Business Administration Study Abroad **Credits: (1-3) OR**
- MGMT 3450 - Business Studies Abroad-International Management **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3) OR**
- MKTG 3700 - Business Studies Abroad - International Marketing **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**
- ECON 4850 - Economics Study Abroad **Credits: (1-3)**
- FIN 4850 - Finance Study Abroad **Credits: (1-3)**
- MGMT 4850 - Management Study Abroad **Credits: (1-3)**
- MKTG 4850 - Marketing Study Abroad **Credits: (1-3)**
- ACTG 4850 - Accounting Study Abroad **Credits: (1-3)**
- SCM 4850 - Supply Chain Management Study Abroad **Credits: (1-3)**
- MIS 4850 - Information Systems & Technology Study Abroad **Credits: (1-3) (if not chosen as a required business class)**

International Economics (BS)

- **Program Prerequisites:** Not required.
- **Minor:** None required.
- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required economics courses with a grade of "C" or higher. In addition, major GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation. A total of 40 upper division credit hours are required (courses numbered 3000 and above).
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Website:** <https://weber.edu/business/departments-of-economics.html>
- **Program Code:** 4050BS

- **CIPC:** 450603

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

Use Grad MAPs to plan your degree

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements. The following courses required for the International Economics major (BS) will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for ECON 2010, QUAN 2400, and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

Course Requirements for International Business Economics BS Degree

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. Non business Economics degree programs within the Goddard School follow the same general pattern which is composed of four required elements: (1) Liberal Support Curriculum, (2) Economics Foundations Curriculum, (3) Admission and Major Declaration, and (4) Major Discipline.

1. Liberal Support Curriculum (7-8 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

- ECON 2010 SS - Principles of Microeconomics **(3)**
- MATH 1050 QL - College Algebra **(4)** or MATH 1090 QL - Business College Algebra **(3)**
- ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.
- MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

NOTE: Students looking at Quantitative Economics should take MATH 1050 NOT MATH 1090 as MATH 1090 does not meet the prerequisite requirement for MATH 1210 Calculus I.

2. Economics Foundations Curriculum (9 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the major course work required. Refer to department degree maps for assistance in course sequencing.

The Economics Foundations Curriculum provides the base for all economic degree programs and should be completed early in the student's academic studies. To satisfy the Economics Foundations requirement, courses must be completed with a grade of "C" or higher. However, admittance to the Goddard School requires a cumulative GPA of 2.5 or higher for the three Economics Foundation courses.

- ECON 2010 SS - Principles of Microeconomics **(3)**
- ECON 2020 SS - Principles of Macroeconomics **(3)**
- QUAN 2600 SUS - Business Statistics I **(3)**

3. Admissions Process (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate admissions course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate admissions course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **(0)** or
- ECON 2899 - Economics Foundations Check **(0)** *(for non-business Economics majors only)*

4. Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

3. Major Course Requirements for International Economics BS Degree (46 credit hours)

School of Business & Economics Courses Required (31)

- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
 - ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
 - ECON 2899 - Economics Foundations Check **Credits: (0)**
 - ECON 4010 - Intermediate Microeconomic Theory **Credits: (3)**
 - ECON 4020 - Intermediate Macroeconomic Theory **Credits: (3)**
 - ECON 4970 - Introduction to Research Methods **Credits: (1)**
 - ECON 4980 CRE - Research Methods **Credits: (3)**
 - QUAN 2400 - Business Calculus **Credits: (3)** or
 - MATH 1210 - Calculus I **Credits: (4)**
 - QUAN 2600 SUS - Business Statistics I **Credits: (3)**
 - QUAN 3610 - Business Statistics II **Credits: (3)**
- and a minimum of two of the following:***
- ECON 3110 - International Trade **Credits: (3)**
 - ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
 - ECON 4170 - Economic Development **Credits: (3)**

Note: If all three courses are taken, the third course may fulfill the Economics elective.

Elective Courses (minimum of 15 credit hours)

Choose at least one class from each of the four groups

Economics (minimum of 3 credit hours)

- ECON 3090 - History of Economic Thought **Credits: (3)**
- ECON 3200 - Money and Banking **Credits: (3)**
- ECON 3400 - Labor Economics **Credits: (3)**
- ECON 3410 - Women in the World Economy **Credits: (3)**
- ECON 4320 - Industrial Organization **Credits: (3)**
- ECON 4520 - Public Finance **Credits: (3)**
- ECON 4550 - Introduction to Econometrics **Credits: (3)**
- ECON 4560 - Mathematical Economics **Credits: (3)**
- ECON 4800 - Independent Research **Credits: (1-3)**
- ECON 4810 - Experimental Course **Credits: (1-6)**
- ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- ECON 3300 - Environmental Economics **Credits: (3)**
- ECON 4330 - Game Theory **Credits: (3)**

Political Science/Philosophy (minimum of 3 credit hours)

- POLS 2100 SS SUS GLB - International Politics, Organizations, and Society **Credits: (3)**
- POLS 2200 SS GLB - Global Governments, Politics, and Societies **Credits: (3)**
- POLS 2300 SS - Introduction to Political Theory **Credits: (3)**
- POLS 3210 GLB - Politics in the European Union **Credits: (3)**
- POLS 3290 GLB - Democratization and Political Transitions **Credits: (3)**
- POLS 4160 - Topics in Global Politics **Credits: (3)**
- POLS 4180 GLB - International Law and Organization **Credits: (3)**
- POLS 4190 GLB - Theories of International Politics **Credits: (3)**
- PHIL 3550 - Philosophy of Eastern Religion **Credits: (3)**

Geography (minimum of 3 credit hours)

- GEOG 3060 SUS - Environmental Issues: Local to Global Impacts and Solutions **Credits: (3)**
- GEOG 3540 - Geography of Latin America and the Caribbean **Credits: (3)**
- GEOG 3590 - Geography of Europe: the Land and People who Built a World Power **Credits: (3)**
- GEOG 3640 - Geography of Asia: Development, Geopolitics and Environment **Credits: (3)**
- GEOG 3740 - Geography of Africa: Culture, Colonialism, Crises and Change **Credits: (3)**

History (minimum of 3 credit hours)

- HIST 4260 - Europe in the Age of Total War **Credits: (3)**
- HIST 4320 CRE - Stalin and the Soviet Experiment **Credits: (3)**
- HIST 4340 - The British Empire **Credits: (3)**

- HIST 4350 - Germany and the Third Reich **Credits: (3)**
- HIST 4370 - History of Modern France 1789-present **Credits: (3)**
- HIST 4410 - History of Spain and Portugal **Credits: (3)**
- HIST 4450 - Cold War Europe **Credits: (3)**
- HIST 4510 GLB - Twentieth Century World **Credits: (3)**
- HIST 4530 - Far Eastern History **Credits: (3)**
- HIST 4550 - Southeast Asian History **Credits: (3)**
- HIST 4590 GLB - Middle Eastern History **Credits: (3)**
- HIST 4650 - Latin American History Since Independence **Credits: (3)**
- HIST 4670 - History of Mexico **Credits: (3)**

Note:

Given the broad international electives required, no minor is required.

Quantitative Economics (BS)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Not required.
- **Minor:** None required.
- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required economics courses with a grade of "C" or higher. In addition, major GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation. A total of 40 upper division credit hours are required (courses numbered 3000 and above).
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Website:** <https://weber.edu/business/departments-of-economics.html>
- **Program Code:** 4051BS
- **CIPC:** 45.0603

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

Use Grad MAPs to plan your degree

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements. The following courses required for the Quantitative Economics major will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a major in Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

Course Requirements for Quantitative Economics BS Degree

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. Non business Economics degree programs within the Goddard School follow the same general pattern which is composed of four required elements: (1) Liberal Support Curriculum, (2) Economics Foundations Curriculum, (3) Admission and Major Declaration, and (4) Major Discipline.

1. Liberal Support Curriculum (7-8 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

- ECON 2010 SS - Principles of Microeconomics **(3)**
- MATH 1050 QL - College Algebra **(4)** or MATH 1090 QL - Business College Algebra **(3)**
- ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.
- MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

*NOTE: Students looking at Quantitative Economics should take MATH 1050 **NOT** MATH 1090 as MATH 1090 does not meet the prerequisite requirement for MATH 1210 Calculus I.*

2. Economics Foundations Curriculum (9 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the major course work required. Refer to department degree maps for assistance in course sequencing.

The Economics Foundations Curriculum provides the base for all economic degree programs and should be completed early in the student's academic studies. To satisfy the Economics Foundations requirement, courses must be completed with a grade of "C" or higher. However, admittance to the Goddard School requires a cumulative GPA of 2.5 or higher for the three Economics Foundation courses.

- ECON 2010 SS - Principles of Microeconomics **(3)**
- ECON 2020 SS - Principles of Macroeconomics **(3)**
- QUAN 2600 SUS - Business Statistics I **(3)**

3. Admissions Process (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate admissions course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate admissions course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **(0)** or
- ECON 2899 - Economics Foundations Check **(0)** *(for non-business Economics majors only)*

4. Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

Major Course Requirements for Quantitative Economics BS Degree (55 credit hours)

Major Courses Required (19 credit hours)

- ECON 4010 - Intermediate Microeconomic Theory **Credits: (3)**
- ECON 4020 - Intermediate Macroeconomic Theory **Credits: (3)**
- ECON 4550 - Introduction to Econometrics **Credits: (3)**
- ECON 4560 - Mathematical Economics **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)**
- ECON 4980 CRE - Research Methods **Credits: (3)**
- QUAN 3610 - Business Statistics II **Credits: (3)**

Note:

**MATH 3410 and *MATH 3420, Probability and Statistics (3 each) can substitute for QUAN 2600 & QUAN 3610.*

Required Math Courses (15 or 16 credit hours)

- MATH 1210 - Calculus I **Credits: (4)**
- MATH 1220 - Calculus II **Credits: (4)**
- MATH 2210 - Calculus III **Credits: (4)**
- MATH 2250 - Linear Algebra and Differential Equations **Credits: (4)** or
- MATH 2270 - Elementary Linear Algebra **Credits: (3)**

Electives (12 credit hours)

Select from the following

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- CS 1400 - Programming I **Credits: (4)**
- CS 2550 - Introduction to Database Design and SQL **Credits: (4)**
- CS 4580 - Data Science Algorithms **Credits: (4)**

- ECON 3090 - History of Economic Thought **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 3200 - Money and Banking **Credits: (3)**
- ECON 3300 - Environmental Economics **Credits: (3)**
- ECON 3400 - Labor Economics **Credits: (3)**
- ECON 3410 - Women in the World Economy **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- ECON 4320 - Industrial Organization **Credits: (3)**
- ECON 4330 - Game Theory **Credits: (3)**
- ECON 4520 - Public Finance **Credits: (3)**
- ECON 4800 - Independent Research **Credits: (1-3)**
- ECON 4810 - Experimental Course **Credits: (1-6)**
- ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- MATH 3120 - Foundations of Euclidean and Non-Euclidean Geometry **Credits: (3)**
- MATH 3270 - Linear Algebra **Credits: (3)**
- MATH 3410 - Probability and Statistics I **Credits: (3)**
- MATH 3420 - Probability and Statistics II **Credits: (3)**
- MATH 3450 - Advanced Statistical Methods **Credits: (4)**
- MATH 4110 - Modern Algebra I **Credits: (3)**

Note:

Due to the cross-disciplinary nature of this program, no minor is required.

Minor

Economics Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A minimum GPA of 2.5 in the minor courses. A course grade of "C" or higher is required for all business and economics courses.
- **Credit Hour Requirements:** Minimum of 21 credit hours.
- **Program Code:** 4022
- **CIPC:** 450603

Course Requirements for Minor

Required Courses (21 credit hours)

- ECON 2899 - Economics Foundations Check **Credits: (0)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**

- ECON 4010 - Intermediate Microeconomic Theory **Credits: (3)** or
- ECON 3110 - International Trade **Credits: (3)** or
- ECON 3300 - Environmental Economics **Credits: (3)** or
- ECON 3400 - Labor Economics **Credits: (3)**

- ECON 4020 - Intermediate Macroeconomic Theory **Credits: (3)** or
- ECON 3200 - Money and Banking **Credits: (3)**

- QUAN 2600 SUS - Business Statistics I **Credits: (3)** or
- CJ 3600 - Criminal Justice Statistics **Credits: (3)** or
- PSY 3600 - Statistics in Psychology **Credits: (3)** or
- GERT 3600 - Social Statistics **Credits: (3)** or
- SW 3600 - Social Statistics **Credits: (3)** or
- SOC 3600 - Social Statistics **Credits: (3)**

- Two upper-level ECON or QUAN electives **(6)**

Note:

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 with a grade of "C" or higher is a prerequisite for QUAN 2600.

Teaching Minor

Economics Teaching Minor

- **GPA Requirement:** A minimum GPA of 2.5 in the minor courses. A course grade of "C" or higher is required for all business and economics courses.
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** 4019
- **CIPC:** 131303

Approval of a minor program by the Economics department chair is required. Students who select the Economics Teaching minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education). Advisement is required.

Course Requirements for Minor

Required Courses (18 credit hours)

- ECON 1010 SS - Economics as a Social Science **Credits: (3)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- ECON 1740 AI - Economic History of the United States **Credits: (3)**
- ECON 3200 - Money and Banking **Credits: (3)**
- HIST 4500 - Teaching Social Studies in Grades 5-12 **Credits: (3)**

Department of Supply Chain & Management Information Systems

Department Chair: Seokwoo Song

Location: Wattis Business Building, Room 205

Telephone Contact: Nancy Tomon, 801-626-7368

Professors: Randy Boyle, Taowen Le, Shane Schvaneveldt, Seokwoo Song; **Associate Professors:** Jeffrey Clements, François Giraud-Carrier, Grace Zhang; **Assistant Professors:** Evan Barlow, Ben Neve

The Department of Supply Chain & Management Information Systems offers two Bachelor of Science degree programs. Supply Chain Management (SCM) provides students with the specialized skills to manage key value-added processes, inspire creative decision-making, and collaborate effectively with decision makers across the firm and around the world. The SCM program offers a whole-brain approach that incorporates relational and interpersonal skills with the technical side of logistics and operations management. Management Information Systems (MIS) prepares students to successfully navigate the business world by building technical, managerial and communication skills. The depth and breadth of technical know-how gained in the MIS program prepares students for a successful career as an Information Systems professional, helping organizations support business processes and solve business problems.

Supply Chain Management (SCM)

Supply Chain Management is "the value creation engine of every organization."

Everyone who participates in the creation and distribution of a product is part of a supply chain, and a Supply Chain Management major learns how to choreograph and manage this entire chain of activities from suppliers, manufacturers, service providers and distributors, to consumers.

With its origins dating back to 1969, Weber State University's Supply Chain Management program is one of the oldest programs in the United States. Our program covers the depth and breadth of SCM, giving our students the foundation for successful careers in logistics, purchasing, operations, and other areas of supply chain management.

Employers recognize our graduates as some of the best in the field, and the demand for Weber State University SCM graduates is strong. Traditionally, graduates from our SCM program enjoy the highest average starting salary of all business majors, and job opportunities exceed the number of graduates. Global and area companies hiring our SCM graduates include Kimberly Clark, Toyota, Ford Motor Company, Autoliv, Orbital ATK, Intermountain Healthcare, Wal-Mart, J.C. Penney Company, UPS, Northrop Grumman, and the U.S. Air Force.

The endowed Jerry & Vickie Moyes Center for Supply Chain Excellence supports opportunities in research, scholarship, and experiential learning for faculty and students. We are fortunate to enjoy an active relationship with our industry partner board which provides real-world insight for our program along with mentoring and internship opportunities for our students. In addition to many opportunities for internships, our Supply Chain Management majors frequently also receive several scholarships from professional associations and area companies as well as from the Moyes Center.

Management Information Systems (MIS)

A bachelor's degree in Management Information Systems provides students with a balanced education between business and information technologies. It provides students with a broad background in basic business knowledge, problem solving, and computer technology and skills. Graduates from this major are prepared to help organizations use computer technology to support their business processes and solve their business problems. Technologies that all MIS majors study include software development, computer architecture, database design, computer networks, and systems analysis and design. In addition, students may also elect to study advanced networks, web development and

management, data analytics, information security and computer forensics. The MIS lab provides hands-on experience in the latest technologies, including 3D printing, machine learning, and AI technologies.

Management Information Systems graduates may work for a large organization, specializing in one aspect of information technology, or as one of a few people supporting all areas of a smaller firm's computer technologies. The job will involve working with people to understand how they do their jobs and where computers can be most effective, implementing computer-based solutions, training people to use computer systems, installing and troubleshooting hardware, software, or networks, and helping management understand and plan for the best new technologies to integrate in the organization's business processes.

MIS graduates are well prepared for graduate school as well, frequently accepted to top graduate programs. The MIS Advisory Board maintains strong relationships with national and local employers, ensuring our program is developing graduates with skills to meet the current and future needs of business.

Associate of Science

Management Information Systems (AS)

- **Program Prerequisite:** Most business and economics courses with numbers above 3000 require formal admission to the John B. Goddard School of Business & Economics and completion of ENGL 2010 or ENGL 2015, MATH 1090 or equivalent, ACTG 2010, ACTG 2020, BSAD 2620, ECON 2010, ECON 2020, MIS 2010, and QUAN 2600. These nine courses are referred to collectively as "Liberal Support" and "Business Foundations." All MIS courses numbered above 3000 require Business Foundations except MIS 3210 and MIS 3610. (Refer to the John B. Goddard School of Business & Economics Requirements.)
- **Grade Requirements:** Even though a minimum grade of "C" will be accepted in courses used to satisfy the associate's degree requirements, the WSU overall GPA requirements must also be met.
- **Credit Hour Requirements:** A total of 60 credit hours is required; a minimum of 25 of these is required within the AS program.
- **Program Code:** 4045AS
- **CIPC:** 110103

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

Admission Requirements

Acceptance to the John B. Goddard School of Business & Economics is required for students pursuing a Bachelor of Science or Associates of Science as well as students pursuing minors in Accounting or Economics. To be admitted, students must register for BSAD 2899. Students may obtain information regarding admissions from the Goddard School Advising Center, WB 211, (801) 626-6534 or AdviseBusiness@weber.edu.

General Education

Refer to Degree Requirements for Associate of Science requirements. The following courses required for the Management Information Systems associates will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social

Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions. MIS 1100 SS - The Digital Society, is recommended to fulfill a general education requirement in Social Science.

Program Learning Outcomes

- Be able to use data to improve business decision making
- Be capable of developing and implementing information systems
- Be able to gather and organize relevant data and information to identify issues and problems to draw logical conclusions

Major Course Requirements for AS Degree

Courses Required (29 credit hours)

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- BSAD 2899 - Business Foundations Check **Credits: (0)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- MIS 2110 - Software Development I **Credits: (3)**
- MIS 3210 - Database Design and Implementation **Credits: (3)**
- MIS 3610 - Networks & Data Communications I **Credits: (3)**

Institutional Certificate

Data Analytics Essentials Certificate of Proficiency

- **Program Pre-requisite:** Applicants must have completed MATH 1040 or QUAN 2600.
- **Grade Requirements:** Students must complete all certificate courses with a grade of "C" or higher.
- **Credit Hours Requirements:** Six credits hours of program pre-requisites and ten credit hours of MIS courses.
- Gainful Employment Disclosure
- **Program Code:** 4056CP
- **CIPC:** 307101

The Data Analytics Essentials Certificate of Proficiency is designed to provide current and future business professionals with highly desired knowledge of Python, SQL and data visualization techniques using Tableau. In addition, students will learn data wrangling and machine learning techniques. This certificate will enable business professionals to improve decisions through improved analysis and visualization of data.

This certificate will prepare students for careers in high-demand jobs in Utah such as: Computer Systems Analysts, Management Analysts, Business Intelligence Analysts, Market Research Analysts, Financial Analysts, and Operation Research Analysts.

The Data Analytics Essentials Certificate is stackable with other credentials and can be completed as a stand-alone certificate or as part of the Data Analytics Minor program. All courses will earn credit toward several B.S. degrees from the Goddard School of Business & Economics, such as a B.S. in Management Information Systems. The certificate will be awarded upon completion of 16 credit hours.

These courses will be offered in a full-semester format. Courses will be offered in a face-to-face format at our Ogden campus, with the exception of MIS 2010, which will be offered in an online format.

Advisement

- MIS Department Chair: Dr. Seokwoo Song, 801-626-6462
- MIS Department Administrative Specialist: Nancy Tomon, 801-626-7368
- Mailing Address: 1337 Edvalson St., Dept. 3805, Ogden UT 84408
- Campus Location: Ogden Campus, Wattis Building, Room 205

Course Requirements for Data Analytics Essentials Certificate of Proficiency

Program Prerequisites (6 credit hours):

- MATH 1090 QL - Business College Algebra **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**

Courses Required (10 credit hours)

- MIS 2010 - Business Computer Skills **Credits: (1)**
- MIS 2030 - Introduction to Business Analytics **Credits: (3)**
- MIS 2040 - Business Analytics with Python **Credits: (3)**
- MIS 3220 - Business Intelligence **Credits: (3)**

Bachelor of Science

Management Information Systems (BS)

- **Program Prerequisite:** MIS Associate of Science Degree, or equivalent degree or course work (which may be articulated for the MIS Associate) from an accredited AS/AA program.
Most business and economics courses with numbers above 3000 require formal admission to the John B. Goddard School of Business & Economics and prior completion of ACTG 2010, ACTG 2020;BSAD 2620, ECON 2010, ECON 2020, MIS 2010, and QUAN 2600. These seven courses are referred to collectively as "Business Foundations." (Refer to the John B. Goddard School of Business & Economics Requirements.)
- **Minor:** Not required.
- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative Goddard School (major) GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.

- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Website:** <https://weber.edu/business/supply-chain-management-information-systems.html>
- **Program Code:** 4045BS
- **CIPC:** 110103

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

General Education

Refer to Degree Requirements for Bachelor of Science requirements. The following courses required for the Management Information Systems major (BS) will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions. MIS 1100, The Digital Society, is recommended to fulfill a general education requirement in Social Science.

Program Learning Outcomes

- Know how to train people to use complex computer systems
- Be able to install and troubleshoot hardware
- Be capable of implementing software and networks
- Adept at helping management understand and plan for the best new technologies to integrate organization's business processes.

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. All degree programs within the Goddard School follow the same general pattern which is composed of five required elements: (1) Liberal Support Curriculum, (2) Business Foundations, (3) Admission and Major Declaration, (4) Business Core, and (5) Major Discipline.

1. Liberal Support Curriculum (6-7 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

Complete one of the following English courses:

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**

- ENGL 2015 EN2 - Intermediate College Writing & Research **Credits: (4)**

Complete one of the following Math courses:

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1090 QL - Business College Algebra **Credits: (3)**

ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

2. Business Foundations Curriculum (17 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the Major course work required. Generally, students should begin taking courses within their major area *before* completing all of the courses in the Business Core. Refer to department degree maps for assistance in course sequencing.

The Business Foundations Curriculum provides the base for all business and economic degree programs and should be completed early in the student's academic studies. To satisfy the Business Foundations requirement, courses must be completed with a grade of "C" or higher.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**

3. Foundation Check (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate foundations check course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate foundations check course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **Credits: (0)** or
- ECON 2899 - Economics Foundations Check **Credits: (0)** *(for non-business Economics majors only)*

Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

4. Business Core (33-34 credit hours)

The Business Core exposes students to the traditional areas of business and provides the competencies needed to analyze problems and interact with individuals from different units of an organization.

Everyone working in business needs a knowledge of these areas. Students should take course work within the Business Core as they are completing the courses within the Major Discipline. Many of the courses in the Business Core are prerequisites for other classes. Keeping this in mind and using department degree maps will assist students in course sequencing.

Required Core Courses

- QUAN 3610 - Business Statistics II **Credits: (3)**
- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)**
- FIN 3200 - Financial Management **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- BSAD 4780 - Strategic Management **Credits: (3) ***

**BSAD 4780 should be taken near the conclusion of the program of study.*

One of the following Communication courses:

- MGMT 3200 - Managerial Communications **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**
- SCM 3200 - Supply Chain Relational Skills **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3530 - The Literature of Business and Economics **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)** and
- ECON 4980 CRE - Research Methods **Credits: (3)**

One of the following International courses:

- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- MIS 3710 GLB - Global Issues in Information Technology **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**

Note

The International Core Course requirement may be fulfilled by a Study Abroad or Exchange Program. See the chair of the program for approval.

Major Course Requirements for BS Degree (27 credit hours)

Major Courses Required (18 credit hours)

- MIS 2110 - Software Development I **Credits: (3)**
- MIS 2030 - Introduction to Business Analytics **Credits: (3)**
- MIS 3210 - Database Design and Implementation **Credits: (3)**
- MIS 3610 - Networks & Data Communications I **Credits: (3)**
- MIS 4600 - Information Security I **Credits: (3)**
- MIS 4730 - IT Project Management and Systems Design **Credits: (3)**

Concentration Elective Courses (9 credit hours)

Select 3 courses from the following:

- MIS 2040 - Business Analytics with Python **Credits: (3)**
- MIS 3220 - Business Intelligence **Credits: (3)**
- MIS 3230 - Data Mining for Business **Credits: (3)**
- MIS 3620 - Networks and Data Communications II **Credits: (3)**
- MIS 3700 - E-business Technologies & Web Development **Credits: (3)**
- MIS 3740 - Business Machine Learning **Credits: (3)**
- MIS 4700 - Information Security II **Credits: (3)**
- MIS 4710 - Enterprise Software Development **Credits: (3)**
- MIS 4720 - Emerging Information Technologies **Credits: (3)**
- MIS 4893 INT - Cooperative Work Experience **Credits: (3)**

Supply Chain Management (BS)

- **Program Prerequisites:** Most business and economics courses with numbers above 3000 require formal admission to the John B. Goddard School of Business & Economics and completion of ACTG 2010, ACTG 2020, BSAD 2620, ECON 2010, ECON 2020, MIS 2010, and QUAN 2600. These seven courses are referred to collectively as "Business Foundations." (Refer to the John B. Goddard School of Business & Economics Requirements.)
- **Minor:** Not required.
- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative John B. Goddard School of Business & Economics (major) GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Website:** <https://weber.edu/business/supply-chain-management-information-systems.html>
- **Program Code:** 4032BS
- **CIPC:** 520203

Academic Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements. The following courses required for the Supply Chain Management major (BS) will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (English Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science), ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

Program Learning Outcomes

- Be able to utilize data to improve business decision making
- Be able to communicate effectively (verbal and written)
- Be able to collaborate effectively with people
- Be capable of applying core supply chain functional skills

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. All degree programs within the Goddard School follow the same general pattern which is composed of five required elements: (1) Liberal Support Curriculum, (2) Business Foundations, (3) Admission and Major Declaration, (4) Business Core, and (5) Major Discipline.

1. Liberal Support Curriculum (6-7 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

Complete one of the following English courses:

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- ENGL 2015 EN2 - Intermediate College Writing & Research **Credits: (4)**

Complete one of the following Math courses:

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1090 QL - Business College Algebra **Credits: (3)**

ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard

School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

2. Business Foundations Curriculum (17 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the Major course work required. Generally, students should begin taking courses within their major area *before* completing all of the courses in the Business Core. Refer to department degree maps for assistance in course sequencing.

The Business Foundations Curriculum provides the base for all business and economic degree programs and should be completed early in the student's academic studies. To satisfy the Business Foundations requirement, courses must be completed with a grade of "C" or higher.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**

3. Foundation Check (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate foundations check course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate foundations check course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **Credits: (0)** or
- ECON 2899 - Economics Foundations Check **Credits: (0)** (*for non-business Economics majors only*)

Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

4. Business Core (33-34 credit hours)

The Business Core exposes students to the traditional areas of business and provides the competencies needed to analyze problems and interact with individuals from different units of an organization.

Everyone working in business needs a knowledge of these areas. Students should take course work within the Business Core as they are completing the courses within the Major Discipline. Many of the courses in the Business Core are prerequisites for other classes. Keeping this in mind and using department degree maps will assist students in course sequencing.

Required Core Courses

- QUAN 3610 - Business Statistics II **Credits: (3)**

- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)**
- FIN 3200 - Financial Management **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- BSAD 4780 - Strategic Management **Credits: (3) ***

**BSAD 4780 should be taken near the conclusion of the program of study.*

One of the following Communication courses:

- MGMT 3200 - Managerial Communications **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**
- SCM 3200 - Supply Chain Relational Skills **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3530 - The Literature of Business and Economics **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)** and
- ECON 4980 CRE - Research Methods **Credits: (3)**

One of the following International courses:

- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- MIS 3710 GLB - Global Issues in Information Technology **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**

Note

The International Core Course requirement may be fulfilled by a Study Abroad or Exchange Program. See the chair of the program for approval.

5. Major Course Requirements for BS Degree (27 credit hours)

Business Courses Required (18 credit hours)

- MIS 2030 - Introduction to Business Analytics **Credits: (3)**
- SCM 3300 - Purchasing & Strategic Sourcing **Credits: (3)**
- SCM 3500 - Spreadsheet Modeling for Prescriptive Analytics **Credits: (3)**
- SCM 3600 - Logistics & Transportation **Credits: (3)**
- SCM 3400 - Quality Management and Process Improvement **Credits: (3)**

- SCM 4400 GLB - Global Supply Chain Management **Credits: (3) ***
- SCM 3200 - Supply Chain Relational Skills **Credits: (3)**
- SCM 4550 - Strategic Supply Chain Management **Credits: (3) ****

Notes:

** SCM 4400 satisfies the International Course requirement under the Business Core as well as the Business Courses requirement.*

***SCM 3200 satisfies the Communication course requirement under the Business Core as well as the Business Courses requirement.*

Elective Courses (9 credit hours)

Select at least one course from Group A below and the remaining courses from either Group A or Group B (see an advisor for guidance in course selection).

- SCM 2400 - Fundamentals of Project Management **Credits: (3)**
- SCM 4700 - Supply Chain Case Analysis, Logic, and Presentation **Credits: (3)**
- SCM 4840 - Operations & Supply Chain Industry Projects **Credits: (3)**
- SCM 4850 - Supply Chain Management Study Abroad **Credits: (1-3)**
- SCM 4860 INT - Supply Chain Management Internship **Credits: (3)**

Elective Course - Group B

- MIS 3220 - Business Intelligence **Credits: (3)**
- MIS 2810 - Experimental Course **Credits: (1-6)**
- FIN 3500 - Capital Budgeting **Credits: (3)**
- ACTG 3300 - Cost Accounting **Credits: (3)**
- BSAD 3500 - Introduction to Business Research **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**

Completion of the Entrepreneurship Minor satisfies the Elective Course - Group B requirement.

Approved 3000 level course from the College of Engineering, Applied Science and Technology satisfies the Elective Course - Group B requirement.

Emphasis Option for Bachelor of Interdisciplinary Studies

Management Information Systems (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Refer to Bachelor of Integrated Studies (BIS) requirements.
- **Grade Requirements:** Each MIS class must be completed with a grade of C or better, and the overall GPA for MIS classes must be at least 2.5.

- **Credit Hour Requirements:** 19 hours of MIS courses selected in consultation with an MIS advisor.
- **Program Code:** 4045
- **CIPC:** 110103

Course Prerequisites, Advisement and Admission Requirements

All prerequisites must be completed before upper-division enrollment. For most classes this includes the business foundations and therefore can add up to 15 credits to your program of study.

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d)diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Suggested Courses (13 credit hours)

- MIS 2010 - Business Computer Skills **Credits: (1)**
- MIS 2110 - Software Development I **Credits: (3)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- MIS 3210 - Database Design and Implementation **Credits: (3)**
- MIS 3610 - Networks & Data Communications I **Credits: (3)**

Elective Courses (6 credit hours)

Select two of the following

- MIS 3620 - Networks and Data Communications II **Credits: (3)**
- MIS 3700 - E-business Technologies & Web Development **Credits: (3)**
- MIS 4600 - Information Security I **Credits: (3)**
- MIS 4700 - Information Security II **Credits: (3)**
- MIS 4710 - Enterprise Software Development **Credits: (3)**
- MIS 4720 - Emerging Information Technologies **Credits: (3)**

Minor

Data Analytics Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A minimum GPA of 2.5 in the minor courses. A course grade of "C" or higher is required for all business and economics courses.
- **Credit Hour Requirements:** A total of a minimum 25 credit hours are required for all registered students.
- **Program Code:** 4048 and cohort DA_SC for Students in School of Computing or DA_GSBE for Students in Goddard School of Business and Economics.
- **CIPC:** 110102

Prerequisite Courses (6-10 credits)*

Students in School of Computing

- CS 1030 - Foundations of Computing **Credits: (4)** or
- CYBR 1300 - Networks and Emerging Technologies **Credits: (3)**
- MATH 1040 QL - Introduction to Statistics **Credits: (3)**

Students in Goddard School of Business and Economics

- MATH 1050 QL - College Algebra **Credits: (4)** or
- MATH 1090 QL - Business College Algebra **Credits: (3)**
- MIS 2110 - Software Development I **Credits: (3)** or
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**

Required Courses (a minimum of 19 credits)

Core Courses (a minimum of 13 credits)

- MIS 3210 - Database Design and Implementation **Credits: (3)** or
- CS 2550 - Introduction to Database Design and SQL **Credits: (4)**
- MIS 2030 - Introduction to Business Analytics **Credits: (3)**
- CS 3550 - Advanced Database Programming **Credits: (4)** or
- MIS 3230 - Data Mining for Business **Credits: (3)**
- CS 4580 - Data Science Algorithms **Credits: (4)**

Elective Courses (a minimum of 6 credits)

- CS 2420 - Introduction to Data Structures and Algorithms **Credits: (4)**
- CS 4500 - Introduction to Artificial Intelligence **Credits: (4)**
- MIS 3740 - Business Machine Learning **Credits: (3)** or

- CS 5600 - Machine Learning **Credits: (3)**
- SCM 3500 - Spreadsheet Modeling for Prescriptive Analytics **Credits: (3)**
- MIS 3220 - Business Intelligence **Credits: (3)**

Note:

This minor is available to all students. Approval of a minor program by the John B. Goddard School of Business and the College of Engineering, Applied Science and Technology is required. Approval of elective courses by the Business Administration department and School of Computing is required.

See the Goddard School Advising Center, WB 211, (801) 626-6534 for advisement.

**Students from other departments can choose either of the two paths. Students are responsible for understanding any pre-requisites or conditions for chosen electives.*

Management Information Systems Minor

- **Grade Requirements:** A minimum GPA of 2.5 in the minor courses. A course grade of "C" or higher is required for all business and economics courses.
- **Credit Hour Requirements:** 19 semester credit hours are required for non-business majors and 15 credits are required for business majors. Approval of a minor program by the Management Information Systems department is required.
- **Program Code:** 4045
- **CIPC:** 110103

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

Course Requirements for Minor

Non-Business Majors (19 credit hours)

Courses Required (13 credit hours)

- MIS 2010 - Business Computer Skills **Credits: (1)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- MIS 2110 - Software Development I **Credits: (3)**
- MIS 3210 - Database Design and Implementation **Credits: (3)**
- MIS 3610 - Networks & Data Communications I **Credits: (3)**

Elective Courses (6 credit hours)

Select two of the following

- MIS 3620 - Networks and Data Communications II **Credits: (3)**
- MIS 3700 - E-business Technologies & Web Development **Credits: (3)**

- MIS 4600 - Information Security I **Credits: (3)**
- MIS 4700 - Information Security II **Credits: (3)**
- MIS 4710 - Enterprise Software Development **Credits: (3)**
- MIS 4720 - Emerging Information Technologies **Credits: (3)**

Business Majors (15 credit hours)

Courses Required (12 credit hours)

- MIS 2110 - Software Development I **Credits: (3)**
- MIS 3210 - Database Design and Implementation **Credits: (3)**
- MIS 3610 - Networks & Data Communications I **Credits: (3)**
- MIS 4600 - Information Security I **Credits: (3)**

Elective Courses (3 credit hours)

Select one of the following

- MIS 3620 - Networks and Data Communications II **Credits: (3)**
- MIS 3700 - E-business Technologies & Web Development **Credits: (3)**
- MIS 4700 - Information Security II **Credits: (3)**
- MIS 4710 - Enterprise Software Development **Credits: (3)**
- MIS 4720 - Emerging Information Technologies **Credits: (3)**

Supply Chain Management Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A minimum GPA of 2.5 in the minor courses. A course grade of "C" or higher is required for all business and economics courses.
- **Credit Hour Requirements:** 15-18 credit hours are required for the minor.
- **Program Code:** 4032
- **CIPC:** 520203

Academic Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

Admission Requirements

Students may be admitted to this minor program without meeting other business school admission requirements if they meet the minor program prerequisites and receive approval from the Supply Chain Management Department. Students may obtain information regarding admissions to the minor from the Supply Chain Management Department, WB 205, (801) 626-7368.

Required Courses (15 credit hours)

- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- SCM 3300 - Purchasing & Strategic Sourcing **Credits: (3)**
- SCM 3400 - Quality Management and Process Improvement **Credits: (3)**
- SCM 3500 - Spreadsheet Modeling for Prescriptive Analytics **Credits: (3)**
- SCM 3600 - Logistics & Transportation **Credits: (3)**

****Students majoring in Engineering Technology or Engineering may substitute the three courses MSE 3850, MSE 3910, and MSE 4590 in place of SCM 3400.***

Admission to SCM Minor in substitution for BSAD 2899.

Elective Course for SCM Minor (3 credit hours)

Select one course from the following (see an advisor for guidance in course selection)

- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**
- SCM 4700 - Supply Chain Case Analysis, Logic, and Presentation **Credits: (3)**
- SCM 4840 - Operations & Supply Chain Industry Projects **Credits: (3)**
- SCM 4850 - Supply Chain Management Study Abroad **Credits: (1-3)**
- MIS 2030 - Introduction to Business Analytics **Credits: (3)**
- MIS 3210 - Database Design and Implementation **Credits: (3)**
- MIS 4730 - IT Project Management and Systems Design **Credits: (3)**

Master of Business Administration Program (MBA)

MBA Program Director: Dr. François Giraud-Carrier

MBA Assistant Program Director/Enrollment Director: Andrew Wright, 801-395-3528

MBA Department Administrative Specialist: Ruth Preece, 801-395-3519

Location: WSU Davis- 2750 University Park Blvd., Layton

The Master of Business Administration program is intended for working adults who wish to advance in their careers. The MBA program is designed to enhance general management abilities and provides an opportunity to further develop functional business skills. Our general management graduate curriculum consists of "hybrid courses" that combine traditional classroom instruction with online educational tools.

In addition to the MBA, the following Graduate Certificates are offered:

- Aerospace Management
- Business Analytics
- Business Development
- Contract Management in Business
- Cyber Security
- Management Information Systems: Information Assurance
- Sustainability for Business

Post Baccalaureate Certificate

Aerospace Management Post Baccalaureate Certificate

Location: Davis Campus - 2750 University Park Blvd., Layton

Gainful Employment Disclosure

Students earning a Graduate Certificate in Aerospace Management will become knowledgeable about strategic management, continuous process improvement, program management, supply chain management, and contract management in an aerospace context.

This graduate certificate can be completed as a part of the WSU MBA Program in the Goddard School of Business and Economics or as a stand-alone certificate. The certificate will be awarded upon completion of four graduate-level elective courses (12 credit hours) in the MBA Program. The courses will be offered in a hybrid delivery format with eight weeks of face-to-face interaction enhanced by online discussions and learning activities.

- **Program Prerequisite:** Applicants must possess a bachelor's degree from a regionally accredited institution or be in the final stage of completing the undergraduate degree. Completion of a course in college algebra or equivalent is required to enroll in MBA courses. Basic computer competency is also required.
- **Grade Requirements:** Students must complete all MBA program courses with a grade of "C" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hour Requirements:** Twelve credit hours of MBA courses. Some prerequisites may need to be completed prior to enrollment in MBA 6150 - Operations/Supply Chain Management.
- **Program Code:** 4036PBC
- **CIPC:** 520201

Courses Required for Graduate Certificate

Required Courses

- MBA 6150 - Operations/Supply Chain Management **Credits: (3)**
- MBA 6370 - CPI & Strategy in Aerospace Management **Credits: (3)**
- MBA 6360 - Aerospace Program Management **Credits: (3)**
- MBA 6740 - Principles of Contract Management **Credits: (3)**

Business Analytics Post Baccalaureate Certificate

The Graduate Certificate in Business Analytics is designed to provide business professionals with the knowledge and analytical tools needed to uncover novel patterns, trends, correlations, and strategic insights. This graduate certificate will help business professionals improve business decision making using analytical skills, models, and processes.

The certificate can be completed as a part of the WSU MBA Program in the Goddard School of Business and Economics or as a stand-alone certificate. The courses will be offered in a hybrid delivery format with eight weeks of face-to-face interaction enhanced by online discussions and learning activities.

Location: Davis Campus - 2750 University Park Blvd., Layton

- **Program Prerequisite:** Applicants must possess a bachelor's degree from a regionally accredited institution or be in the final stage of completing the undergraduate degree. Completion of a course in college algebra or equivalent is required to enroll in MBA courses. Basic computer competency is also required.

- **Grade Requirements:** Students must complete all MBA program courses with a grade of "C" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hours Requirements:** Fifteen credit hours of MBA courses.
- **Program Code:** 4054PBC
- **CIPC:** 110802

Required Courses

- MBA 6160 - Applications of Decision Models **Credits: (3)**
- MBA 6260 - Data Visualization Using Tableau **Credits: (3)**
- MBA 6620 - Data Mining for Business **Credits: (3)**
- MBA 6660 - Forecasting and Time Series **Credits: (3)**

Elective Courses

One of the following

- MBA 6310 - Information Technology in the Enterprise **Credits: (3)**
- MBA 6640 - Cyber Security **Credits: (3)**
- MBA 6670 - Cloud Computing **Credits: (3)**
- MBA 6680 - Graduate Consulting Project **Credits: (3)**
- MBA 6800 - Directed Study **Credits: (1-3)**

Business Development Post Baccalaureate Certificate

The Post-Baccalaureate Certificate in Business Development is designed to provide business professionals with the knowledge and skills needed to effectively start new businesses, market products and services, sell effectively, analyze data, and make strategic business decisions.

The certificate can be completed as a part of the WSU MBA Program in the Goddard School of Business and Economics or as a stand-alone certificate. The courses will be offered in a hybrid delivery format with eight weeks of face-to-face interaction enhanced by online discussions and learning activities.

Location: Davis Campus - 2750 University Park Blvd., Layton

- **Program Prerequisite:** Applicants must possess a bachelor's degree from a regionally accredited institution or be in the final stage of completing the undergraduate degree. Completion of a course in college algebra or equivalent is required to enroll in MBA courses. Basic computer competency is also required.
- **Grade Requirements:** Students must complete all MBA program courses with a grade of "C" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hours Requirements:** Twelve credit hours of MBA courses.
- **Program Code:** 4053PBC
- **CIPC:** 520701

Required Courses

- MBA 6560 - Business/Market Planning Using Online Resources **Credits: (3)**
- MBA 6850 - Business Development and Entrepreneurship **Credits: (3)**

Elective Courses

Two of the following

- MBA 6160 - Applications of Decision Models **Credits: (3)**
- MBA 6260 - Data Visualization Using Tableau **Credits: (3)**
- MBA 6320 - Strategic Procurement **Credits: (3)**
- MBA 6330 - Logistics **Credits: (3)**
- MBA 6430 - International Marketing **Credits: (3)**
- MBA 6540 - Negotiations **Credits: (3)**
- MBA 6550 - Managing and Improving Quality **Credits: (3)**
- MBA 6580 - Project Management **Credits: (3)**
- MBA 6660 - Forecasting and Time Series **Credits: (3)**
- MBA 6740 - Principles of Contract Management **Credits: (3)**
- MBA 6870 - Sales Strategy & Management **Credits: (3)**

Contract Management in Business Post Baccalaureate Certificate

Location: Davis Campus - 2750 University Park Blvd., Layton

Gainful Employment Disclosure

Students earning a Graduate Certificate in Contract Management in Business will become knowledgeable about the practice of contract management in the federal and commercial environment and gain experience in planning, organizing and managing contracts.

The certificate can be completed as a part of the WSU MBA Program in the Goddard School of Business and Economics or as a stand-alone certificate. The courses will be offered in a hybrid delivery format with eight weeks of face-to-face interaction enhanced by online discussions and learning activities.

- **Program Prerequisite:** Applicants must possess a bachelor's degree from a regionally accredited institution or be in the final stage of completing the undergraduate degree. Completion of a course in college algebra or equivalent is required to enroll in MBA courses. Basic computer competency is also required.
- **Grade Requirements:** Students must complete all MBA program courses with a grade of "C" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hours Requirements:** Twelve credit hours of MBA elective courses.
- **Program Code:** 4035PBC
- **CIPC:** 520202

Courses Required for Graduate Certificate

Required Courses

- MBA 6740 - Principles of Contract Management **Credits: (3)**
- MBA 6750 - Financial Aspects of Contract Management **Credits: (3)**
- MBA 6760 - Legal Aspects of Contract Management **Credits: (3)**

Elective Courses

Select one of the following:

- MBA 6540 - Negotiations **Credits: (3)**
or
- MBA 6580 - Project Management **Credits: (3)**
or
- MBA 6320 - Strategic Procurement **Credits: (3)**

Cybersecurity Post Baccalaureate Certificate

The Post-Baccalaureate Certificate in Cybersecurity focuses on the fundamentals of cybersecurity, security policies, penetration testing, enterprise IT management, and networking. Courses in this program emphasize how to improve information security within organizations. This program allows students to quickly increase their technical capabilities in the cybersecurity field with hands-on applied projects, expert instruction, and advanced training environments.

The certificate can be completed as a part of the WSU MBA Program in the Goddard School of Business and Economics or as a stand-alone certificate. The courses will be offered in a hybrid delivery format with eight weeks of face-to-face interaction enhanced by online discussions and learning activities.

Location: Davis Campus - 2750 University Park Blvd., Layton

- **Program Prerequisite:** Applicants must possess a bachelor's degree from a regionally accredited institution or be in the final stage of completing the undergraduate degree. Completion of a course in college algebra or equivalent is required to enroll in MBA courses. Basic computer competency is also required.
- **Grade Requirements:** Students must complete all MBA program courses with a grade of "C" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hours Requirements:** Twelve credit hours of MBA courses.
- **Program Code:** 4052PBC
- **CIPC:** 111003

Required Courses

- MBA 6310 - Information Technology in the Enterprise **Credits: (3)**
- MBA 6630 - Networking **Credits: (3)**
- MBA 6640 - Cyber Security **Credits: (3)**
- MBA 6650 - Penetration Testing **Credits: (3)**

Management Information Systems: Information Assurance Post Baccalaureate Certificate

MBA Program Director: Dr. Shaun Hansen, 425-231-9770

MBA Enrollment Director: Andrew Wright, 801-395-3528

MBA Department Administrative Specialist: Sally Taylor 801-395-3519

Location: Davis Campus - 2750 University Park Blvd., Layton

Gainful Employment Disclosure

The Graduate Certificate in Management Information Systems / Information Assurance is designed to provide business professionals with the conceptual tools and language to more effectively deploy information technology and enhance organizational performance.

The certificate can be completed as a part of the WSU MBA Program in the Goddard School of Business and Economics or as a stand-alone certificate. The courses will be offered in a hybrid delivery format with eight weeks of face-to-face interaction enhanced by online discussions and learning activities.

- **Program Prerequisite:** Applicants must possess a bachelor's degree from a regionally accredited institution or be in the final stage of completing the undergraduate degree. Completion of a course in college algebra or equivalent is required to enroll in MBA courses. Basic computer competency is also required.
- **Grade Requirements:** Students must complete all MBA program courses with a grade of "C" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hours Requirements:** Thirteen credit hours of MBA courses.
- **Program Code:** 4046PBC
- **CIPC:** 521201

Courses Required for Graduate Certificate

Required Courses

- MBA 6310 - Information Technology in the Enterprise **Credits: (3)**
- MBA 6640 - Cyber Security **Credits: (3)**
- MBA 6800 - Directed Study **Credits: (1-3)**

Elective Courses

Two of the following

- MBA 6160 - Applications of Decision Models **Credits: (3)**
- MBA 6530 - E-Business **Credits: (3)**
- MBA 6630 - Networking **Credits: (3)**
- MACC 6570 - Information Systems Auditing **Credits: (3)**

Supply Chain Management Post Baccalaureate Certificate

The Post-Baccalaureate Certificate in Supply Chain Management prepares students for leadership roles and decision-making responsibilities within supply chain operations across various industries. As industries grow increasingly dependent on effective supply chain management, this certificate will provide essential training for leadership positions in this critical field. Graduates will acquire skills to improve operational efficiency, optimize supply chains, and drive organizational growth. This certificate will cater to employees from various industries, including aerospace, defense, and transportation, helping them improve supply chain processes, implement continuous improvement methodologies, and manage purchasing and logistics.

The certificate can be completed as a part of the WSU MBA Program in the Goddard School of Business and Economics or as a stand-alone certificate. The courses will be offered in a hybrid delivery format with eight weeks of face-to-face interaction enhanced by online discussions and learning activities.

Location: Davis Campus - 2750 University Park Blvd., Layton

- **Program Prerequisite:** Applicants must possess a bachelor's degree from a regionally accredited institution or be in the final stage of completing the undergraduate degree. Completion of a course in college algebra or equivalent is required to enroll in MBA courses. Basic computer competency is also required.
- **Grade Requirements:** Students must complete all MBA program courses with a grade of "C" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hours Requirements:** Twelve credit hours of MBA courses.
- **Program Code:** 4032PBC
- **CIPC:** 520203

Required Courses

- MBA 6150 - Operations/Supply Chain Management **Credits: (3)**
- MBA 6320 - Strategic Procurement **Credits: (3)**
- MBA 6330 - Logistics **Credits: (3)**

Elective Course -- Choose 1

- MBA 6160 - Applications of Decision Models **Credits: (3)**
- MBA 6370 - CPI & Strategy in Aerospace Management **Credits: (3)**
- MBA 6550 - Managing and Improving Quality **Credits: (3)**
- MBA 6580 - Project Management **Credits: (3)**
- MBA 6700 SUS - Managing for Sustainability **Credits: (3)**
- MBA 6740 - Principles of Contract Management **Credits: (3)**

Sustainability for Business Post Baccalaureate Certificate

Location: Davis Campus - 2750 University Park Blvd., Layton
Gainful Employment Disclosure

The Graduate Certificate in Sustainability for Business is designed for graduate students to explore and evaluate how business organizations can address sustainability issues to meet societal needs and create competitive advantages. Students must complete four courses (minimum of 12 credit hours) of existing MBA elective courses in environmental sustainability in order to be awarded the Graduate Certificate in Sustainability for Business. The certificate can be completed along with the MBA Degree at the Goddard School of Business and Economics or as a stand-alone certificate.

- **Program Prerequisite:** Applicants must possess a bachelor's degree from a regionally accredited institution or be in the final stage of completing the undergraduate degree. Completion of a course in college algebra or equivalent is required to enroll in MBA courses. Basic computer competency is also required.
- **Grade Requirements:** Students must complete all MBA program courses with a grade of "C" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hour Requirements:** Twelve credit hours of existing MBA elective courses in environmental sustainability.
- **Program Code:** 4039PBC
- **CIPC:** 520101

Courses Required for Graduate Certificate

- MBA 6700 SUS - Managing for Sustainability **Credits: (3)**
- MBA 6715 - Sustainability Tools and Methods **Credits: (3)**
- MBA 6720 - Business, Economics, and the Environment **Credits: (3)**

Elective Courses for the Graduate Certificate

- MBA 6730 - Consulting Project in Sustainability **Credits: (3)** Or
- Any approved MBA course **Credits (3)** And
- MBA 6800 - Directed Study **Credits: (1-3)**
(The subject of the directed study should build upon sustainability topics related to the approved MBA class)

Master of Business Administration

Master of Business Administration (MBA)

- **Program Prerequisite:** Applicants must have earned a bachelor's degree from a regionally accredited institution (or international equivalent) or be in the final stage of completing the undergraduate degree. If proof of completion of the bachelor's degree has not been received prior to the start of an admitted student's first semester in the MBA Program, they will not be allowed to start classes in the program until an official transcript with the posted bachelor's degree has been received by the MBA Program office. Completion of a course in college algebra or equivalent is required to enroll in MBA courses. Basic computer competency is also required.
- **Grade Requirements:** To earn the MBA degree, candidates must complete all MBA program courses with a grade of "C" or higher. In addition, the overall cumulative MBA Program GPA must be 3.0 or higher, excluding transfer credits from other WSU graduate programs or other institutions. An elective course in which a grade lower than "C" is earned may be repeated or another elective may be taken in its place. Failure to maintain a 3.0 grade point average after two consecutive semesters, will result in academic probation in accordance with departmental policies. Students must meet with their academic advisor after notification of academic probation. Two consecutive semesters of academic probation will result in suspension from the program. A waiver of suspension will be considered according to due process.
- **Credit Hour Requirements:** The MBA degree ordinarily requires a minimum of 36 semester hours of graduate work for persons with a recent undergraduate business degree from an AACSB-accredited business school. Individuals with business undergraduate degrees from non-AACSB-accredited schools may be required to complete additional foundations course work contingent on departmental analysis of their undergraduate transcripts. For persons with a non-business undergraduate degree, the program typically requires 54 semester hours, including foundations or leveling courses. Exemptions from foundations courses may be made based on equivalent undergraduate coursework. Specific program and course requirements are shown below.
- **Program Code:** Business Undergrad (4026MBA1), Non-Business Undergrad (4026MBA2)
- **CIPC:** 52.0201

Major Field Exemption

Students with business-related undergraduate degrees are exempted from the required MBA course in their major field of study (e.g. accounting, finance, economics, information systems, marketing, management, supply chain management, human resources) and will take an additional elective MBA course in its place.

The MBA Program Office must approve each MBA student's plan of study. The plan of study will show all courses necessary to meet the degree requirements. A formal plan of study will be filed when a student is accepted into the program.

If students deviate from their program of study without PRIOR written and documented departmental approval, those courses will NOT be counted toward graduation. Taking unapproved courses will be a costly and time intensive mistake. If you are in doubt about a course, please call or email the office and make an appointment with your advisor BEFORE starting the class.

Non-MBA Electives

Qualified students may take up to two MACC (Master of Accounting), MHA (Master of Health Administration), or MTAX (Master of Taxation) courses as MBA electives, counting six credit hours toward their MBA elective requirements. Four MHA courses may be counted towards MBA elective requirements for dual MBA-MHA degree students. Please contact the department to assure you meet pre-requisites for your desired elective and for assistance in getting an over ride in order to add the class to your schedule.

Qualified graduate students currently accepted into other Weber State University grad programs may cross over and take classes from the MBA. Students must meet all pre-requisites for any MBA class they may choose. An email from your graduate advisor stating that they will accept the MBA class as an elective into your program is required. Have them email mba@weber.edu requesting the course with the student's W number. An over ride to register will be placed in Banner and the student notified that they can add the class to their schedule.

Transfer Credits/Residency Requirements

The minimum residency requirements for the Goddard School MBA Program is two-thirds of the required number of credit hours for undergraduate business majors (the 36-hour track) and for non-business majors (the 54-hour track). Students who have completed business-related graduate course work at another AACSB-accredited institution prior to admission to the program may apply for transfer of graduate credits to satisfy their Goddard School MBA program of study, the number of transfer credits not to exceed the minimum residency requirements for the 36-hour or 54-hour program tracks (see above). Once admitted to the program, students may transfer only elective credits into the program from another AACSB-accredited institution. Required course credits may be accepted in transfer from another institution after admission to the Goddard School MBA Program only in circumstances where the student is unable to complete all required courses in residence due to relocation. All transfers are subject to program approval.

Time to Degree Completion

MBA students have a maximum of six calendar years to complete their degree completion requirements, starting from the first semester during which the student has registered for and begun taking classes. Students who exceed this requirement may submit a letter of appeal to the MBA Program Director to request that this requirement be waived. Students who fail to enroll in MBA courses for more than six years must apply for readmission to the program.

Admission Requirements

In addition to the program prerequisites specified above, the primary criteria in determining eligibility for admission to the Goddard School MBA Program are: previous academic achievement, work experience and career progression. The ideal applicant will present a strong overall previous academic record, and strong letters of recommendation. Moreover, under certain circumstances, the admissions committee may require the applicant to submit an official GMAT score before an admissions decision is made.

Applicants must submit a completed application form and current resume, as well as transcripts from every institution of higher education attended. Letters of recommendation from appropriate professional and/or academic references are also required. Each applicant is considered on an individual basis. The MBA program will have limited enrollment. Any applicant who is admitted while other courses or programs are still in process of completion is admitted conditionally.

Additional Admission Requirements for International Students:

All international students and any applicant educated outside the U.S. must demonstrate proficiency in English. For applicants for whom English is not their first language, a minimum English language proficiency score or equivalent is required. (TOEFL = 75 overall, or IELTS 6.5 overall, or equivalent demonstration of language proficiency as established through the Weber State International Student and Scholar Center.) Students with a bachelor's degree or higher from a regionally-accredited (or equivalent) university in which the language of instruction was English may be exempt from English-language proficiency testing.

In addition to a language proficiency score, all applicants educated outside the U.S. must submit transcripts that have been evaluated by a WSU approved foreign credentials evaluation service. For a list of approved agencies, click here: <https://weber.edu/issc/foreign-credentials-evaluation-services.html>

A translated transcript is not accepted. Transcripts must be evaluated on a course-by-course format, showing U.S. semester credit and grade equivalent for each course based on a 4.0 GPA scale.

Students participating in WSU approved "Exchange Programs" within the Goddard School of Business and Economics must meet the following requirements:

1. Partner school must nominate student
2. Provide evidence of English proficiency as indicated above
3. Meet all application and visa requirements as established by the International Students office. More information is available at this link: <http://www.weber.edu/issc>

Program Learning Outcomes

Goddard School MBA graduates will be:

- Effective business analysts.
 - MBA students will analyze and interpret financial data for decision making.
 - MBA students will evaluate business systems and make recommendations for improvement.
- Strategic thinkers.
 - MBA students will use the appropriate tools to identify, analyze and make suggestions to improve a company's competitive strategy.
- Globally informed.
 - MBA students will research and analyze current trends occurring in the global economy.
- Stakeholder-focused leaders.
 - MBA students will understand how to utilize the psychological science of trust through a focus on capability, character, and compassion.
 - MBA students will be able to compare/contrast prominent leadership theories, and to utilize these theories, along with their own introspection, to develop their own "theory of ethical leadership."

MBA Program Requirements for Students with a Non-Business Undergraduate Degree

Foundations (15 credit hours)

Prerequisites: Admission to MBA program and college algebra or equivalent.

- MBA 6010 - Legal and Regulatory Environment of Business **Credits: (3)**
- MBA 6020 - Financial and Managerial Accounting **Credits: (3)**
- MBA 6040 - Managerial Economics **Credits: (3)**
- MBA 6050 - Quantitative Methods I **Credits: (3)**
- MBA 6051 - Quantitative Methods II **Credits: (3)**

Other Required Courses (24 credit hours)

- MBA 6110 - Fundamentals of Ethical Leadership **Credits: (3)**
- MBA 6120 - Organizational Behavior **Credits: (3)**
- MBA 6130 - Financial Management **Credits: (3)**
- MBA 6140 - Marketing Management **Credits: (3)**
- MBA 6150 - Operations/Supply Chain Management **Credits: (3)**
- MBA 6210 - Management Accounting and Control **Credits: (3)**
- MBA 6310 - Information Technology in the Enterprise **Credits: (3)**
- MBA 6410 - Global Macroeconomic Conditions **Credits: (3)**

Electives (select 12 credit hours)

- MBA 6160 - Applications of Decision Models **Credits: (3)**
- MBA 6360 - Aerospace Program Management **Credits: (3)**
- MBA 6370 - CPI & Strategy in Aerospace Management **Credits: (3)**
- MBA 6430 - International Marketing **Credits: (3)**
- MBA 6450 - Leadership Through People Skills **Credits: (3)**
- MBA 6460 - Leadership Through Character **Credits: (3)**
- MBA 6520 - International Business Field Studies **Credits: (3)**
- MBA 6540 - Negotiations **Credits: (3)**
- MBA 6550 - Managing and Improving Quality **Credits: (3)**
- MBA 6560 - Business/Market Planning Using Online Resources **Credits: (3)**
- MBA 6580 - Project Management **Credits: (3)**
- MBA 6630 - Networking **Credits: (3)**
- MBA 6640 - Cyber Security **Credits: (3)**
- MBA 6680 - Graduate Consulting Project **Credits: (3)**
- MBA 6700 SUS - Managing for Sustainability **Credits: (3)**
- MBA 6710 - Accounting and Finance for Environmental Sustainability **Credits: (3)**
- MBA 6720 - Business, Economics, and the Environment **Credits: (3)**
- MBA 6730 - Consulting Project in Sustainability **Credits: (3)**
- MBA 6740 - Principles of Contract Management **Credits: (3)**
- MBA 6760 - Legal Aspects of Contract Management **Credits: (3)**
- MBA 6800 - Directed Study **Credits: (1-3)**
- MBA 6850 - Business Development and Entrepreneurship **Credits: (3)**
- MBA 6660 - Forecasting and Time Series **Credits: (3)**
- MBA 6670 - Cloud Computing **Credits: (3)**
- MBA 6870 - Sales Strategy & Management **Credits: (3)**
- MBA 6260 - Data Visualization Using Tableau **Credits: (3)**

- MBA 6620 - Data Mining for Business **Credits: (3)**
- MBA 6890 - MBA Internship **Credits: (1-3)**
- MBA 6650 - Penetration Testing **Credits: (3)**
- MBA 6320 - Strategic Procurement **Credits: (3)**
- MBA 6330 - Logistics **Credits: (3)**

Note:

** Students may complete either MBA 6680 or MBA 6730, but not both courses.*

Capstone (3 credit hours)

- MBA 6180 - Strategic Management **Credits: (3)**

Fast-Track MBA Program Requirements for Students with an Undergraduate Business Degree

The Fast-Track MBA program is open only to students who have completed an undergraduate business degree from an AACSB-accredited business school within the past 10 years.

Required Courses (24 credit hours)

- MBA 6110 - Fundamentals of Ethical Leadership **Credits: (3)**
- MBA 6210 - Management Accounting and Control **Credits: (3)**
- MBA 6120 - Organizational Behavior **Credits: (3)**
- MBA 6130 - Financial Management **Credits: (3)**
- MBA 6140 - Marketing Management **Credits: (3)**
- MBA 6150 - Operations/Supply Chain Management **Credits: (3)**
- MBA 6310 - Information Technology in the Enterprise **Credits: (3)**
- MBA 6410 - Global Macroeconomic Conditions **Credits: (3)**

Electives (select 9 credit hours)

- MBA 6160 - Applications of Decision Models **Credits: (3)**
- MBA 6360 - Aerospace Program Management **Credits: (3)**
- MBA 6370 - CPI & Strategy in Aerospace Management **Credits: (3)**
- MBA 6430 - International Marketing **Credits: (3)**
- MBA 6450 - Leadership Through People Skills **Credits: (3)**
- MBA 6460 - Leadership Through Character **Credits: (3)**
- MBA 6520 - International Business Field Studies **Credits: (3)**
- MBA 6540 - Negotiations **Credits: (3)**
- MBA 6550 - Managing and Improving Quality **Credits: (3)**
- MBA 6560 - Business/Market Planning Using Online Resources **Credits: (3)**
- MBA 6580 - Project Management **Credits: (3)**
- MBA 6630 - Networking **Credits: (3)**
- MBA 6640 - Cyber Security **Credits: (3)**

- MBA 6680 - Graduate Consulting Project **Credits: (3)**
- MBA 6700 SUS - Managing for Sustainability **Credits: (3)**
- MBA 6710 - Accounting and Finance for Environmental Sustainability **Credits: (3)**
- MBA 6720 - Business, Economics, and the Environment **Credits: (3)**
- MBA 6730 - Consulting Project in Sustainability **Credits: (3)**
- MBA 6740 - Principles of Contract Management **Credits: (3)**
- MBA 6750 - Financial Aspects of Contract Management **Credits: (3)**
- MBA 6760 - Legal Aspects of Contract Management **Credits: (3)**
- MBA 6800 - Directed Study **Credits: (1-3)**
- MBA 6850 - Business Development and Entrepreneurship **Credits: (3)**
- MBA 6660 - Forecasting and Time Series **Credits: (3)**
- MBA 6670 - Cloud Computing **Credits: (3)**
- MBA 6870 - Sales Strategy & Management **Credits: (3)**
- MBA 6260 - Data Visualization Using Tableau **Credits: (3)**
- MBA 6620 - Data Mining for Business **Credits: (3)**
- MBA 6890 - MBA Internship **Credits: (1-3)**
- MBA 6650 - Penetration Testing **Credits: (3)**
- MBA 6320 - Strategic Procurement **Credits: (3)**
- MBA 6330 - Logistics **Credits: (3)**

Note:

** Students may complete either MBA 6680 or MBA 6730, but not both courses.*

Capstone (3 credit hours)

- MBA 6180 - Strategic Management **Credits: (3)** or
- MBA 6560 - Business/Market Planning Using Online Resources **Credits: (3)**

Master of Accounting Program (MACC)

Program Director: Ryan Pace, 801-626-7562

Website: www.weber.edu/macc

An accounting professional in today's environment must possess a high level of technical competence, a sense of commitment to service, communication skills, analytical skills, and the ability to work well with people. To obtain the required body of knowledge and to develop the skills and abilities needed to be successful accounting professionals, serious consideration must be given to study beyond a four-year baccalaureate program. The Master of Accounting (MACC) Program provides an additional year of training for the professional accountant. In addition, the MACC satisfies the requirements of the Utah Certified Public Accountant Licensing Act for those wishing to sit for the Uniform CPA Examination. It gives the students an opportunity to increase the depth of their understanding in key areas and allows a broadening of perspective by providing course work in a variety of areas that cannot be considered in an undergraduate program due to time constraints.

Master of Accounting

Master of Accounting (MAcc)

- **Grade Requirements:** A Master of Accounting MAcc student must complete all MAcc program courses, including electives, and any leveling courses, with a grade of "C" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hour Requirements:** The program requires a minimum of 30 semester hours beyond a bachelor's degree in accounting.
- **Exit Survey Requirements:** The program requires all graduating students to satisfactorily complete all exit surveys as assigned by the department.
- **Program Code:** 4037MAcc
- **CIPC:** 521301

Admissions Requirements

- A four year Bachelor's degree from a regionally accredited university or equivalent. If the degree is not in Accounting, leveling courses may be required for acceptance into the program.
- Minimum grade point average of at least 3.0 (3.3 preferred) in each of the following three areas:
 - a. Overall GPA
 - b. The last 60 credit hours of undergraduate work
 - c. Accounting course work only

Applicants must submit an online application, current resume, and official transcripts from every institution of higher education attended. Two letters of recommendation are required. At least one of those letters should come from individuals who can evaluate the applicant's academic abilities. All letters should address the applicant's potential for successful graduate study. Each applicant is considered on an individual basis. Under certain circumstances, the admissions committee may require the applicant to submit an official GMAT score before an admissions decision is made.

Additional Admission Requirements for International Students:

All international students and any applicant educated outside the U.S. must demonstrate proficiency in English. Those whose native language is not English, or whose language of instruction for their undergraduate degree was not English, will be required to submit a score from the Test of English as a Foreign Language (TOEFL) or International Language Testing System (IELTS) which is not more than two years old. The TOEFL must have a minimum score of 80 (Internet-Based) and the IELTS must have a minimum of 6.5 with a minimum of 5.0 on each section. An alternative English language proficiency test (e.g., Duolingo) may also be used with prior approval from the Master of Accounting Program. International students will be required to have their foreign transcript evaluated for U.S. equivalency.

Application

Application for admission to the Master of Accounting Program should normally be made by August 1 (fall semester), December 1 (spring semester), and April 1 (summer semester) of the year during which admission is sought. Application for admission must include official GMAT results (if required), official undergraduate transcripts, resume, and two letters of recommendation.

It is expected that the Master of Accounting Program will entail a minimum of two semesters of full-time study for a student with a bachelor's degree in accounting. Students with other business-related degrees can expect to spend about two years in the program. Those with non-business related undergraduate degrees should plan to spend at least three years in the program.

Contact the School of Accounting & Taxation for a separate and detailed bulletin on the Master of Accounting Program.

Advisement

For questions concerning academic advisement, the primary source of contact will be the Master of Accounting Program Advisor or Director. For issues regarding registration and scheduling, students will contact the School of Accounting & Taxation Graduate Enrollment Manager. Career services are offered through the Goddard School of Business & Economics Career Center.

Program Learning Outcomes

- Be effective researchers and communicators
- Will understand and comply with tax laws and regulations
- Be ethically aware
- Be analytical thinkers
- Be globally informed

Course Requirements for Master of Accounting

Required

- MACC 6120 - Financial Accounting & Reporting **Credits: (3)**
- MACC 6160 - Financial Statement Analysis **Credits: (3)**
- MACC 6180 - Advanced Accounting Data Analytics **Credits: (3)**
- MACC 6610 - Advanced Accounting Information Systems **Credits: (3)**
- MACC 6590 - Risk Assessment, and Internal Controls **Credits: (3)**

Restricted MAcc Electives

At least one of the following (3 credit hours):

- MACC 6330 - Strategic Management Accounting **Credits: (3)**
- MACC 6560 - Advanced Auditing & Assurance Services **Credits: (3)**

Restricted MTax Electives

At least one of the following (3 credit hours):

- MTAX 6400 - Tax Research & Procedure **Credits: (3)**
- MTAX 6405 - Accounting for Income Taxes **Credits: (3)**
- MTAX 6430 - Advanced Individual Taxation **Credits: (3)**
- MTAX 6460 - Advanced Corporate Taxation **Credits: (3)**
- MTAX 6470 - Advanced Partnership Taxation **Credits: (3)**

Other Electives

In addition to the previously listed courses, MAcc students are required to complete 9 additional hours of electives. They may select any other MAcc or MTax courses. Select MBA courses approved by the MAcc Program Director may also be used up to a maximum of 6 credit hours. Also, other program opportunities such as internships, CPA exam preparation, and study abroad upon approval of the MAcc Program Director, may be used to satisfy elective requirements for up to 6 credit hours.

Master of Taxation (MTax)

Program Director: Ryan Pace, 801-626-7562

Website: www.weber.edu/mtax

The tax laws are vast, complex, and dynamic. Basic tax courses at the undergraduate level do not provide sufficient breadth or depth of coverage for future CPAs and tax consultants. Consequently, instruction at the graduate level is necessary. Tax law is a major branch of accounting. The Master of Taxation degree gives more recognition to a graduate as a tax specialist than does a Master of Accounting degree. The program is designed to provide students with the highly technical and demanding skills necessary to be effective tax and business consultants. Students will also acquire important tools necessary for effective research and communication in taxation.

Post Baccalaureate Certificate

Taxation Post Baccalaureate Certificate

- **Program Pre-requisites:** Bachelor's degree or higher.
- **Grade Requirements:** A student may earn the Taxation Graduate Certificate from the School of Accounting & Taxation by completing the following courses with an overall GPA of at least 3.0.
- **Credit Hour Requirements:** 15 credit hours total.
- **Program Code:** 4055PBC
- **CIPC:** 521601

Course Requirements (12 credit hours)

- MTAX 6400 - Tax Research & Procedure **Credits: (3)**
- MTAX 6430 - Advanced Individual Taxation **Credits: (3)**
- MTAX 6460 - Advanced Corporate Taxation **Credits: (3)**
- MTAX 6470 - Advanced Partnership Taxation **Credits: (3)**

Additionally, select one of the following (3 credit hours)

- MTAX 6210 - Business Law and Legal Liability **Credits: (3)**
- MTAX 6405 - Accounting for Income Taxes **Credits: (3)**
- MTAX 6803 - Individual Study **Credits: (3)**

Master of Taxation

Master of Taxation (MTax)

- **Grade Requirements:** A Master of Taxation (MTax) student must complete all MTax program courses, including electives, and any leveling courses, with a grade of "C" or higher. In addition, the overall program GPA must be 3.0 or higher.
- **Credit Hour Requirements:** The program requires a minimum of 30 semester hours beyond a bachelor's degree in accounting.
- **Exit Survey Requirements:** The program requires all graduating students to satisfactorily complete all exit surveys as assigned by the department.
- **Program Code:** 4033MTAX
- **CIPC:** 521601

Admissions Requirements

- A four year Bachelor's degree from a regionally accredited university or equivalent.
- Minimum overall GPA of at least 3.0 (3.3 preferred).
- Minimum GPA of at least 3.0 (3.3 preferred) in the last 60 credit hours of undergraduate work.

Applicants must submit an online application, current resume, and official transcripts from every institution of higher education attended. Two letters of recommendation are required. All letters should address the applicant's potential for successful graduate study. Each applicant is considered on an individual basis. If an applicant has had minimal exposure to tax or accounting concepts, the admissions committee may require that the applicant complete some leveling courses prior to admission or during the program. Moreover, under certain circumstances, the admissions committee may require the applicant to submit an official GMAT score before an admissions decision is made.

Additional Admission Requirements for International Students:

All international students and any applicant educated outside the U.S. must demonstrate proficiency in English. Those whose native language is not English, or whose language of instruction for their undergraduate degree was not English, will be required to submit a score from the Test of English as a Foreign Language (TOEFL) or International Language Testing System (IELTS) or equivalent test which is not more than two years old. The TOEFL must have a minimum score of 80 (Internet-Based), and the IELTS must have a minimum of 6.5 with a minimum of 5.0 on each section. International students may be required to have their foreign transcripts evaluated for U.S. equivalency. Please contact the School of Accounting and Taxation to determine with a GMAT will be required.

Application

Application for admission to the Master of Taxation Program should normally be made by **August 1** (fall semester), **December 1** (spring semester), and **April 1** (summer semester) of the year during which admission is sought. Application for admission must include official GMAT results (if required), official undergraduate transcripts, resume, and two letters of recommendation.

It is expected that the Master of Taxation Program will entail a minimum of two semesters of full-time study for a student with a bachelor's degree in accounting. Students with other degrees should contact the program director to determine which leveling courses may be necessary.

Contact the School of Accounting & Taxation for a separate and detailed bulletin on the Master of Taxation Program.

Advisement

For questions concerning academic advisement, the primary source of contact will be the Master of Taxation Graduate Enrollment Manager or Director. For issues regarding registration and scheduling, students will contact the

School of Accounting & Taxation Graduate Enrollment Manager. Career services are offered through the Goddard School of Business & Economics Career Center.

Program Learning Outcomes

- Be effective researchers and communicators.
- Will understand and comply with tax laws and regulations.
- Be ethically aware.
- Be analytical thinkers.
- Be globally informed.

Course Requirements for Master of Taxation

Required

All MTax students are required to complete the following courses (15 credit hours):

- MTAX 6400 - Tax Research & Procedure **Credits: (3)**
- MTAX 6405 - Accounting for Income Taxes **Credits: (3)**
- MTAX 6430 - Advanced Individual Taxation **Credits: (3)**
- MTAX 6460 - Advanced Corporate Taxation **Credits: (3)**
- MTAX 6470 - Advanced Partnership Taxation **Credits: (3)**

Restricted Electives

At least one of the following (3 credit hours):

- MTAX 6410 - International Taxation **Credits: (3)**
- MTAX 6437 - State & Local Tax/Exempt Orgs **Credits: (3)**
- MTAX 6455 - Gifts, Estates, Trusts & Real Estate Taxation **Credits: (3)**
- MTAX 6487 - Retirement Plans **Credits: (3)**
- MTAX 6490 - Mergers, Acquisitions and Consolidations **Credits: (3)**

Other Electives

In addition to the previously listed courses, MTax students are required to complete 12 additional hours of electives. They may select any other MAcc or MTax courses. Select MBA courses approved by the MTax Program Director may also be used up to a maximum of 6 credit hours. Also, other program opportunities such as internships, CPA exam preparation, and study abroad, upon the approval of the MTax Program Director, may be used to satisfy elective requirements for up to 6 credit hours. If a student is part of the MTax Online Program, or does not have an undergraduate degree in accounting, class selections are typically restricted to MTax courses only.

School of Accounting, Finance & Taxation

Department Chair: Darcie Costello

Location: Wattis Business Building, Room 221

Telephone: 801-626-6072

Professors: Jefferson Davis, Yuhong Fan, James Hansen, Ryan Pace, Eric Smith; **Associate Professors:** David

Folsom, Andrea Gouldman, Jim Turner, Valerie Chambers, Darcie Costello, Weiwei Wang; **Instructors:** Lisa Hopkins, Loisanne Kattelman, Terrilyn Morgan

Accounting

The School of Accounting & Taxation creates a synergy between accounting, business, and economic theory and contemporary practice to prepare working professionals and full-time students for careers in a global, culturally diverse, information-driven economy. Three principles are central to our mission:

- **Education** - The first, and foremost, is fostering learning through excellent teaching, individual attention, and scholarship, which develops, assesses, and disseminates good practice.
- **Research** - The second is the application of theory to practice through applied research and scholarship, and the utilization of applied research to further learning in the classroom and through co-curricular activities.
- **Community** - The third is advancing contemporary practice and creating learning opportunities by contributing to the accounting profession and to business and the community.

Accounting is defined as the process of gathering, classifying, interpreting, and presenting financial and non-financial information for decision-making purposes to diversified user groups. The field of accounting encompasses the well-recognized profession of public accounting including auditing, management advisory services, and tax services; professional careers in industry such as management accounting (controllship), cost accounting, and internal auditing; careers in various governmental agencies and other accounting and business-related fields.

Certification in public accounting in Utah requires 30 semester hours beyond a baccalaureate degree. Students should take advantage of opportunities to prepare themselves to sit for one of the professional examinations (such as Certified Public Accountant, Certified Management Accountant, and/or Certified Internal Auditor) at the culmination of their accounting program.

Finance

After studying in the School's core courses about the various functions in organizations, the student who concentrates in finance learns how to efficiently acquire, allocate, and control a firm's financial resources.

A background in finance will prepare the student to: (1) conduct detailed financial analyses; (2) relate the financial environment of an organization to the policies that organization will need for optimum returns; and (3) select and analyze investment opportunities for both individuals and organizations.

Bachelor of Science

Accounting (BS)

- **Program Prerequisites:** Most business and economics courses with numbers above 3000 require formal admission to the John B. Goddard School of Business & Economics and completion of ACTG 2010, ACTG 2020, BSAD 2620, ECON 2010, ECON 2020, MIS 2010, and QUAN 2600. These seven courses are referred to collectively as "Business Foundations." All Accounting courses numbered above 3000 require admission to the Goddard School and Business Foundations except ACTG 3110 and ACTG 3400.
- **Minor:** Not required.
- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative John B. Goddard School of Business & Economics (major) GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.

- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Exit Survey Requirements:** The program requires all graduating students to satisfactorily complete all exit surveys as assigned by the department.
- **Website:** <https://weber.edu/business/school-accounting-taxation.html>
- **Program Code:** 4001BS
- **CIPC:** 521301

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements. The following courses required for the Accounting major (BS) will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); COMM 1020 or 2110 (Humanities); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

Program Learning Outcomes

- Understand the professional role played by accountants in society.
- Effectively utilize the accounting cycle.
- Understand the audit processes.
- Be proficient with accounting information systems and controls.
- Understand tax law and compliance.
- Effectively use research tools.
- Be globally informed.

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. All degree programs within the Goddard School follow the same general pattern which is composed of five required elements: (1) Liberal Support Curriculum, (2) Business Foundations, (3) Admission and Major Declaration, (4) Business Core, and (5) Major Discipline.

1. Liberal Support Curriculum (6-7 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal

Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

Complete one of the following English courses:

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**
- ENGL 2015 EN2 - Intermediate College Writing & Research **Credits: (4)**

Complete one of the following Math courses:

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1090 QL - Business College Algebra **Credits: (3)**

ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

2. Business Foundations Curriculum (17 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the Major course work required. Generally, students should begin taking courses within their major area *before* completing all of the courses in the Business Core. Refer to department degree maps for assistance in course sequencing.

The Business Foundations Curriculum provides the base for all business and economic degree programs and should be completed early in the student's academic studies. To satisfy the Business Foundations requirement, courses must be completed with a grade of "C" or higher.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**

3. Foundation Check (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate foundations check course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate foundations check course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **Credits: (0)** or
- ECON 2899 - Economics Foundations Check **Credits: (0)** *(for non-business Economics majors only)*

Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

4. Business Core (33-34 credit hours)

The Business Core exposes students to the traditional areas of business and provides the competencies needed to analyze problems and interact with individuals from different units of an organization.

Everyone working in business needs a knowledge of these areas. Students should take course work within the Business Core as they are completing the courses within the Major Discipline. Many of the courses in the Business Core are prerequisites for other classes. Keeping this in mind and using department degree maps will assist students in course sequencing.

Required Core Courses

- QUAN 3610 - Business Statistics II **Credits: (3)**
- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)**
- FIN 3200 - Financial Management **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- BSAD 4780 - Strategic Management **Credits: (3) ***

**BSAD 4780 should be taken near the conclusion of the program of study.*

One of the following Communication courses:

- MGMT 3200 - Managerial Communications **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**
- SCM 3200 - Supply Chain Relational Skills **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3530 - The Literature of Business and Economics **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)** and
- ECON 4980 CRE - Research Methods **Credits: (3)**

One of the following International courses:

- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- MIS 3710 GLB - Global Issues in Information Technology **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**

Note

The International Core Course requirement may be fulfilled by a Study Abroad or Exchange Program. See the chair of the program for approval.

5. Major Course Requirements for BS Degree (33 credit hours)

Required Major Courses (30 credit hours)

All course prerequisites must be met. Refer to the course descriptions for required prerequisites.

- ACTG 3110 - Intermediate Financial Accounting I **Credits: (3)**
- ACTG 3120 - Intermediate Financial Accounting II **Credits: (3)**
- ACTG 3130 - Accounting Data Analytics **Credits: (3)**
- ACTG 3300 - Cost Accounting **Credits: (3)**
- ACTG 3400 - Taxation of Individuals **Credits: (3)**
- ACTG 3750 - Accounting & Information Systems **Credits: (3)**
- ACTG 4510 - Auditing **Credits: (3)**
- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3) ***
- ACTG 4440 - Taxation of Business Entities **Credits: (3)**

- QUAN 2400 - Business Calculus **Credits: (3)** or
- MATH 1210 - Calculus I **Credits: (4)**

**ACTG 4140 satisfies the International requirement under the Cross-Functional Core as well as the Required Major course requirement.*

Oral Communications Elective (3 credit hours)

Select one of the following:

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3070 - Performance Studies **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**

Finance (BS)

- **Program Prerequisites:** Most business and economics courses with numbers above 3000 require formal admission to the John B. Goddard School of Business & Economics and completion of ACTG 2010, ACTG 2020, BSAD 2620, ECON 2010, ECON 2020, MIS 2010, and QUAN 2600. These seven courses are referred to collectively as "Business Foundations." (Refer to the John B. Goddard School of Business & Economics Requirements.)
- **Minor:** Not required.
- **Grade Requirements:** Candidates for the bachelor of science degree must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative John B.

Goddard School (major) GPA must be 2.5 or higher. The WSU grade point average must meet university requirements.

- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.
- **Residency Requirement:** Students must satisfactorily complete 50 percent of the total required course work and 60 percent of the upper-division requirements from the Goddard School. Furthermore, any transferred credit must be approved prior to beginning the program of study. Refer to John B. Goddard School of Business & Economics for credit policy and transfer credit policy.
- **Website:** <https://weber.edu/business/school-accounting-taxation.html>
- **Program Code:** 4042BS
- **CIPC:** 520801

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

General Education

Refer to Degree Requirements for the University Bachelor of Science requirements. The following courses required for the Finance major (BS) will also satisfy general education requirements: ENGL 2010 or ENGL 2015 (English Composition); MATH 1050 or MATH 1090 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

Program Learning Outcomes

- Understand the professional role played by finance and financial institutions in business and society.
- Graduates will exhibit knowledge of theoretical concepts, ideas, and topics of Financial Analysis, Corporate Finance, and Investments.
- Be able to perform financial analysis

John B. Goddard School of Business & Economics Requirements

John B. Goddard School of Business & Economics Curriculum

The program of study within the John B. Goddard School of Business & Economics is designed to assist the students from admission to career placement. All degree programs within the Goddard School follow the same general pattern which is composed of five required elements: (1) Liberal Support Curriculum, (2) Business Foundations, (3) Admission and Major Declaration, (4) Business Core, and (5) Major Discipline.

1. Liberal Support Curriculum (6-7 credit hours)

The Liberal Support Curriculum consists of courses outside the John B. Goddard School of Business & Economics which provide critical skills and information useful to all business students. Students should complete the Liberal Support Curriculum as soon as possible because the knowledge attained in these courses will be used throughout the business curriculum.

Complete one of the following English courses:

- ENGL 2010 EN2 - Intermediate College Writing **Credits: (3)**

- ENGL 2015 EN2 - Intermediate College Writing & Research **Credits: (4)**

Complete one of the following Math courses:

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1090 QL - Business College Algebra **Credits: (3)**

ENGL 2010 or ENGL 2015 and MATH 1050 or MATH 1090 must be completed with a grade of "C" or higher and may not be taken on a CR/NC basis. Courses required in the Liberal Support Curriculum for Goddard School majors may be used to satisfy specific university and general education requirements.

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2400 and QUAN 2600. Students seeking a degree within the Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study.

2. Business Foundations Curriculum (17 credit hours)

Each major discipline within the Goddard School designates different course work. Consult the Degrees/Programs listing for the Major course work required. Generally, students should begin taking courses within their major area *before* completing all of the courses in the Business Core. Refer to department degree maps for assistance in course sequencing.

The Business Foundations Curriculum provides the base for all business and economic degree programs and should be completed early in the student's academic studies. To satisfy the Business Foundations requirement, courses must be completed with a grade of "C" or higher.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**

3. Foundation Check (0 credit hours)

Students intending to pursue a Bachelor of Science or Associate of Science from the John B. Goddard School of Business & Economics must take the appropriate foundations check course listed below. Students wishing to minor in Accounting or Economics must also take the appropriate foundations check course. Other minors and certificates do not require any admissions course. Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

- BSAD 2899 - Business Foundations Check **Credits: (0)** or
- ECON 2899 - Economics Foundations Check **Credits: (0)** *(for non-business Economics majors only)*

Admission and Major Declaration

Refer to the criteria and process for admittance to the Goddard School by visiting John B. Goddard School of Business & Economics.

4. Business Core (33-34 credit hours)

The Business Core exposes students to the traditional areas of business and provides the competencies needed to analyze problems and interact with individuals from different units of an organization.

Everyone working in business needs a knowledge of these areas. Students should take course work within the Business Core as they are completing the courses within the Major Discipline. Many of the courses in the Business Core are prerequisites for other classes. Keeping this in mind and using department degree maps will assist students in course sequencing.

Required Core Courses

- QUAN 3610 - Business Statistics II **Credits: (3)**
- BSAD 3200 - Legal Environment of Business **Credits: (3)**
- BSAD 3330 - Business Ethics & Environmental Responsibility **Credits: (3)**
- FIN 3200 - Financial Management **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- SCM 2050 - Introduction to Operations and Supply Chain Management **Credits: (3)**
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**
- MIS 2020 - Introduction to Information Systems **Credits: (3)**
- BSAD 4780 - Strategic Management **Credits: (3) ***

**BSAD 4780 should be taken near the conclusion of the program of study.*

One of the following Communication courses:

- MGMT 3200 - Managerial Communications **Credits: (3)**
- PS 3250 - Business Communication **Credits: (3)**
- SCM 3200 - Supply Chain Relational Skills **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3530 - The Literature of Business and Economics **Credits: (3)**
- ECON 4970 - Introduction to Research Methods **Credits: (1)** and
- ECON 4980 CRE - Research Methods **Credits: (3)**

One of the following International courses:

- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- ECON 3110 - International Trade **Credits: (3)**
- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
- ECON 4170 - Economic Development **Credits: (3)**
- MIS 3710 GLB - Global Issues in Information Technology **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- SCM 4400 GLB - Global Supply Chain Management **Credits: (3)**

Note

The International Core Course requirement may be fulfilled by a Study Abroad or Exchange Program. See the chair of the program for approval.

5. Major Course Requirements for BS Degree (30 credit hours)

Major Courses Required (21 credit hours)

All course prerequisites must be met. Refer to the course descriptions for required prerequisites.

- ECON 3120 GLB - International Finance and Monetary Systems **Credits: (3)**
or
- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- FIN 3300 - Investments **Credits: (3)**
- FIN 3350 - Financial Institutions **Credits: (3)**
- FIN 3500 - Capital Budgeting **Credits: (3)**
- FIN 4400 - Financial Problems - Corporate Finance **Credits: (3)**
- FIN 4410 - Financial Problems - Investments **Credits: (3)**

- QUAN 2400 - Business Calculus **Credits: (3)** or
- MATH 1210 - Calculus I **Credits: (4)**

**ECON 3120 or ACTG 4140 will satisfy the International Course requirement under the Business Core as well as the Major Course requirement.*

Elective Courses (9 credit hours)

Select three courses:

- ACTG 3110 - Intermediate Financial Accounting I **Credits: (3)**
- ACTG 3120 - Intermediate Financial Accounting II **Credits: (3)**
- ACTG 3400 - Taxation of Individuals **Credits: (3)**
- BSAD 3500 - Introduction to Business Research **Credits: (3)**
- BSAD 4210 - Survey of Business Law **Credits: (3)**
- BSAD 4500 - Entrepreneurship **Credits: (3)**
- ECON 3200 - Money and Banking **Credits: (3)**
- ECON 4520 - Public Finance **Credits: (3)**
- FIN 3400 - Real Estate Principles and Practices **Credits: (3)**
- FIN 4860 INT - Finance Internship **Credits: (1-3)**
- MKTG 3200 - Selling and Sales Management **Credits: (3)**
- SCM 3500 - Spreadsheet Modeling for Prescriptive Analytics **Credits: (3)**
- SCM 3400 - Quality Management and Process Improvement **Credits: (3)**
- One Additional International Course from Goddard School list

Minor

Accounting Minor/BIS

- **Grade Requirements:** Candidates for minors must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative Business Foundations GPA,

John B. Goddard School of Business & Economics (minor) GPA, and the overall university GPA must be 2.5 or higher.

- **Credit Hour Requirements:** A total of 30 credit hours is required. Of the 30 hours, 15 hours are accounting classes and the remaining classes are support courses.
- **Website:** <https://weber.edu/business/school-accounting-taxation.html>
- **Program Code:** 4001
- **CIPC:** 521301

For Goddard School majors other than finance, this minor includes up to nine credit hours of course work beyond requirements in major field, depending on the electives chosen. Finance majors can complete an accounting minor with no additional hours beyond the major requirements, depending on the electives chosen.

This minor is available to all students. Business students must complete the minor requirements in addition to all major requirements. All prerequisites for required courses must be satisfied.

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

Admission Requirements

Acceptance to the John B. Goddard School of Business & Economics is required for students pursuing a Bachelor of Science or Associates of Science as well as students pursuing minors in Accounting, Finance, or Economics. To be admitted, students must register for BSAD 2899. Students may obtain information regarding admissions from the Goddard School Advising Center, WB 211, (801) 626-6534.

Required Support Course (3 or 4 hours)

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2600.

Select One:

- MATH 1050 QL - College Algebra **Credits: (4)**
- MATH 1090 QL - Business College Algebra **Credits: (3)**

Business Foundations (17 Hours)

The Goddard School Business Foundations courses serve as prerequisites for the accounting minor required and elective classes. Although not every required or elective class has every Business Foundations class as a prerequisite, students cannot earn the accounting minor without completing all the Goddard School Business Foundations courses.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**

- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- BSAD 2899 - Business Foundations Check **Credits: (0)**

Required Minor Courses (6 Hours)

- ACTG 3110 - Intermediate Financial Accounting I **Credits: (3)**
- ACTG 3120 - Intermediate Financial Accounting II **Credits: (3)**

Elective Minor Courses (3 Hours)

Select One:

- ACTG 3300 - Cost Accounting **Credits: (3)**
- ACTG 3400 - Taxation of Individuals **Credits: (3)**
- ACTG 3750 - Accounting & Information Systems **Credits: (3)**
- ACTG 4140 - Accounting for Global and Complex Entities **Credits: (3)**
- ACTG 4510 - Auditing **Credits: (3)**

Finance Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** Candidates for minors must complete all prerequisite and required business and economics courses with a grade of "C" or higher. In addition, the cumulative Business Foundations GPA, John B. Goddard School of Business & Economics (minor) GPA, and the overall university GPA must be 2.5 or higher.
- **Credit Hour Requirements:** A total of 36 credit hours are required for all registered students to complete the minor, including hours earned in prerequisite classes.
- **Program Code:** 4042
- **CIPC:** 520801

For Goddard School majors other than Business Administration and Supply Chain Management, this minor includes nine credit hours of course work beyond requirements in the major field. Business Administration and Supply Chain Management majors can complete a finance minor with six additional hours beyond the major requirements, depending on the electives chosen.

This minor is available to all students. Business students must complete the minor requirements in addition to all major requirements. All prerequisites for required courses must be satisfied.

Advisement

Advisement is strongly encouraged for all Goddard School majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics section of this catalog.

Admission Requirements

Acceptance to the John B. Goddard School of Business & Economics is required for students pursuing a Bachelor of Science or Associates of Science as well as students pursuing minors in Accounting, Finance, or Economics. To be

admitted, students must register for BSAD 2899. Students may obtain information regarding admissions from the Goddard School Advising Center, WB 211, (801) 626-6534.

Required Support Course (3 or 4 Hours)

MATH 1010 is a prerequisite for ECON 2010 and ECON 2020. MATH 1050 or MATH 1090 is a prerequisite for QUAN 2600.

- MATH 1050 QL - College Algebra **Credits: (4)** OR
- MATH 1090 QL - Business College Algebra **Credits: (3)**

Business Foundations (17 Hours)

The Goddard School Business Foundations courses serve as prerequisites for the finance minor required and elective classes. Although not every required or elective class has every Business Foundations class as a prerequisite, students cannot earn the finance minor without completing all the Goddard School Business Foundations courses.

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ACTG 2020 - Survey of Accounting II **Credits: (3)**
- BSAD 2620 - Executive Lectures/Career Development **Credits: (1)**
- ECON 2010 SS - Principles of Microeconomics **Credits: (3)**
- ECON 2020 SS - Principles of Macroeconomics **Credits: (3)**
- MIS 2010 - Business Computer Skills **Credits: (1)**
- QUAN 2600 SUS - Business Statistics I **Credits: (3)**
- BSAD 2899 - Business Foundations Check **Credits: (0)**

Prerequisite Course From Business Core (3 Hours)

QUAN 3610 is a prerequisite for FIN 3300 and FIN 4400.

- QUAN 3610 - Business Statistics II **Credits: (3)**

Required Minor Courses (9 Hours)

Students must complete the courses listed below:

- FIN 3200 - Financial Management **Credits: (3)**
- FIN 3300 - Investments **Credits: (3)**
- FIN 3500 - Capital Budgeting **Credits: (3)**

Elective Minor Courses (3 Hours)

Students must also complete one course from the list below:

- FIN 3350 - Financial Institutions **Credits: (3)**
- FIN 3400 - Real Estate Principles and Practices **Credits: (3)**
- FIN 4400 - Financial Problems - Corporate Finance **Credits: (3)**
- FIN 4410 - Financial Problems - Investments **Credits: (3)**

Telitha E. Lindquist College of Arts & Humanities

Deborah Uman, Dean

The Telitha E. Lindquist College of Arts & Humanities offers comprehensive programs encompassing the visual and performing arts, languages, literature, and communications. The programs of the College are designed to help students gain a thorough understanding of their cultural and aesthetic heritage and to prepare them for employment opportunities that will take advantage of the special skills developed through rigorous study of the arts and humanities. The educational and cultural programs of the departments are available to both major and non-major students.

The curriculum of the Telitha E. Lindquist College of Arts & Humanities is enriched by special lectures, exhibitions, dramatic and musical productions. Many nationally known artists perform each year before audiences drawn from the campus and the community.

Associate Dean: Sarah Steimel

Location: Elizabeth Hall, Room 346

Telephone Contact: Tammy Watson 801-626-6424

Senior College Advisor: Debra Murphy 801-626-6631

Location: Elizabeth Hall, Room 413A

College Advisor: Tyler Dingham 801-626-6664

Location: Elizabeth Hall, Room 413C

Department Chairs/Directors

Communication: Dr. Anne Bialowas	801-626-6454
Communication Master's Program: Dr. Sarah Steimel	801-626-6535
English Language & Literature: Dr. Hal Crimmel	801-626-8044
English Master's Program: Dr. David Hartwig	801-626-7461
Foreign Languages: Dr. Isabel Asensio	801-626-6777
Performing Arts: Jessica Greenberg	801-626-6437
Visual Art and Design: Paul Crow	801-626-7923

Matthew S. Browning Center for Design

The Matthew S. Browning Center for Design draws on a number of different disciplines and strands of experience to imagine new design solutions for a variety of applications, including graphic design, data visualization, lighting design, product design, game design, service design, and much more. Students will engage with a broad range of media, interfaces, spaces and cultures to develop skills valuable for entry into graduate school programs, professional schools and/or the labor market.

Weber: The Contemporary West

Editor: Dr. Michael Wutz
Managing Editor: Alexandria Thompson
Telephone: 801-626-6473

Instituted in 1984 as *Weber Studies*, this interdisciplinary humanities journal is published under the auspices of the Telitha E. Lindquist College of Arts & Humanities. Indexed in leading indexes in the humanities and social sciences, the journal is peer-reviewed and has an international editorial board. For more information see weberjournal.weber.edu.

Wasatch Writers Center

Wasatch Writers Center fosters numerous programs for WSU students and the community, such as the Wasatch Range Writing Project, our robust visiting writer series, our writers in the schools program, Weber Book Links, our undergraduate literary journal *Metaphor*, and many others.

Department of Communication

Department Chair: Dr. Anne Bialowas
Location: Elizabeth Hall, Room 330
Telephone: 801-626-6426

Professors: Anne Bialowas, Rebecca Johns, Sheree Josephson, Colleen Packer Berg, Sarah Steimel; **Associate Professors:** Michael Ault, Nicola Corbin, Nicole Defenbaugh, Hailey Gillen Hoke, Alexander Lancaster, Jean Norman; **Assistant Professors:** Aaron Atkins, Andrea Baltazar, Li Chen, Mylynn Felt, Robin Haislett, Leslie Howerton, Nathan Rodriguez, Ashkan Soltani-Stone; **Instructors:** Mark Galaviz, Natalie Hales, Lauren Johnson, James McAllister, Stephen Salmon, Deann Shepherd, Brent Warnock

Communication is a dynamic process that plays a complex and profound role in shaping both individuals and society and is vital to the free exchange of ideas central to a democratic society. The Weber State University Department of Communication seeks to promote an understanding of this process and the effective and ethical practice of human communication by focusing on how people create and use messages to generate meanings within and across various contexts, cultures, channels and media, including those delivered through technology. WSU Communication Department curricula and programs are grounded within a liberal arts tradition and are designed to help students live vital and successful lives in an ever-changing global environment.

The curriculum for the major is designed to provide a liberal arts-based study of human communication combined with a course of study that prepares graduates for entry-level employment in Communication and Communication-related careers. The major also prepares students for graduate study in Communication and related disciplines. The Department is committed to enhancing student learning through required internships and through co-curricular opportunities afforded by our award-winning student-operated organizations, including The Signpost, KWCR Wildcat Radio, Ogden Peak Communications, Studio 76, and Weber State Debate and Speech Team.

Communication majors may select one of six emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, and Public Relations & Advertising. They may also select a Communication Teaching major with emphases in Communication Studies or Multimedia Journalism. Students may earn the Communication major as either a Bachelor of Arts or a Bachelor of Science degree.

The Communication minor and the Bachelor of Integrated Studies concentration in Communication (BIS) are designed to provide students with knowledge and skills in Communication that complement the major or other concentrations of study.

The interdisciplinary associate's degree in Workplace Communication & Writing is a career-oriented program designed to prepare students for entry-level careers in many fields while also preparing students for bachelor's

degrees in Communication. The Associate of Science in Communication is another two-year degree offered that benefits students from many professions where communication plays a critical role.

In addition to emphasizing knowledge, understanding, and demonstrated competence in the skills of human communication, curricular and co-curricular programs emphasize the development of character in students. Accordingly, department faculty discourage symbolic expression that demeans and degrades other human beings, and encourage symbolic expression that celebrates the fundamental dignity of all human beings.

Obsolete Credit

Credit earned more than 10 years earlier than the proposed date of graduation will not be accepted for the major, minor or BIS concentration in Communication unless validated through a challenge examination or department chair approval.

Co-curricular and Extra-curricular Activities

Scholarships, Fellowships, and Tuition Waivers

Scholarships and/or tuition waivers are available to WSU Policy Debate Speech Team competitors and to The Signpost, KWCR Wildcat Radio, Ogden Peak Communications, and Studio 76 staff members. Other academic scholarships are also available. Contact the department office at 801-626-6426 or visit the department website at weber.edu/communication for more information.

Professional and/or Honorary Organizations

Communication students are encouraged to join one or more of the professional and/or honorary organizations affiliated with the department. Memberships in these organizations provide students with opportunities to meet and network with Communication professionals, learn about employment opportunities in the field of Communication, and participate in practical experiences relevant to future employment. Professional organizations in Communication include:

Society of Professional Journalists (SPJ)

Public Relations Student Society of America (PRSSA)

Lambda Pi Eta Honor Society (LPH)

Weber State Debate and Speech Team

Participation in intercollegiate debate and speech team activities is conducted in conjunction with the instructional program in argument, public speaking, and civic advocacy. Students participate in debate and speech team tournaments under supervision of the program's directors. The Department of Communication hosts the annual Bob Mukai College Classic, the annual Val Browning Round Robin, and the state high school debate and speech championship. Policy debate is a two-on-two format, centering on a policy question derived from a resolution. Policy debate simultaneously challenges and improves student research, analytical, advocacy, and public speaking skills. Speech competition is a contest between individuals or teams in various argument and advocacy skills that can be used and applied across the educational spectrum. There are four main categories of competition: platform speaking, interpretive speaking, limited preparation, and individual debate.

Weber State Student Media

The Signpost

Multimedia Journalism students polish reporting, writing, and multimedia skills at The Signpost, Weber State University's student-run news organization. Content is disseminated online 24/7 and via newspaper two days a week.

KWCR Wildcat Radio

Students practice and develop their knowledge and resumes by joining Weber State's student-run, digital-streaming radio station KWCR Wildcat Radio. Student staffers gain experience in audio production, podcast creation, live broadcasting, public relations, live event planning, social campaigns, and seeking music promoters and sponsorship opportunities. KWCR streams music, local sports, news, and specialty programs on the MyWeberMedia app and the RadioFX app.

Studio 76

Studio 76 produces high-quality video content for campus and community organizations as well as creates multiple studio shows ranging from a weekly newscast produced for The Signpost to in-studio entertainment shows. Studio 76 also offers live-streaming services to many campus clubs and organizations. Content is shown online via MyWeberMedia.com or Studio 76's YouTube channel.

Ogden Peak Communications

Students run a public relations and advertising agency to apply the skills they have learned in the classroom. Ogden Peak Communications works with clients to develop content and campaigns. Students take on the same roles and responsibilities as PR professionals.

My Weber Media

Members of each student media co-curricular area collaborate through the My Weber Media Group and distribute media content on the converged media site MyWeberMedia.com. Students develop multimedia skills and learn about cross-promotion. The My Weber Media site contains news and views from The Signpost, video content from Studio 76, music and interviews from KWCR Wildcat Radio, as well as promotional material from Ogden Peak Communications. Additional content includes student films and live streaming of important events.

Interdisciplinary Associate's and Minor

The Communication Department participates in the interdisciplinary associate's degree in Workplace Communication and Writing (AA). Students who wish to enroll in this program should contact the Communication Department or one of the college advisors for the College of Arts & Humanities who will help them work out a schedule. The department also participates in the Linguistics Minor/BIS. Students who wish to enroll in this program should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Associate of Arts

Digital Media Production (AA)

- **Grade Requirements:** Institutional grade-point average of 2.0 or better.
- **Credit Hour Requirements:** The Associate of Arts in Digital Media Production is a specialized associate's degree consisting of a minimum of 61 semester credit hours with a minimum of 15 in Digital Media

Production core with a cumulative grade-point average of 2.0 or better. The degree consists of a minimum of 37 credits of General Education classes paired with classes dedicated to professional and artistic expression via digital media, video or film, and 6 credits of Foreign Languages. This degree stacks with the bachelor's degree in Communication with a Digital Media emphasis OR with the interdisciplinary Film Studies bachelor's degree in the College of Arts & Humanities. In Communication classes, students obtain a theoretical perspective on digital media and go on to learn practical skills such as writing, producing audio and video content, performing on audio and video productions, and computer editing skills associated with content creation for the web, social media, film and other purposes. Students apply these skills in Communication classes associated with the converged media site, mywebermedia.com. Elective courses come from Art, Theater and Web. The culminating experience is a capstone course where students work on their resume, portfolio, and interviewing skills while becoming acquainted with the field of digital media and film production.

- **Program Code:** 3091AA
- **CIPC:** 090199

Advisement

Students are encouraged to meet with the academic advisor for the College of Arts & Humanities at least annually for course and program advisement. Email cahadvisor@weber.edu for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information).

General Education

Refer to Degree Requirements for Associate of Arts requirements, which include 6 credits of Foreign Language.

Digital Media Production Core (15 credits)

- COMM 1130 - Media Writing **Credits: (3)** or
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2890 - Cooperative Work Experience for The Signpost **Credits: (1-3)** or
- COMM 2999 - Capstone in Workplace Communication and Writing **Credits: (3)**

Digital Media Production Electives (3 credits)

- ART 1120 - Design Concepts **Credits: (3)**
- ART 2750 - Foundations of Video Art **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
Whichever course not taken above:
- COMM 1130 - Media Writing **Credits: (3)** or
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**

- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- COMM 2730 - Digital Radio Production and Broadcast **Credits: (1-3)**
- COMM 2820 - Podcast Production **Credits: (3)**
- COMM 2980 - Introduction to Storytelling in Cinematic Virtual Reality **Credits: (3)**
- COMM 2890 - Cooperative Work Experience for The Signpost **Credits: (1-3)** (if not taken above)
- COMM 2999 - Capstone in Workplace Communication and Writing **Credits: (3)** (if not taken above)
- THEA 1023 CA - Introduction to Film **Credits: (3)**
- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- WEB 1400 - Web Design and Usability **Credits: (3)**
- WEB 2200 - Image Editing **Credits: (3)**
- WEB 2410 - Web Animation I **Credits: (3)**
- WEB 2500 - User Experience Design **Credits: (3)**

Note

Only 6 credits of COMM 2730 and COMM 2890 can be counted toward AA degree.

Associate of Applied Science

Digital Media Production (AAS)

- **Grade Requirements:** Institutional grade-point average of 2.0 or better.
- **Credit Hour Requirements:** The Associate Applied Science in Digital Media Production is a specialized associate's degree consisting of a minimum of 64 semester credit hours with a minimum of 21 in Communication. The degree consists of a minimum of 18 credits of General Education classes (ENGL 1010, ENGL 2010, MATH QL, HU/CA, SS, PS/LS) paired with classes dedicated to professional and artistic expression via digital media, video or film. This degree stacks with the bachelor's degree in Communication with a Digital Media emphasis OR with the interdisciplinary Film Studies bachelor's degree in the College of Arts & Humanities. In Communication, students obtain a theoretical perspective on digital media and go on to learn practical skills such as writing, producing audio and video content, performing on audio and video productions, and computer editing skills associated with content creation for the web, social media, film and other purposes. Students apply these skills in Communication classes associated with the converged media site, mywebermedia.com. Elective courses come from Art, Theater and Web. The culminating experience is a capstone course where students work on their resume, portfolio, and interviewing skills while becoming acquainted with the field of digital media and film production.
- **Program Code:** 3091AAS
- **CIPC:** 090199

Advisement

Students are encouraged to meet with the academic advisor for the College of Arts & Humanities at least annually for course and program advisement. Email cahadvisor@weber.edu for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information).

General Education

Refer to Degree Requirements for Associate of Applied Science requirements.

Digital Media & Film Production Core (21 credits)

- COMM 1130 - Media Writing **Credits: (3)** or
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 1500 - Introduction to Mass Communication **Credits: (3)** or
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2890 - Cooperative Work Experience for The Signpost **Credits: (1-3)** or
- COMM 2999 - Capstone in Workplace Communication and Writing **Credits: (3)**

Digital Media Production Electives (24 credits)

- ART 1120 - Design Concepts **Credits: (3)**
- ART 2750 - Foundations of Video Art **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**

Whichever course not taken above:

- COMM 1130 - Media Writing **Credits: (3)** or
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**

Whichever course not taken above:

- COMM 1500 - Introduction to Mass Communication **Credits: (3)** or
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2730 - Digital Radio Production and Broadcast **Credits: (1-3)**
- COMM 2820 - Podcast Production **Credits: (3)**
- COMM 2980 - Introduction to Storytelling in Cinematic Virtual Reality **Credits: (3)**
- COMM 2890 - Cooperative Work Experience for The Signpost **Credits: (1-3)** (if not taken above)
- COMM 2999 - Capstone in Workplace Communication and Writing **Credits: (3)** (if not taken above)
- THEA 1023 CA - Introduction to Film **Credits: (3)**
- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**

- THEA 2403 - Stage Management **Credits: (3)**
- WEB 1400 - Web Design and Usability **Credits: (3)**
- WEB 2200 - Image Editing **Credits: (3)**
- WEB 2410 - Web Animation I **Credits: (3)**
- WEB 2500 - User Experience Design **Credits: (3)**

Note

Only 6 credits of COMM 2730 and COMM 2890 can be counted toward AAS degree.

Associate of Science

Communication (AS)

An Associate of Science degree may be obtained while pursuing coursework in Communication. The AS requires a minimum of 61 semester credit hours (24 in COMM) with a cumulative grade-point average of 2.0 or better. Communication core (12 credit hours) course requirements include COMM 1020 HU - Principles of Public Speaking, COMM 1130 - Media Writing, COMM 1500 - Introduction to Mass Communication, COMM 2110 HU CEL - Interpersonal and Small Group Communication. Communication electives (12 credit hours) include any combination of: COMM 1270 - Analysis of Argument, COMM 1560 - Audio Production and Performance, COMM 2010 HU - Mass Media and Society, COMM 2200 - Multi-Camera Production and Performance, COMM 2210* Intercollegiate Debate, COMM 2250 HU - Essentials of Digital Media, COMM 2270 - Argumentation and Debate, COMM 2730* Radio Production Workshop.

*COMM 2210 & 2730 are 1-credit hour participation courses that may be repeated for 3 credit hours each for an AS degree.

- **Program Code:** 3017AS
- **CIPC:** 090101

Advisement

Students are encouraged to meet with the academic advisor for the College of Arts and Humanities at least annually for course and program advisement. Call 801-626-6631 or email cahadvisor@weber.edu for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information).

General Education

Refer to Degree Requirements of this catalog for Associate of Science requirements.

Communication Core Requirements (12 credits)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** OR
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 1500 - Introduction to Mass Communication **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**

Communication Electives (12 credits)

- COMM 1270 - Analysis of Argument **Credits: (3)**
 - COMM 1560 - Audio Production and Performance **Credits: (3)**
 - COMM 2010 HU - Mass Media and Society **Credits: (3)**
 - COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
 - COMM 2210 INT - Intercollegiate Debate **Credits: (1)**
 - COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
 - COMM 2270 - Argumentation and Debate **Credits: (3)**
 - COMM 2550 - Communication in Professional Settings **Credits: (3)**
 - COMM 2730 - Digital Radio Production and Broadcast **Credits: (1-3)**
 - COMM 2890 - Cooperative Work Experience for The Signpost **Credits: (1-3)**
 - COMM 2999 - Capstone in Workplace Communication and Writing **Credits: (3)**
- COMM 2210 & 2730 are 1-credit hour participation courses that may be repeated for 3 credit hours each for an AS degree.***

Digital Media Production (AS)

- **Grade Requirements:** Institutional grade-point average of 2.0 or better.
- **Credit Hour Requirements:** The Associate of Science in Digital Media Production is a specialized associate's degree consisting of a minimum of 61 semester credit hours with a minimum of 18 credits in Communication. The degree consists of a minimum of 37 credits of General Education classes paired with classes dedicated to professional and artistic expression via digital media, video or film. This degree stacks with the bachelor's degree in Communication with a Digital Media emphasis OR with the interdisciplinary Film Studies bachelor's degree in the College of Arts & Humanities. In Communication, students obtain a theoretical perspective on digital media and go on to learn practical skills such as writing, producing audio and video content, performing on audio and video productions, and computer editing skills associated with content creation for the web, social media, film and other purposes. Students apply these skills in Communication classes associated with the converged media site, mywebermedia.com. Elective courses come from Art, Theater and Web. The culminating experience is a capstone course where students work on their resume, portfolio, and interviewing skills while becoming acquainted with the field of digital media and film production.
- **Program Code:** 3091AS
- **CIPC:** 090199

Advisement

Students are encouraged to meet with the academic advisor for the College of Arts & Humanities at least annually for course and program advisement. Email cahadvisor@weber.edu for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information).

General Education

Refer to Degree Requirements for Associate of Science requirements.

Digital Media & Film Production Core (18 credits)

- COMM 1130 - Media Writing **Credits: (3)** or
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 1500 - Introduction to Mass Communication **Credits: (3)** or
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2890 - Cooperative Work Experience for The Signpost **Credits: (1-3)** or
- COMM 2999 - Capstone in Workplace Communication and Writing **Credits: (3)**

Digital Media Production Electives (6 credits)

- ART 1120 - Design Concepts **Credits: (3)**
- ART 2750 - Foundations of Video Art **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**

Whichever course not taken above:

- COMM 1130 - Media Writing **Credits: (3)** or
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**

Whichever course not taken above:

- COMM 1500 - Introduction to Mass Communication **Credits: (3)** or
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- COMM 2730 - Digital Radio Production and Broadcast **Credits: (1-3)**
- COMM 2820 - Podcast Production **Credits: (3)**
- COMM 2980 - Introduction to Storytelling in Cinematic Virtual Reality **Credits: (3)**
- COMM 2890 - Cooperative Work Experience for The Signpost **Credits: (1-3)** (if not taken above)
- COMM 2999 - Capstone in Workplace Communication and Writing **Credits: (3)** (if not taken above)
- THEA 1023 CA - Introduction to Film **Credits: (3)**
- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**

- THEA 2403 - Stage Management **Credits: (3)**
- WEB 1400 - Web Design and Usability **Credits: (3)**
- WEB 2200 - Image Editing **Credits: (3)**
- WEB 2410 - Web Animation I **Credits: (3)**
- WEB 2500 - User Experience Design **Credits: (3)**

Note

Only 6 credits of COMM 2730 and COMM 2890 can be counted toward AS degree.

Institutional Certificate

Social Media and Data Analytics Certificate of Proficiency

The Certificate of Proficiency in Social Media and Data Analytics enables students and professionals to validate their intermediate data analysis skills in social media research and strategic planning in communication. This validation provides a competitive advantage in current or future employment, broadens business opportunities, and strengthens the connections between academia and industry. This certificate equips individuals with a solid foundation in social media strategy and research, making them valuable assets to employers in the communication industry.

- **Grade Requirements:** A grade of "C" or better in all courses used for this certificate Credit Hour Requirements: A total of 18 credit hours is required.
- **Program Code:** 3109CP
- **CIPC:** 090702

Advisement

Students are advised by faculty and the Academic Advisor for the Department of Communication.

Admission Requirements N/A Program Learning Outcomes

- Analyze social media data to inform effective communication strategies that support organizational goals.
- Utilize social media analytics to measure the impact of campaigns and optimize content strategies.
- Interpret and communicate data-driven insights to inform decision-making in social media marketing and strategic planning.
- Evaluate emerging social media trends and technologies and their potential implications for organizations.

Major Course Requirements

Required Courses (9 credit hours)

Complete the following (9 credit hours)

- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3880 - Audience Analysis **Credits: (3)**

Elective Courses (9 credit hours)

9 credit hours selected from the following courses.

- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3840 - Data Visualization and Storytelling **Credits: (3)**
- COMM 4880 - Social Media Metrics and Measurement **Credits: (3)**
- COMM 3894 - Advanced Cooperative Work Experience with Social Media and Data Analytics Lab **Credits: (1-3)**
- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)** <limited to the social media manager position>
- COMM 3891 INT - Advanced Cooperative Work Experience with KWCR **Credits: (1-3)** <limited to the social media manager position>
- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)** <limited to the social media manager position>
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)** <limited to the social media manager position>
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4760 - Media Management and Distribution **Credits: (3)**

Bachelor of Arts

Communication (BA)

Areas of Emphasis

Select one of the following areas of emphasis

- Communication (BA), Civic Advocacy Emphasis
- Communication Teaching (BA), Communication Studies Emphasis
- Communication (BA), Digital Media Emphasis
- Communication (BA), Interpersonal & Family Communication Emphasis
- Communication (BA), Multimedia Journalism Emphasis
- Communication Teaching (BA), Multimedia Journalism Emphasis
- Communication (BA), Organizational Communication Emphasis
- Communication (BA), Public Relations and Strategic Communication Emphasis
- Communication (BA), Social Media & Data Analytics

Communication (BA), Civic Advocacy Emphasis

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family

Communication, Multimedia Journalism, Organizational Communication, Public Relations & Advertising, and Social Media & Data Analytics. A student may not receive both a major and a minor from the Department of Communication.

- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations and Strategic Communication (3123), Social Media & Data Analytics (3109).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations and Strategic Communication (090999), Social Media & Data Analytics (090702).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication coursework at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors: weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy General Education requirements: COMM 1020 HU, COMM 2010 HU, and COMM 2110 HU CEL.

Program Learning Outcomes

- **Writing:** Write at a level expected of a professional communicator in a selected emphasis area.
- **Diversity:** Be sensitive to difference and discrimination in society and value diversity.
- **Career Readiness:** Be prepared to enter a professional career or graduate school.
- **Critical thinking:** Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- **Law/Ethics:** Understand communication law and ethics to enable legal and ethical communication.
- **Theory:** Understand how various communication theories have been developed, applied, and evaluated.
- **Research:** Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.

- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising
- Social Media & Data Analytics

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** OR
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BA (12 credit hours)

Complete either Option 1 or Option 2.

Option 1 - Foreign Language

- Select 4 courses (12 credit hours) in a foreign language.

Option 2 - Foreign Language with Language Arts

Select two courses (6 credit hours) from the following, plus two courses (6 credit hours) in a foreign language.

- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 4160 - Contemporary Rhetorical and Communication Theories **Credits: (3)**

Civic Advocacy Emphasis (45 credit hours)

The mission of the Civic Advocacy emphasis is to educate students who wish to serve as advocates in the interest of the public good. Those who might benefit from this interdisciplinary emphasis include students who want to become attorneys, legislators, environmental advocates, animal rights activists, religious leaders, homeless advocates, politicians, children's advocates, advocates for minority and marginalized populations, etc.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks:

- Environmental Advocacy
- Ethnic Studies/Ethnic Advocacy
- Legal Advocacy
- Public Policy Advocacy
- Religion Advocacy
- Women's Advocacy

Required Courses (27 credit hours)

- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2270 - Argumentation and Debate **Credits: (3)** or
- COMM 1270 - Analysis of Argument **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)** or
- COMM 3090 - Gender and Communication **Credits: (3)**

Three of the following courses (9 credit hours):

- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3070 - Performance Studies **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)**
- COMM 3891 INT - Advanced Cooperative Work Experience with KWCR **Credits: (1-3)**
- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)**
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)**
- COMM 4500 - Topics in Communication **Credits: (3)** *only when taught as "Political Communication"*

Elective Courses (18 credit hours)

See department advisor for an approved list of additional non-Communication Department courses for the tracks (18 credit hours).

Communication (BA), Digital Media Emphasis

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, Public Relations & Advertising, and Social Media & Data Analytics. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations and Strategic Communication (3123), Social Media & Data Analytics (3109).

- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations and Strategic Communication (090999), Social Media & Data Analytics (090702).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication coursework at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors: weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy General Education requirements: COMM 1020 HU, COMM 2010 HU, and COMM 2110 HU CEL.

Program Learning Outcomes

- Writing: Write at a level expected of a professional communicator in a selected emphasis area.
- Diversity: Be sensitive to difference and discrimination in society and value diversity.
- Career Readiness: Be prepared to enter a professional career or graduate school.
- Critical thinking: Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- Law/Ethics: Understand communication law and ethics to enable legal and ethical communication.
- Theory: Understand how various communication theories have been developed, applied, and evaluated.
- Research: Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising
- Social Media & Data Analytics

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** OR
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BA (12 credit hours)

Complete either Option 1 or Option 2.

Option 1 - Foreign Language

- Select 4 courses (12 credit hours) in a foreign language.

Option 2 - Foreign Language with Language Arts

Select two courses (6 credit hours) from the following, plus two courses (6 credit hours) in a foreign language.

- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**

- COMM 3650 - Communication Law **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 4160 - Contemporary Rhetorical and Communication Theories **Credits: (3)**

Digital Media Emphasis (45 credit hours)

An emphasis in Digital Media will teach students about the importance of deadlines, budgets, and the impact their actions have on a production team. Advanced students will gain understanding about the art and power of communicating messages through video, audio, and the web.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks:

- **Entertainment:** acquire skills in production, writing, and content development to prepare to pursue further graduate study and careers within the entertainment industry.
- **Digital Media Production:** acquire skills producing, writing, shooting, editing, directing, and distributing video content. Focused on creating and sharing institutional, educational, and commercial video productions.

Required Courses (30 credit hours)

- COMM 1500 - Introduction to Mass Communication **Credits: (3)**
- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3750 - Advanced Cinematography and Editing **Credits: (3)**
- COMM 4760 - Media Management and Distribution **Credits: (3)**

Three of the following courses (9 credit hours)

- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- COMM 2730 - Digital Radio Production and Broadcast **Credits: (1-3)** (3 semesters at 1 credit hour each)
- COMM 2820 - Podcast Production **Credits: (3)**
- COMM 2980 - Introduction to Storytelling in Cinematic Virtual Reality **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3070 - Performance Studies **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**

- COMM 3200 - Live Event Production **Credits: (1-3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3850 - Advertising **Credits: (3)**
- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)**
- COMM 3891 INT - Advanced Cooperative Work Experience with KWCR **Credits: (1-3)**
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**
- COMM 4440 - Developing and Evaluating Health Communication Campaigns **Credits: (3)**
- COMM 4500 - Topics in Communication **Credits: (3)** *only when taught as digital media-related topic and with permission of instructor*
- COMM 4800 - Special Study and Individual Projects **Credits: (1-3)**

Elective Courses (15 credit hours)

Note:

See department advisor for an approved list of non-Communication Department courses for the tracks (15 credit hours).

Communication (BA), Interpersonal & Family Communication Emphasis

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, and Public Relations & Advertising. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division is required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations & Advertising (3055).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101),

Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations & Advertising (090999).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication course-work at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors - weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy general education requirements: COMM 1020, COMM 2010, and COMM 2110.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** OR
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**

- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BA (12 credit hours)

Complete either Option 1 or Option 2.

Option 1 - Foreign Language

- Select 4 courses (12 credit hours) in a foreign language.

Option 2 - Foreign Language with Language Arts

Select two courses (6 credit hours) from the following, plus two courses (6 credit hours) in a foreign language.

- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 4160 - Contemporary Rhetorical and Communication Theories **Credits: (3)**

Interpersonal & Family Communication Emphasis (45 credit hours)

The Interpersonal & Family Communication emphasis is designed to help students understand, explain, and improve friendship, marriage, family, and other meaningful long- and short-term interpersonal relationships. Communication is the central enabling feature or framework through which we all function, create, and share meaning, sustain identities, and negotiate our relationships with each other and the rest of the world. This program of study will teach students to understand these complex, dynamic relationships.

Required Courses (24 credit hours)

- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**

- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3085 - Family Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**

Required Outside the Department (6 credits)

- FAM 1400 - Marriage and Romantic Relationships **Credits: (3)** or
- CHF 2400 SS/CC - Family Relations **Credits: (3)**
- WGS 1500 SS/CC - Introduction to Women, Gender, and Queer Studies **Credits: (3)**

Three of the following courses (9 credit hours)

- COMM 1270 - Analysis of Argument **Credits: (3)**
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- COMM 3070 - Performance Studies **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)**

Elective Courses (12 credit hours)

Note:

See department advisor for an approved list of non-Communication Department courses for the tracks (12 credit hours).

Communication (BA), Multimedia Journalism Emphasis

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, and Public Relations & Advertising. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.

- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations and Strategic Communication (3123).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations and Strategic Communication (090999).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication coursework at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors: weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy General Education requirements: COMM 1020 HU, COMM 2010 HU, and COMM 2110 HU CEL.

Program Learning Outcomes

- **Writing:** Write at a level expected of a professional communicator in a selected emphasis area.
- **Diversity:** Be sensitive to difference and discrimination in society and value diversity.
- **Career Readiness:** Be prepared to enter a professional career or graduate school.
- **Critical thinking:** Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- **Law/Ethics:** Understand communication law and ethics to enable legal and ethical communication.
- **Theory:** Understand how various communication theories have been developed, applied, and evaluated.
- **Research:** Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- **History:** Know the history of the communication discipline and its societal and professional implications.
- **Media:** Use and produce media to communicate messages.
- **Interpersonal/Small Group:** Facilitate successful communication in interpersonal situations and small group settings.
- **Listening:** Listen actively to acquire and analyze information.

- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising
- Social Media & Data Analytics

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BA (12 credit hours)

Complete either Option 1 or Option 2.

Option 1 - Foreign Language

- Select 4 courses (12 credit hours) in a foreign language.

Option 2 - Foreign Language with Language Arts

Select two courses (6 credit hours) from the following, plus two courses (6 credit hours) in a foreign language.

- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**

- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 4160 - Contemporary Rhetorical and Communication Theories **Credits: (3)**

Multimedia Journalism Emphasis (45 credit hours)

The Multimedia Journalism emphasis teaches students how to collect and write information or produce video and audio content regarding current events-including trends, issues, and people-for publication in a website, newspaper, or magazine. The curriculum emphasizes writing skills and video/audio production skills, but students also learn about research, interviewing, editing, layout and design, and legal and ethical issues in journalism.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks:

- Technical Writing
- Web Publishing
- Literary Journalism
- General Reporting
- Sports Journalism

Required Courses (30 credit hours)

- COMM 1500 - Introduction to Mass Communication **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3200 - Live Event Production **Credits: (1-3)** (*select 3 credit hours*) OR
- COMM 3840 - Data Visualization and Storytelling **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)** (*select 3 credit hours*)
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**

Three of the following courses (9 credit hours):

- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**

- COMM 2730 - Digital Radio Production and Broadcast **Credits: (1-3)**
- COMM 2820 - Podcast Production **Credits: (3)**
- COMM 2980 - Introduction to Storytelling in Cinematic Virtual Reality **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3850 - Advertising **Credits: (3)**
- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)**
- COMM 3891 INT - Advanced Cooperative Work Experience with KWCR **Credits: (1-3)**
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)**
- COMM 4400 INT - Public Relations Media and Campaigns **Credits: (3)**
- COMM 4440 - Developing and Evaluating Health Communication Campaigns **Credits: (3)**
- COMM 4500 - Topics in Communication **Credits: (3)** *only when taught as journalism-related topic and with permission of instructor*

Elective Courses (15 credit hours)

See department advisor for an approved list of additional non-Communication Department courses for the tracks (15 credit hours).

Communication (BA), Organizational Communication Emphasis

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, and Public Relations & Advertising. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division is required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations & Advertising (3055).

- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations & Advertising (090999).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication course-work at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors - weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy general education requirements: COMM 1020, COMM 2010, and COMM 2110.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** OR

- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BA (12 credit hours)

Complete either Option 1 or Option 2.

Option 1 - Foreign Language

- Select 4 courses (12 credit hours) in a foreign language.

Option 2 - Foreign Language with Language Arts

Select two courses (6 credit hours) from the following, plus two courses (6 credit hours) in a foreign language.

- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 4160 - Contemporary Rhetorical and Communication Theories **Credits: (3)**

Organizational Communication Emphasis (45 credit hours)

An Organizational Communication emphasis provides students with a foundation employers seek-effective professional communication in the workplace.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks:

- **Generalist:** Does not specialize. The generalist has the communication skills and knowledge to lead groups and develop organizational strategies necessary for management. Rather than focus on the career areas of technical writing or training and development, the generalist combines organizational communication with expertise in a secondary subject of interest. Minors in disciplines such as Spanish, health administration,

political science, psychology, or economics are a valuable combination with an Organizational Communication Generalist emphasis.

- **Technical Writing:** Synthesizes technical information into messages easily understood by a given audience. Technical writers produce organizational policy and training manuals, employee newsletters, brochures, grant applications, and annual reports.
- **Training & Development:** Conducts training needs assessments for diverse groups, designs workshops, writes training manuals, evaluates classroom technology and equipment needs, and evaluates training.

Required Courses (27 credit hours)

- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)** or
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**

Three of the following courses (9 credit hours)

- COMM 1500 - Introduction to Mass Communication **Credits: (3)** OR
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3085 - Family Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)**

Required Courses outside the Department (18 credit hours)

Technical Writing track (18 credit hours):

- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3140 - Professional and Technical Editing **Credits: (3)**
- ENGL 3190 CEL - Document Design **Credits: (3)**
- ENGL 4100 - Issues in Professional and Technical Writing **Credits: (3)**

- ENGL 4110 - Content Management **Credits: (3)**
- WEB 1400 - Web Design and Usability **Credits: (3)**

Training & Development track (18 credit hours):

- BSAD 1010 - Introduction to Business **Credits: (3)**
- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3190 CEL - Document Design **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- MGMT 3200 - Managerial Communications **Credits: (3)**
- MGMT 3300 - Human Resource Management **Credits: (3)**
- MGMT 3350 - Employment and Labor Law **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MGMT 4320 - Staffing Organizations **Credits: (3)**
- MGMT 4350 - Training **Credits: (3)**
- WEB 3400 - LAMP Stack Web Development **Credits: (3)**

Communication (BA), Public Relations and Strategic Communication Emphasis

The Public Relations & Advertising emphasis provides students with theoretical and practical skills in writing, critical thinking, marketing, advertising, and communicating to influence public opinion across a range of media.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks (15 credits):

- Copywriting
- Health Care Public Relations
- International Public Relations
- Marketing
- Visual Communication

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, and Public Relations & Advertising. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia

Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations and Strategic Communication (3123).

- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations and Strategic Communication (090999).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication coursework at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors: weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy General Education requirements: COMM 1020 HU, COMM 2010 HU, and COMM 2110 HU CEL.

Program Learning Outcomes

- Writing: Write at a level expected of a professional communicator in a selected emphasis area.
- Diversity: Be sensitive to difference and discrimination in society and value diversity.
- Career Readiness: Be prepared to enter a professional career or graduate school.
- Critical thinking: Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- Law/Ethics: Understand communication law and ethics to enable legal and ethical communication.
- Theory: Understand how various communication theories have been developed, applied, and evaluated.
- Research: Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising
- Social Media & Data Analytics

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BA (12 credit hours)

Complete either Option 1 or Option 2.

Option 1 - Foreign Language

- Select 4 courses (12 credit hours) in a foreign language.

Option 2 - Foreign Language with Language Arts

Select two courses (6 credit hours) from the following, plus two courses (6 credit hours) in a foreign language.

- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**

- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 4160 - Contemporary Rhetorical and Communication Theories **Credits: (3)**

Public Relations & Strategic Communication Emphasis (45 credit hours)

The Public Relations & Strategic Communication emphasis provides students with theoretical and practical skills in writing, critical thinking, marketing, advertising, and communicating to influence public opinion across a range of media.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks (15 credits):

- Copywriting
- Health Care Public Relations
- International Public Relations
- Marketing
- Visual Communication

Required Courses (21 credit hours)

- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)** (3 credits required)
OR
- COMM 3840 - Data Visualization and Storytelling **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3850 - Advertising **Credits: (3)**
- COMM 4400 INT - Public Relations Media and Campaigns **Credits: (3)** or
- COMM 4440 - Developing and Evaluating Health Communication Campaigns **Credits: (3)**
- Non-Communication Requirement for Major (3 credits)***
- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**

Three of the following courses (9 credit hours)

- COMM 1500 - Introduction to Mass Communication **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2820 - Podcast Production **Credits: (3)**

- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3840 - Data Visualization and Storytelling **Credits: (3)**
- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)**
- COMM 4500 - Topics in Communication **Credits: (3)** *only when taught as public relations/advertising-related topic and with permission of instructor*

Elective Courses (15 credit hours)

Note:

See department advisor for an approved list of non-Communication Department courses for the tracks (15 credit hours).

Communication (BA), Social Media & Data Analytics

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, Public Relations & Advertising, and Social Media & Data Analytics. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations and Strategic Communication (3123), Social Media & Data Analytics (3109).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations and Strategic Communication (090999), Social Media & Data Analytics (090702).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication coursework at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors: weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy General Education requirements: COMM 1020 HU, COMM 2010 HU, and COMM 2110 HU CEL.

Program Learning Outcomes

- Writing: Write at a level expected of a professional communicator in a selected emphasis area.
- Diversity: Be sensitive to difference and discrimination in society and value diversity.
- Career Readiness: Be prepared to enter a professional career or graduate school.
- Critical thinking: Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- Law/Ethics: Understand communication law and ethics to enable legal and ethical communication.
- Theory: Understand how various communication theories have been developed, applied, and evaluated.
- Research: Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising
- Social Media & Data Analytics

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** OR
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BA (12 credit hours)

Complete either Option 1 or Option 2.

Option 1 - Foreign Language

- Select 4 courses (12 credit hours) in a foreign language.

Option 2 - Foreign Language with Language Arts

Select two courses (6 credit hours) from the following, plus two courses (6 credit hours) in a foreign language.

- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 4160 - Contemporary Rhetorical and Communication Theories **Credits: (3)**

Social Media and Data Analytics Emphasis (45 credits)

An emphasis in Social Media and Data Analytics will provide students with an in-depth understanding of social media and how to strategically use it to communicate messages. Students will gain skills in creating social media content, analyzing social media data, and making data visualizations to communicate complex data to audiences.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks:

- Web Design: acquire skills in web design and web management
- Digital Strategy: acquire skills in digital strategy and advertising
- Audience Analytics: acquire skills in audience and consumer analysis and campaign analysis

Required for Social Media and Data Analytics Emphasis (30 credits)

- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3840 - Data Visualization and Storytelling **Credits: (3)**
- COMM 3880 - Audience Analysis **Credits: (3)**
- COMM 4880 - Social Media Metrics and Measurement **Credits: (3)**

Three of the following courses (9 credit hours)

- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2820 - Podcast Production **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3200 - Live Event Production **Credits: (1-3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3750 - Advanced Cinematography and Editing **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3850 - Advertising **Credits: (3)**
- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)**
- COMM 3891 INT - Advanced Cooperative Work Experience with KWCR **Credits: (1-3)**
- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)**
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)**
- COMM 3894 - Advanced Cooperative Work Experience with Social Media and Data Analytics Lab **Credits: (1-3)**

- COMM 4440 - Developing and Evaluating Health Communication Campaigns **Credits: (3)**
- COMM 4760 - Media Management and Distribution **Credits: (3)**

Elective Courses (15 credit hours)

See department advisor for an approved list of non-Communication Department courses for the tracks (15 credit hours).

Communication Teaching (BA), Communication Studies Emphasis

Communication Teaching Major (BS or BA)

- **Program Prerequisite:** Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable).
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A minimum of 47-48 of these are required within the major, depending on the selected emphasis. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); a minimum of 24-36 of these are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media (3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations & Advertising (3055).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media (090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations & Advertising (090999).

Advisement

Communication students are required to meet with a faculty advisor at least annually for course and program advisement. Teaching majors are encouraged to also consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269). (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

General Education

Refer to Degree Requirements of this catalog for either Bachelor of Science or Bachelor of Arts requirements. See specific requirements for the BA and BS under the major course requirements. The following courses required for this

major will also fulfill general education requirements: COMM 1020 HU or COMM 2010 HU and COMM 2110 HU CEL.

Program Learning Outcomes

- Writing: Write at a level expected of a professional communicator in a selected emphasis area.
- Diversity: Be sensitive to difference and discrimination in society and value diversity.
- Career Readiness: Be prepared to enter a professional career or graduate school.
- Critical thinking: Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- Law/Ethics: Understand communication law and ethics to enable legal and ethical communication.
- Theory: Understand how various communication theories have been developed, applied, and evaluated.
- Research: Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Requirements

The State of Utah endorses secondary teachers in two areas of Communication: Speech and Journalism. Accordingly, the Communication Teaching major is divided into two emphasis areas: Communication Studies (Speech) and Multimedia Journalism (Journalism). All Communication Teaching majors must complete one of these two emphasis areas.

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must also complete required and elective courses from non-Communication departments.

Communication Courses Required of all Communication Teaching Majors (21 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)** *
- COMM 1130 - Media Writing **Credits: (3)**
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Note:

Students must take either COMM 1020 HU or COMM 2110 HU CEL as a foundation course requirement for the Communication Teaching major, whichever is **not used for Teacher Education admission requirements.*

Courses Required to Fulfill the BA (12 credit hours)

Complete either Option 1 or Option 2.

Option 1 - Foreign Language

- Select 4 courses (12 credit hours) in a foreign language.

Option 2 - Foreign Language with Language Arts

Select two courses (6 credit hours) from the following, plus two courses (6 credit hours) in a foreign language.

- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 4160 - Contemporary Rhetorical and Communication Theories **Credits: (3)**

Communication Studies Emphasis (27 credit hours)

Required Courses (18 credit hours)

- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 4850 INT - Teaching Speech and Directing Speech Activities in the Secondary School **Credits: (3)**

Electives (9 credit hours)

Select 9 credit hours of electives from the following with approval from the department's Communication Education advisor for the Communication Studies emphasis.

- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3070 - Performance Studies **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**

Communication Teaching (BA), Multimedia Journalism Emphasis

Communication Teaching Major (BS or BA)

- **Program Prerequisite:** Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable).
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A minimum of 47-48 of these are required within the major, depending on the selected emphasis. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); a minimum of 24-36 of these are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media (3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations & Advertising (3055).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media (090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations & Advertising (090999).

Advisement

Communication students are required to meet with a faculty advisor at least annually for course and program advisement. Teaching majors are encouraged to also consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269). (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

General Education

Refer to Degree Requirements of this catalog for either Bachelor of Science or Bachelor of Arts requirements. See specific requirements for the BA and BS under the major course requirements. The following courses required for this major will also fulfill general education requirements: COMM 1020 HU or COMM 2010 HU and COMM 2110 HU CEL.

Program Learning Outcomes

- Writing: Write at a level expected of a professional communicator in a selected emphasis area.
- Diversity: Be sensitive to difference and discrimination in society and value diversity.
- Career Readiness: Be prepared to enter a professional career or graduate school.
- Critical thinking: Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- Law/Ethics: Understand communication law and ethics to enable legal and ethical communication.
- Theory: Understand how various communication theories have been developed, applied, and evaluated.
- Research: Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Requirements

The State of Utah endorses secondary teachers in two areas of Communication: Speech and Journalism. Accordingly, the Communication Teaching major is divided into two emphasis areas: Communication Studies (Speech) and Multimedia Journalism (Journalism). All Communication Teaching majors must complete one of these two emphasis areas.

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must also complete required and elective courses from non-Communication departments.

Communication Courses Required of all Communication Teaching Majors (21 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)** *
- COMM 1130 - Media Writing **Credits: (3)**
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Note:

Students must take either COMM 1020 HU or COMM 2110 HU CEL as a foundation course requirement for the Communication Teaching major, whichever is **not used for Teacher Education admission requirements.*

Courses Required to Fulfill the BA (12 credit hours)

Complete either Option 1 or Option 2.

Option 1 - Foreign Language

- Select 4 courses (12 credit hours) in a foreign language.

Option 2 - Foreign Language with Language Arts

Select two courses (6 credit hours) from the following, plus two courses (6 credit hours) in a foreign language.

- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 4160 - Contemporary Rhetorical and Communication Theories **Credits: (3)**

Multimedia Journalism Emphasis (27 credit hours)

Required Courses (18 credit hours)

- COMM 1500 - Introduction to Mass Communication **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)** or
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 4840 - Teaching Journalism and Advising Student Media in the Secondary School **Credits: (3)**

Electives (9 credit hours)

Select 9 credit hours of electives from the following with approval from the department's communication education advisor for the Multimedia Journalism emphasis.

- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**

Bachelor of Science

Communication (BS)

Areas of Emphasis

Select one of the following areas of emphasis

- Communication (BS), Civic Advocacy Emphasis
- Communication Teaching (BS), Communication Studies Emphasis
- Communication (BS), Digital Media Emphasis
- Communication (BS), Interpersonal & Family Communication Emphasis
- Communication (BS), Multimedia Journalism Emphasis
- Communication Teaching (BS), Multimedia Journalism Emphasis
- Communication (BS), Organizational Communication Emphasis
- Communication (BS), Public Relations and Strategic Communication Emphasis
- Communication (BS), Social Media & Data Analytics

Communication (BS), Civic Advocacy Emphasis

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, Public Relations & Advertising, and Social Media & Data Analytics. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.

- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations and Strategic Communication (3123), Social Media & Data Analytics (3109).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations and Strategic Communication (090999), Social Media & Data Analytics (090702).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication coursework at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors: weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy General Education requirements: COMM 1020 HU, COMM 2010 HU, and COMM 2110 HU CEL.

Program Learning Outcomes

- **Writing:** Write at a level expected of a professional communicator in a selected emphasis area.
- **Diversity:** Be sensitive to difference and discrimination in society and value diversity.
- **Career Readiness:** Be prepared to enter a professional career or graduate school.
- **Critical thinking:** Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- **Law/Ethics:** Understand communication law and ethics to enable legal and ethical communication.
- **Theory:** Understand how various communication theories have been developed, applied, and evaluated.
- **Research:** Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- **History:** Know the history of the communication discipline and its societal and professional implications.
- **Media:** Use and produce media to communicate messages.
- **Interpersonal/Small Group:** Facilitate successful communication in interpersonal situations and small group settings.

- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising
- Social Media & Data Analytics

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** OR
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Pick 3 credit hours from Physical Sciences and 3 credit hours from Life Sciences.

- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- CHEM 1360 PS - Principles of Physical Science **Credits: (3)**
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEO 1030 PS - Earthquakes and Volcanoes **Credits: (3)**
- GEO 1350 PS - Principles of Earth Science **Credits: (3)**
- HNRS 1500 PS - Perspectives in the Physical Sciences **Credits: (3)**

- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- BTNY 1370 LS - Principles of Life Science **Credits: (3)**
- HNRS 1510 LS - Perspectives in the Life Sciences **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1020 LS - Science and Application of Human Nutrition **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**
- ZOOL 1030 LS - The Nature of Sex **Credits: (3)**

Civic Advocacy Emphasis (45 credit hours)

The mission of the Civic Advocacy emphasis is to educate students who wish to serve as advocates in the interest of the public good. Those who might benefit from this interdisciplinary emphasis include students who want to become attorneys, legislators, environmental advocates, animal rights activists, religious leaders, homeless advocates, politicians, children's advocates, advocates for minority and marginalized populations, etc.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks:

- Environmental Advocacy
- Ethnic Studies/Ethnic Advocacy
- Legal Advocacy
- Public Policy Advocacy
- Religion Advocacy
- Women's Advocacy

Required Courses (27 credit hours)

- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2270 - Argumentation and Debate **Credits: (3)** or
- COMM 1270 - Analysis of Argument **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)** or
- COMM 3090 - Gender and Communication **Credits: (3)**

Three of the following courses (9 credit hours):

- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3070 - Performance Studies **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**

- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)**
- COMM 3891 INT - Advanced Cooperative Work Experience with KWCR **Credits: (1-3)**
- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)**
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)**
- COMM 4500 - Topics in Communication **Credits: (3)** *only when taught as "Political Communication"*

Elective Courses (18 credit hours)

See department advisor for an approved list of additional non-Communication Department courses for the tracks (18 credit hours).

Communication (BS), Digital Media Emphasis

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, Public Relations & Advertising, and Social Media & Data Analytics. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations and Strategic Communication (3123), Social Media & Data Analytics (3109).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations and Strategic Communication (090999), Social Media & Data Analytics (090702).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication coursework at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors: weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy General Education requirements: COMM 1020 HU, COMM 2010 HU, and COMM 2110 HU CEL.

Program Learning Outcomes

- Writing: Write at a level expected of a professional communicator in a selected emphasis area.
- Diversity: Be sensitive to difference and discrimination in society and value diversity.
- Career Readiness: Be prepared to enter a professional career or graduate school.
- Critical thinking: Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- Law/Ethics: Understand communication law and ethics to enable legal and ethical communication.
- Theory: Understand how various communication theories have been developed, applied, and evaluated.
- Research: Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising
- Social Media & Data Analytics

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** OR
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Pick 3 credit hours from Physical Sciences and 3 credit hours from Life Sciences.

- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- CHEM 1360 PS - Principles of Physical Science **Credits: (3)**
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEO 1030 PS - Earthquakes and Volcanoes **Credits: (3)**
- GEO 1350 PS - Principles of Earth Science **Credits: (3)**
- HNRS 1500 PS - Perspectives in the Physical Sciences **Credits: (3)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- BTNY 1370 LS - Principles of Life Science **Credits: (3)**
- HNRS 1510 LS - Perspectives in the Life Sciences **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1020 LS - Science and Application of Human Nutrition **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**
- ZOOL 1030 LS - The Nature of Sex **Credits: (3)**

Digital Media Emphasis (45 credit hours)

An emphasis in Digital Media will teach students about the importance of deadlines, budgets, and the impact their actions have on a production team. Advanced students will gain understanding about the art and power of communicating messages through video, audio, and the web.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks:

- **Entertainment:** acquire skills in production, writing, and content development to prepare to pursue further graduate study and careers within the entertainment industry.

- **Digital Media Production:** acquire skills producing, writing, shooting, editing, directing, and distributing video content. Focused on creating and sharing institutional, educational, and commercial video productions.

Required Courses (30 credit hours)

- COMM 1500 - Introduction to Mass Communication **Credits: (3)**
- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3750 - Advanced Cinematography and Editing **Credits: (3)**
- COMM 4760 - Media Management and Distribution **Credits: (3)**

Three of the following courses (9 credit hours)

- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- COMM 2730 - Digital Radio Production and Broadcast **Credits: (1-3)** (3 semesters at 1 credit hour each)
- COMM 2820 - Podcast Production **Credits: (3)**
- COMM 2980 - Introduction to Storytelling in Cinematic Virtual Reality **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3070 - Performance Studies **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3200 - Live Event Production **Credits: (1-3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3850 - Advertising **Credits: (3)**
- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)**
- COMM 3891 INT - Advanced Cooperative Work Experience with KWCR **Credits: (1-3)**
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**
- COMM 4440 - Developing and Evaluating Health Communication Campaigns **Credits: (3)**
- COMM 4500 - Topics in Communication **Credits: (3)** *only when taught as digital media-related topic and with permission of instructor*
- COMM 4800 - Special Study and Individual Projects **Credits: (1-3)**

Elective Courses (15 credit hours)

Note:

See department advisor for an approved list of non-Communication Department courses for the tracks (15 credit hours).

Communication (BS), Interpersonal & Family Communication Emphasis

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, and Public Relations & Advertising. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division is required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations & Advertising (3055).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations & Advertising (090999).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication course-work at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors - weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy general education requirements: COMM 1020, COMM 2010, and COMM 2110.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** OR
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Pick 3 credit hours from Physical Sciences and 3 credit hours from Life Sciences.

- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- CHEM 1360 PS - Principles of Physical Science **Credits: (3)**
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEO 1030 PS - Earthquakes and Volcanoes **Credits: (3)**
- GEO 1350 PS - Principles of Earth Science **Credits: (3)**
- HNRS 1500 PS - Perspectives in the Physical Sciences **Credits: (3)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**

- BTNY 1370 LS - Principles of Life Science **Credits: (3)**
- HNRS 1510 LS - Perspectives in the Life Sciences **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1020 LS - Science and Application of Human Nutrition **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**
- ZOOL 1030 LS - The Nature of Sex **Credits: (3)**

Interpersonal & Family Communication Emphasis (45 credit hours)

The Interpersonal & Family Communication emphasis is designed to help students understand, explain, and improve friendship, marriage, family, and other meaningful long- and short-term interpersonal relationships. Communication is the central enabling feature or framework through which we all function, create, and share meaning, sustain identities, and negotiate our relationships with each other and the rest of the world. This program of study will teach students to understand these complex, dynamic relationships.

Required Courses (24 credit hours)

- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3085 - Family Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**

Required Outside the Department (6 credits)

- FAM 1400 - Marriage and Romantic Relationships **Credits: (3)** or
- CHF 2400 SS/CC - Family Relations **Credits: (3)**
- WGS 1500 SS/CC - Introduction to Women, Gender, and Queer Studies **Credits: (3)**

Three of the following courses (9 credit hours)

- COMM 1270 - Analysis of Argument **Credits: (3)**
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- COMM 3070 - Performance Studies **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)**

Elective Courses (12 credit hours)

Note:

See department advisor for an approved list of non-Communication Department courses for the tracks (12 credit hours).

Communication (BS), Multimedia Journalism Emphasis

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, and Public Relations & Advertising. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations and Strategic Communication (3123).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations and Strategic Communication (090999).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication coursework at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors: weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the

Communication major, will also satisfy General Education requirements: COMM 1020 HU, COMM 2010 HU, and COMM 2110 HU CEL.

Program Learning Outcomes

- Writing: Write at a level expected of a professional communicator in a selected emphasis area.
- Diversity: Be sensitive to difference and discrimination in society and value diversity.
- Career Readiness: Be prepared to enter a professional career or graduate school.
- Critical thinking: Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- Law/Ethics: Understand communication law and ethics to enable legal and ethical communication.
- Theory: Understand how various communication theories have been developed, applied, and evaluated.
- Research: Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising
- Social Media & Data Analytics

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**

- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Pick 3 credit hours from Physical Sciences and 3 credit hours from Life Sciences.

- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- CHEM 1360 PS - Principles of Physical Science **Credits: (3)**
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEO 1030 PS - Earthquakes and Volcanoes **Credits: (3)**
- GEO 1350 PS - Principles of Earth Science **Credits: (3)**
- HNRS 1500 PS - Perspectives in the Physical Sciences **Credits: (3)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- BTNY 1370 LS - Principles of Life Science **Credits: (3)**
- HNRS 1510 LS - Perspectives in the Life Sciences **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1020 LS - Science and Application of Human Nutrition **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**
- ZOOL 1030 LS - The Nature of Sex **Credits: (3)**

Multimedia Journalism Emphasis (45 credit hours)

The Multimedia Journalism emphasis teaches students how to collect and write information or produce video and audio content regarding current events-including trends, issues, and people-for publication in a website, newspaper, or magazine. The curriculum emphasizes writing skills and video/audio production skills, but students also learn about research, interviewing, editing, layout and design, and legal and ethical issues in journalism.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks:

- Technical Writing
- Web Publishing
- Literary Journalism
- General Reporting
- Sports Journalism

Required Courses (30 credit hours)

- COMM 1500 - Introduction to Mass Communication **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3200 - Live Event Production **Credits: (1-3)** (select 3 credit hours) OR
- COMM 3840 - Data Visualization and Storytelling **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**

- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)** (*select 3 credit hours*)
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**

Three of the following courses (9 credit hours):

- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2730 - Digital Radio Production and Broadcast **Credits: (1-3)**
- COMM 2820 - Podcast Production **Credits: (3)**
- COMM 2980 - Introduction to Storytelling in Cinematic Virtual Reality **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3850 - Advertising **Credits: (3)**
- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)**
- COMM 3891 INT - Advanced Cooperative Work Experience with KWCR **Credits: (1-3)**
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)**
- COMM 4400 INT - Public Relations Media and Campaigns **Credits: (3)**
- COMM 4440 - Developing and Evaluating Health Communication Campaigns **Credits: (3)**
- COMM 4500 - Topics in Communication **Credits: (3)** *only when taught as journalism-related topic and with permission of instructor*

Elective Courses (15 credit hours)

See department advisor for an approved list of additional non-Communication Department courses for the tracks (15 credit hours).

Communication (BS), Organizational Communication Emphasis

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family

Communication, Multimedia Journalism, Organizational Communication, and Public Relations & Advertising. A student may not receive both a major and a minor from the Department of Communication.

- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division is required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations & Advertising (3055).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations & Advertising (090999).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication course-work at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors - weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy general education requirements: COMM 1020, COMM 2010, and COMM 2110.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** OR
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Pick 3 credit hours from Physical Sciences and 3 credit hours from Life Sciences.

- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- CHEM 1360 PS - Principles of Physical Science **Credits: (3)**
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEO 1030 PS - Earthquakes and Volcanoes **Credits: (3)**
- GEO 1350 PS - Principles of Earth Science **Credits: (3)**
- HNRS 1500 PS - Perspectives in the Physical Sciences **Credits: (3)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- BTNY 1370 LS - Principles of Life Science **Credits: (3)**
- HNRS 1510 LS - Perspectives in the Life Sciences **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1020 LS - Science and Application of Human Nutrition **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**
- ZOOL 1030 LS - The Nature of Sex **Credits: (3)**

Organizational Communication Emphasis (45 credit hours)

An Organizational Communication emphasis provides students with a foundation employers seek-effective professional communication in the workplace.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks:

- **Generalist:** Does not specialize. The generalist has the communication skills and knowledge to lead groups and develop organizational strategies necessary for management. Rather than focus on the career areas of technical writing or training and development, the generalist combines organizational communication with expertise in a secondary subject of interest. Minors in disciplines such as Spanish, health administration,

political science, psychology, or economics are a valuable combination with an Organizational Communication Generalist emphasis.

- **Technical Writing:** Synthesizes technical information into messages easily understood by a given audience. Technical writers produce organizational policy and training manuals, employee newsletters, brochures, grant applications, and annual reports.
- **Training & Development:** Conducts training needs assessments for diverse groups, designs workshops, writes training manuals, evaluates classroom technology and equipment needs, and evaluates training.

Required Courses (27 credit hours)

- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**

- COMM 3080 GLB - Intercultural Communication **Credits: (3)** or
- COMM 3090 - Gender and Communication **Credits: (3)**

- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**

Three of the following courses (9 credit hours)

- COMM 1500 - Introduction to Mass Communication **Credits: (3)** OR
- COMM 2010 HU - Mass Media and Society **Credits: (3)**

- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3085 - Family Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)**

Required Courses outside the Department (18 credit hours)

Technical Writing track (18 credit hours):

- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3140 - Professional and Technical Editing **Credits: (3)**
- ENGL 3190 CEL - Document Design **Credits: (3)**
- ENGL 4100 - Issues in Professional and Technical Writing **Credits: (3)**

- ENGL 4110 - Content Management **Credits: (3)**
- WEB 1400 - Web Design and Usability **Credits: (3)**

Training & Development track (18 credit hours):

- BSAD 1010 - Introduction to Business **Credits: (3)**
- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3190 CEL - Document Design **Credits: (3)**
- MGMT 3010 - Organizational Behavior and Management **Credits: (3)**
- MGMT 3200 - Managerial Communications **Credits: (3)**
- MGMT 3300 - Human Resource Management **Credits: (3)**
- MGMT 3350 - Employment and Labor Law **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MGMT 4320 - Staffing Organizations **Credits: (3)**
- MGMT 4350 - Training **Credits: (3)**
- WEB 3400 - LAMP Stack Web Development **Credits: (3)**

Communication (BS), Public Relations and Strategic Communication Emphasis

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, and Public Relations & Advertising. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations and Strategic Communication (3123).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations and Strategic Communication (090999).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication coursework at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors: weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy General Education requirements: COMM 1020 HU, COMM 2010 HU, and COMM 2110 HU CEL.

Program Learning Outcomes

- Writing: Write at a level expected of a professional communicator in a selected emphasis area.
- Diversity: Be sensitive to difference and discrimination in society and value diversity.
- Career Readiness: Be prepared to enter a professional career or graduate school.
- Critical thinking: Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- Law/Ethics: Understand communication law and ethics to enable legal and ethical communication.
- Theory: Understand how various communication theories have been developed, applied, and evaluated.
- Research: Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising
- Social Media & Data Analytics

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Pick 3 credit hours from Physical Sciences and 3 credit hours from Life Sciences.

- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- CHEM 1360 PS - Principles of Physical Science **Credits: (3)**
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEO 1030 PS - Earthquakes and Volcanoes **Credits: (3)**
- GEO 1350 PS - Principles of Earth Science **Credits: (3)**
- HNRS 1500 PS - Perspectives in the Physical Sciences **Credits: (3)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- BTNY 1370 LS - Principles of Life Science **Credits: (3)**
- HNRS 1510 LS - Perspectives in the Life Sciences **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1020 LS - Science and Application of Human Nutrition **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**
- ZOOL 1030 LS - The Nature of Sex **Credits: (3)**

Public Relations & Strategic Communication Emphasis (45 credit hours)

The Public Relations & Strategic Communication emphasis provides students with theoretical and practical skills in writing, critical thinking, marketing, advertising, and communicating to influence public opinion across a range of media.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks (15 credits):

- Copywriting
- Health Care Public Relations
- International Public Relations

- Marketing
- Visual Communication

Required Courses (21 credit hours)

- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)** (3 credits required)
OR
- COMM 3840 - Data Visualization and Storytelling **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3850 - Advertising **Credits: (3)**
- COMM 4400 INT - Public Relations Media and Campaigns **Credits: (3)** or
- COMM 4440 - Developing and Evaluating Health Communication Campaigns **Credits: (3)**

Non-Communication Requirement for Major (3 credits)

- MKTG 3010 - Marketing Concepts and Practices **Credits: (3)**

Three of the following courses (9 credit hours)

- COMM 1500 - Introduction to Mass Communication **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 2820 - Podcast Production **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3840 - Data Visualization and Storytelling **Credits: (3)**
- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)**
- COMM 4500 - Topics in Communication **Credits: (3)** *only when taught as public relations/advertising-related topic and with permission of instructor*

Elective Courses (15 credit hours)

Note:

See department advisor for an approved list of non-Communication Department courses for the tracks (15 credit hours).

Communication (BS), Social Media & Data Analytics

Communication Major

- **Program Prerequisite:** Not required.
- **Minor:** Students may complete a minor approved by their academic advisor OR one of the tracks associated with any of the six interdisciplinary emphasis areas: Civic Advocacy, Digital Media, Interpersonal & Family Communication, Multimedia Journalism, Organizational Communication, Public Relations & Advertising, and Social Media & Data Analytics. A student may not receive both a major and a minor from the Department of Communication.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable), in addition to an overall GPA of 2.00 or higher for all courses.
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A total of 40 upper-division credit hours is required (courses numbered 3000 and above). Between 27-35 credits of upper-division are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media(3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations and Strategic Communication (3123), Social Media & Data Analytics (3109).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media(090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations and Strategic Communication (090999), Social Media & Data Analytics (090702).

To enroll in upper-division Communication courses, a student must hold upper-division standing in the university. Students must complete at least 50 percent of their Communication coursework at Weber State University in order to receive a major or a minor in Communication.

Advisement

Students are encouraged to meet with the appropriate department advisor depending on their selected emphasis. Refer to the Communication Department website for a current list of department advisors: weber.edu/communication.

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for either Bachelor of Arts or Bachelor of Science requirements. See specific requirements for the BA and BS under the major course requirements. The following courses, required for the Communication major, will also satisfy General Education requirements: COMM 1020 HU, COMM 2010 HU, and COMM 2110 HU CEL.

Program Learning Outcomes

- **Writing:** Write at a level expected of a professional communicator in a selected emphasis area.

- Diversity: Be sensitive to difference and discrimination in society and value diversity.
- Career Readiness: Be prepared to enter a professional career or graduate school.
- Critical thinking: Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- Law/Ethics: Understand communication law and ethics to enable legal and ethical communication.
- Theory: Understand how various communication theories have been developed, applied, and evaluated.
- Research: Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Areas

Select one of the following emphasis areas in Communication:

- Civic Advocacy
- Digital Media
- Interpersonal & Family Communication
- Multimedia Journalism
- Organizational Communication
- Public Relations & Advertising
- Social Media & Data Analytics

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must complete a minor approved by the department or the classes required in an interdisciplinary track.

Required Courses for Major (24 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** OR
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4890 INT - Communication Internship **Credits: (1-3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Courses Required to Fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Pick 3 credit hours from Physical Sciences and 3 credit hours from Life Sciences.

- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- CHEM 1360 PS - Principles of Physical Science **Credits: (3)**
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEO 1030 PS - Earthquakes and Volcanoes **Credits: (3)**
- GEO 1350 PS - Principles of Earth Science **Credits: (3)**
- HNRS 1500 PS - Perspectives in the Physical Sciences **Credits: (3)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- BTNY 1370 LS - Principles of Life Science **Credits: (3)**
- HNRS 1510 LS - Perspectives in the Life Sciences **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1020 LS - Science and Application of Human Nutrition **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**
- ZOOL 1030 LS - The Nature of Sex **Credits: (3)**

Social Media and Data Analytics Emphasis (45 credits)

An emphasis in Social Media and Data Analytics will provide students with an in-depth understanding of social media and how to strategically use it to communicate messages. Students will gain skills in creating social media content, analyzing social media data, and making data visualizations to communicate complex data to audiences.

Students must complete a minor approved by their advisor or select one of the following interdisciplinary tracks:

- Web Design: acquire skills in web design and web management
- Digital Strategy: acquire skills in digital strategy and advertising
- Audience Analytics: acquire skills in audience and consumer analysis and campaign analysis

Required for Social Media and Data Analytics Emphasis (30 credits)

- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 2400 - Social Media for Communicators **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3460 GLB - Public Relations and Social Media **Credits: (3)**
- COMM 3840 - Data Visualization and Storytelling **Credits: (3)**
- COMM 3880 - Audience Analysis **Credits: (3)**
- COMM 4880 - Social Media Metrics and Measurement **Credits: (3)**

Three of the following courses (9 credit hours)

- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2820 - Podcast Production **Credits: (3)**

- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3200 - Live Event Production **Credits: (1-3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3400 - Introduction to Public Relations & Strategic Communication **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3750 - Advanced Cinematography and Editing **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 3850 - Advertising **Credits: (3)**
- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)**
- COMM 3891 INT - Advanced Cooperative Work Experience with KWCR **Credits: (1-3)**
- COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations **Credits: (1-3)**
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)**
- COMM 3894 - Advanced Cooperative Work Experience with Social Media and Data Analytics Lab **Credits: (1-3)**
- COMM 4440 - Developing and Evaluating Health Communication Campaigns **Credits: (3)**
- COMM 4760 - Media Management and Distribution **Credits: (3)**

Elective Courses (15 credit hours)

See department advisor for an approved list of non-Communication Department courses for the tracks (15 credit hours).

Communication Teaching (BS), Communication Studies Emphasis

Communication Teaching Major (BS or BA)

- **Program Prerequisite:** Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable).
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A minimum of 47-48 of these are required within the major, depending on the selected emphasis. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); a minimum of 24-36 of these are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media (3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations & Advertising (3055).

- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media (090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations & Advertising (090999).

Advisement

Communication students are required to meet with a faculty advisor at least annually for course and program advisement. Teaching majors are encouraged to also consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269). (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

General Education

Refer to Degree Requirements of this catalog for either Bachelor of Science or Bachelor of Arts requirements. See specific requirements for the BA and BS under the major course requirements. The following courses required for this major will also fulfill general education requirements: COMM 1020 HU or COMM 2010 HU and COMM 2110 HU CEL.

Program Learning Outcomes

- Writing: Write at a level expected of a professional communicator in a selected emphasis area.
- Diversity: Be sensitive to difference and discrimination in society and value diversity.
- Career Readiness: Be prepared to enter a professional career or graduate school.
- Critical thinking: Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- Law/Ethics: Understand communication law and ethics to enable legal and ethical communication.
- Theory: Understand how various communication theories have been developed, applied, and evaluated.
- Research: Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Requirements

The State of Utah endorses secondary teachers in two areas of Communication: Speech and Journalism. Accordingly, the Communication Teaching major is divided into two emphasis areas: Communication Studies (Speech) and Multimedia Journalism (Journalism). All Communication Teaching majors must complete one of these two emphasis areas.

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must also complete required and elective courses from non-Communication departments.

Communication Courses Required of all Communication Teaching Majors (21 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)** *
- COMM 1130 - Media Writing **Credits: (3)**
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Note:

Students must take either COMM 1020 HU or COMM 2110 HU CEL as a foundation course requirement for the Communication Teaching major, whichever is **not used for Teacher Education admission requirements.*

Courses Required to Fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Pick 3 credit hours from Physical Sciences and 3 credit hours from Life Sciences.

- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- CHEM 1360 PS - Principles of Physical Science **Credits: (3)**
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEO 1030 PS - Earthquakes and Volcanoes **Credits: (3)**
- GEO 1350 PS - Principles of Earth Science **Credits: (3)**
- HNRS 1500 PS - Perspectives in the Physical Sciences **Credits: (3)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- BTNY 1370 LS - Principles of Life Science **Credits: (3)**
- HNRS 1510 LS - Perspectives in the Life Sciences **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1020 LS - Science and Application of Human Nutrition **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**
- ZOOL 1030 LS - The Nature of Sex **Credits: (3)**

Communication Studies Emphasis (27 credit hours)

Courses Required (18 credit hours)

- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**
- COMM 4850 INT - Teaching Speech and Directing Speech Activities in the Secondary School **Credits: (3)**

Electives (9 credit hours)

Select 9 credit hours of electives from the following with approval from the department's communication education advisor for the Communication Studies emphasis.

- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3070 - Performance Studies **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**

Communication Teaching (BS), Multimedia Journalism Emphasis

Communication Teaching Major (BS or BA)

- **Program Prerequisite:** Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses is required for this major (a grade of "C-" is not acceptable).
- **Credit-Hour Requirements:** A total of 120 credit hours is required for graduation. A minimum of 47-48 of these are required within the major, depending on the selected emphasis. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); a minimum of 24-36 of these are required within the major, depending on the selected emphasis.
- **Program Code:** Communication (3017) with emphasis code Civic Advocacy (3051), Communication Studies/Communication Teaching (3016), Digital Media (3068), Interpersonal & Family (3053), Multimedia Journalism (3069), Multimedia Journalism/Communication Teaching (3070), Organizational Communication (3054), Public Relations & Advertising (3055).
- **CIPC:** Communication (090101) with emphasis code Civic Advocacy (090904), Communication Studies/Communication Teaching (131399), Digital Media (090199), Interpersonal & Family (090101), Multimedia Journalism (099999), Multimedia Journalism/Communication Teaching (131399), Organizational Communication (090901), Public Relations & Advertising (090999).

Advisement

Communication students are required to meet with a faculty advisor at least annually for course and program advisement. Teaching majors are encouraged to also consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269). (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study at the Communication Department office, Elizabeth Hall 330. Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

General Education

Refer to Degree Requirements of this catalog for either Bachelor of Science or Bachelor of Arts requirements. See specific requirements for the BA and BS under the major course requirements. The following courses required for this major will also fulfill general education requirements: COMM 1020 HU or COMM 2010 HU and COMM 2110 HU CEL.

Program Learning Outcomes

- Writing: Write at a level expected of a professional communicator in a selected emphasis area.
- Diversity: Be sensitive to difference and discrimination in society and value diversity.
- Career Readiness: Be prepared to enter a professional career or graduate school.
- Critical thinking: Use critical thinking to analyze information from a variety of perspectives for understanding, persuasive argument or problem solving.
- Law/Ethics: Understand communication law and ethics to enable legal and ethical communication.
- Theory: Understand how various communication theories have been developed, applied, and evaluated.
- Research: Find peer-reviewed or professional research studies, be familiar with a variety of research methods, and interpret and analyze research data.
- History: Know the history of the communication discipline and its societal and professional implications.
- Media: Use and produce media to communicate messages.
- Interpersonal/Small Group: Facilitate successful communication in interpersonal situations and small group settings.
- Listening: Listen actively to acquire and analyze information.
- Speaking: Speak clearly and persuasively in a one-on-one interpersonal interaction, and in front of small and large groups in a variety of contexts.

Emphasis Requirements

The State of Utah endorses secondary teachers in two areas of Communication: Speech and Journalism. Accordingly, the Communication Teaching major is divided into two emphasis areas: Communication Studies (Speech) and Multimedia Journalism (Journalism). All Communication Teaching majors must complete one of these two emphasis areas.

Major Course Requirements for BS or BA Degree

Students, regardless of their emphasis, must successfully complete required and elective Communication courses specified for each emphasis. Students must also complete required and elective courses from non-Communication departments.

Communication Courses Required of all Communication Teaching Majors (21 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)** *

- COMM 1130 - Media Writing **Credits: (3)**
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4990 - Senior Seminar **Credits: (3)**

Note:

Students must take either COMM 1020 HU or COMM 2110 HU CEL as a foundation course requirement for the Communication Teaching major, whichever is **not used for Teacher Education admission requirements.*

Courses Required to Fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Pick 3 credit hours from Physical Sciences and 3 credit hours from Life Sciences.

- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3150 CRE - Communication Research Methods **Credits: (3)**
- CHEM 1360 PS - Principles of Physical Science **Credits: (3)**
- GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life **Credits: (3)**
- GEO 1030 PS - Earthquakes and Volcanoes **Credits: (3)**
- GEO 1350 PS - Principles of Earth Science **Credits: (3)**
- HNRS 1500 PS - Perspectives in the Physical Sciences **Credits: (3)**
- PHYS 1010 PS - Elementary Physics **Credits: (3)**
- BTNY 1370 LS - Principles of Life Science **Credits: (3)**
- HNRS 1510 LS - Perspectives in the Life Sciences **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1020 LS - Science and Application of Human Nutrition **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**
- ZOOL 1030 LS - The Nature of Sex **Credits: (3)**

Multimedia Journalism Emphasis (26 credit hours)

Required Courses (18 credit hours)

- COMM 1500 - Introduction to Mass Communication **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)** OR
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 4840 - Teaching Journalism and Advising Student Media in the Secondary School **Credits: (3)**

Electives (6 credit hours)

Select 6 credit hours of electives from the following with approval from the department's communication education advisor for the Multimedia Journalism emphasis.

- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- COMM 3090 - Gender and Communication **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3440 - Public Relations Writing **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Communication (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Grade Requirements:** A grade of "C" or better in all courses.
- **Credit-Hour Requirements:** A minimum of 24 credit hours.
- **Program Code:** 3017
- **CIPC:** 090101

Course Requirements for BIS

Communication Courses Required (15 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** or
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 1500 - Introduction to Mass Communication **Credits: (3)** or
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**

Additional Electives (9 credit hours)

The required courses listed add up to 15 credits. The rest of your contract will consist of at least 3 elective courses you negotiate with an advisor.

Minor

Communication Minor

- **Grade Requirements:** A grade of "C" or better in all courses.
- **Credit-Hour Requirements:** A minimum of 24 credit hours.
- **Program Code:** 3017
- **CIPC:** 090101

Course Requirements for Minor

Communication Courses Required (15 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- COMM 1130 - Media Writing **Credits: (3)** or
- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- COMM 1500 - Introduction to Mass Communication **Credits: (3)** or
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**

Electives (9 credit hours, including at least 6 upper-division)

Select 3 courses (9 credit hours) in consultation with and approval by your department advisor, 2 (6 credit hours) of which must be upper-division.

Note:

A maximum of 3 credit hours total from the following Communication courses may be counted for the minor: COMM 2210, COMM 2730, COMM 3890, COMM 3891, COMM 3892, COMM 3893, COMM 4210.

Teaching Minor

Communication Teaching Minor, Communication Studies Emphasis

- **Grade Requirements:** A grade of "C" or better in minor courses.
- **Credit-Hour Requirements:** A minimum of 24 credit hours.

- **Program Code:** 3016
- **CIPC:** 131399

Students who select the Communication Teaching minor must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

Course Requirements for Minor

Communication Studies Emphasis (24 credit hours)

Communication Courses Required (18 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)** *
- COMM 1130 - Media Writing **Credits: (3)**
- COMM 2270 - Argumentation and Debate **Credits: (3)**
- COMM 3000 - Communication Theory **Credits: (3)**
- COMM 3820 - Persuasive Communication **Credits: (3)**
- COMM 4850 INT - Teaching Speech and Directing Speech Activities in the Secondary School **Credits: (3)**

Note:

** Students must take either COMM 1020 or COMM 2110 as a foundation course requirement for the Communication Teaching minor, whichever is **not** used for Teacher Education admission requirements.*

Electives (6 credit hours)

Select 6 credit hours from the following in consultation with and approved by the department's communication education advisor for the Communication Studies emphasis.

- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 3050 - Conflict Management and Negotiation **Credits: (3)**
- COMM 3060 - Listening and Interviewing **Credits: (3)**
- COMM 3070 - Performance Studies **Credits: (3)**
- COMM 3100 - Small Group Facilitation and Leadership **Credits: (3)**
- COMM 3120 - Advanced Public Speaking **Credits: (3)**
- COMM 3550 - Organizational Communication **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4150 - Rhetorical Theory and Criticism **Credits: (3)**

Communication Teaching Minor, Multimedia Journalism Emphasis

- **Grade Requirements:** A grade of "C" or better in minor courses.
- **Credit-Hour Requirements:** A minimum of 24 credit hours.
- **Program Code:** 3018
- **CIPC:** 131399

Students who select the Communication Teaching minor must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

Course Requirements for Minor

Multimedia Journalism Emphasis (24 credit hours)

Communication Courses Required (18 credit hours)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)** *
- COMM 1130 - Media Writing **Credits: (3)**
- COMM 1500 - Introduction to Mass Communication **Credits: (3)** or
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 3130 - News Reporting and Writing **Credits: (3)**
- COMM 3650 - Communication Law **Credits: (3)**
- COMM 4840 - Teaching Journalism and Advising Student Media in the Secondary School **Credits: (3)**

Note:

Students must take either COMM 1020 HU or COMM 2110 HU CEL as a foundation course requirement for the Communication Teaching Minor, whichever is **not used for Teacher Education Admission requirements.*

Electives (6 credit hours)

Select 6 credit hours from the following in consultation with and approved by the department's Communication Education advisor for the Multimedia Journalism emphasis.

- COMM 1560 - Audio Production and Performance **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 3220 - Editing **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3780 - Broadcast News Writing and Production **Credits: (3)**
- COMM 3890 INT - Advanced Cooperative Work Experience with Signpost **Credits: (1-3)**
- COMM 4130 - In-depth and Investigative Journalism **Credits: (3)**

Department of English Language and Literature

Department Chair: Becky Jo Gesteland

Location: Elizabeth Hall, Room 435

Telephone Contact: Emily Evensen 801-626-6251

Professors: James Russell Burrows, Hal Crimmel, Becky Jo Gesteland, Siân Griffiths, Mark LeTourneau, Karen Marguerite Moloney, Scott Rogers, Sally Bishop Shigley, Mahalingam Subbiah, Michael Wutz; **Associate Professors:** Christy Call, Courtney Craggett, Rebekah Cumpsty, David Hartwig, Emily January, Susan McKay, Ryan Ridge, Abraham Smith, Shelley Thomas, Megan McDonald Van Deventer; **Assistant Professors:** Jace Brown, Ashley Caranto Morford, Ukamaka Olisakwe, Chris Scheidler, Marisa Yerace; **Instructors:** Toni Asay, Ryan Evans, Kristin Friederichs Champi, Jan Hamer, Kyra Hudson, Clint Johnson, Brooke Kelly, Becky Marchant, Sylvia Newman, Daniel Paul, William Pollett, Laura Stott, Sarah Vause, Sunni Wilkinson

The Department of English Language and Literature offers a broad spectrum of language, literature, and writing courses. English majors and minors, English Teaching majors and minors, English majors with Professional and Technical writing emphasis and Professional and Technical writing minors, English majors with Creative Writing emphasis, and Literary Editing minors and Screenwriting minors, as well as Associate of Arts in English students, in consultation with English department advisors, can select programs individually designed to satisfy academic requirements. Furthermore, students preparing for careers in law, medicine, business, public relations and government service may find departmental courses highly beneficial. The English Department also offers courses for the general student in literature, creative writing, and introductory and intermediate writing.

Students transferring to Weber State as English majors, with most of their junior and senior status completed, are required to take a minimum of 9 upper division credit hours, minors a minimum of 6 upper division credit hours. This requirement also applies to transfer graduate students.

English Composition Requirement

Students seeking the Associate of Applied Science degree must pass ENGL 1010 or ENGL 1005 or ENGL 1006 and ENGL 1007 with a "C" grade (2.0) or better in order to satisfy the composition requirement. Students seeking any other degree must successfully complete ENGL 2010 or ENGL 2015 with a grade of "C" or higher. Students placed in developmental English courses ENGL 0900 must also pass that course with a grade of "C" or higher. Please note that English composition courses, whether developmental or not, are sequential and can not be taken out of numerical order.

Successful completion of ENGL 2015 or ENGL 2010 with a grade of C or better satisfies the University core requirement for Composition. Entrance into ENGL 2015 or ENGL 2010 can be accomplished in the following ways: 1) passing ENGL 1005 or ENGL 1010 or ENGL 1006 and ENGL 1007 with a grade of C or better, 2) passing the AP Language and Composition or Literature and Composition examination with a score of 3 or better, 3) achieving an ACT English and Reading score of 29 or better, 4) a CLEP with essay test with a score of 50 or better, or 5) articulated transfer credit from another regionally accredited college or university.

English Placement

Students are placed in the English developmental/composition sequence of courses either by ACT sub-scores or by Accuplacer scores. As of 2019, there is a new version. If you took the Accuplacer test prior to 2019, contact the Department of English for details.

ACT Sub-scores*	Accuplacer Scores	Course Placement
ACT English and Reading sub-score 29 or higher	Reading and Writing both 270-300	ENGL 2010 or ENGL 2015
ACT English and Reading sub-scores both 17 or above	Reading and Writing scores both 250-269 or above	ENGL 1010

Lowest ACT English or Reading score from 13-16	Lowest Reading or Writing score from 237-249	ENGL 1005 or ENGL 1006. (Students completing 1006 will need to complete 1007 before enrolling in ENGL 2010 or ENGL 2015).
Lowest ACT English or Reading score 12 or below	Both Reading and Writing score 236 or below	ENGL 0900

**ACT scores in English and Reading expire after 4 years. ACCUPLACER scores expire after 48 months.*

International students must provide ACT, SAT or Accuplacer scores for English placement. If scores are missing, students will be placed into ENGL 0900.

Pathways for Completing your Composition Requirement

Your placement shows where you need to begin in one of these course sequences to fulfill your English Composition requirement:

ENGL 0900 → ENGL 1005 → ENGL 2010 or

ENGL 0900 → ENGL 1005 → ENGL 2015 or

ENGL 0900 → ENGL 1006 → ENGL 1007 → ENGL 2010 or

ENGL 0900 → ENGL 1006 → ENGL 1007 → ENGL 2015 or

ENGL 1010 → ENGL 2010 or

ENGL 1010 → ENGL 2015

Interdisciplinary Minors

The English Department participates in the Asian Studies, Environmental Studies and Linguistics Minor/BIS Programs. Students who wish to enroll in one of these programs should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Interdisciplinary Associate's

The English Language and Literature Department participates in the interdisciplinary associate's degree in Workplace Communication and Writing (AS). Students who wish to enroll in this program should contact the English Language and Literature Department or one of the college advisors for the College of Arts & Humanities who will help them work out a schedule.

The English Department offers **Face-to-Face (F2F)**, **Hybrid**, and **Online (OL)** classes.

The following definitions are intended to help faculty and students understand the differences between **Face-to-Face (F2F)**, **Hybrid**, and **Online (OL)** classes taught in the English Department.

1. If less than 15% of the class sessions are online, a course will be designated **Face-to-Face (F2F)**-the current default for courses.
2. If 30–70% of class sessions are conducted online, normally but not exclusively in Canvas, courses will be designated **Hybrid**. This is consistent with *WSU Online's* definition.

- Classes that are 100% online will be defined as **Online (OL)**.
- Classes will be designated as **F2F, Hybrid, or OL** prior to the time the department finalizes schedules for any given semester. The designation may not be changed once registration has opened or during the semester except in the event of extenuating circumstances such as injury, illness or university closure; Department Chair approval is required.
- Within the various categories (**F2F, Hybrid, Online**) the table below illustrates how many online class sessions students can expect in each category. This number is dependent on how often a class meets: once a week (mainly evening classes), twice a week (TR or MW), and three times a week (MWF):

Course Scheduled As:	How Many Sessions May Be Online?		
	F2F (up to 15% online)	Hybrid (30-70% online)	Online (100% online)
1x/week: (14-15 classes/semester)	2 sessions, maximum	Minimum 4 / Maximum 10 sessions	100%
2x/week: (TR or MW: 30 classes/semester)	4-5 sessions, maximum	Minimum 9 / Maximum 21 sessions	100%
3x/week: (MWF: 42 classes/semester)	6 sessions, maximum	Minimum 13 / Maximum 30 sessions	100%

Associate of Arts

English (AA)

The Associate of Arts Program in the Department of English is designed for students who are passionate about reading and writing, who like being creative, and who want to develop professional skills for their careers. This program lets students earn an Associate's degree with 60 credit hours. It also forms the foundation for pursuing a Bachelor's degree in English or related fields.

- **Program Prerequisite:** Not required.
- **Grade Requirements:** A 2.0 or better in all courses required for this degree in addition to an overall GPA of 2.00 (C) or higher.
- **Credit Hour Requirements:** A total of 60 credit hours is required for graduation; a minimum of 18 of these must be from the program detailed below.
- **Program Code:** 3022AA
- **CIP:** 230101

Advisement

English students are required to meet with a faculty advisor at least annually for course and program advisement. Please contact Dr. Daniel Paul at danielpaul1@weber.edu for more information or to schedule an appointment.

For General Education advising, call 801-626-6631 or emailcahadvisor@weber.edu

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study at the English department office, Elizabeth Hall 413. No special admission or application requirement is needed for this program.

General Education

Refer to Degree Requirements for Associate of Arts requirements. See Foreign Language Courses Required below to fulfill the Associate of Arts degree.

Consult with a departmental or college advisor for detailed general education guidelines.

Program Learning Outcomes

- 1. Writing and Editing Skills, including the inclusion of multimedia components --Includes writing, presentations made using presentation software from Microsoft and Adobe, and Document Design.
- 2. Creativity --In the interpretation of written and multimedia texts; in document and web design; in writing analytical papers and creative texts
- 3. Ability to Communicate In Writing, Orally and Visually --Includes the ability to gather, analyze, and communicate information and insights creatively and critically; Understand and apply various theoretical perspectives and discipline-specific terminology to interpretations of texts and /or analysis of data; demonstrate knowledge of research practices and application.

Common Courses (9 credits)

Take each of the following classes:

- ENGL 2200 HU/CC - Introduction to Literature **Credits: (3)**
- ENGL 2501 HU/CC - Literature Today **Credits: (3)**
- ENGL 2700 - Introduction to Critical Theory **Credits: (3)**

EXPLORING ENGLISH CAREER AREAS (6 credits)

Take **two** courses from the following:

Creative Writing

- ENGL 2250 CA/CC - CW: Introduction to Creative Writing **Credits: (3)**
- ENGL 2260 CA/CC - CW: Introduction to Writing Short Fiction **Credits: (3)**
- ENGL 2270 CA/CC - CW: Introduction to Writing Poetry **Credits: (3)**

Professional and Technical Writing

- ENGL 2100 - Technical Writing **Credits: (3)**

English Education

- ENGL 2420 - Young Adult Literature **Credits: (3)**

Exploring Literary Genres and Perspectives

- ENGL 2210 - Introduction to Film Theory and Criticism **Credits: (3)**
- ENGL 2220 HU/CC - Introduction to Fiction **Credits: (3)**
- ENGL 2230 HU/CC - Introduction to Drama **Credits: (3)**
- ENGL 2240 HU/CC - Introduction to Poetry **Credits: (3)**
- ENGL 2710 HU/CC - Perspectives on Women's Literature **Credits: (3)**
- ENGL 2750 HU - Topics and Ideas in the Humanities **Credits: (3)**

ELECTIVES (3 credits)

Choose **one** additional course from the following OR **one** course not previously taken from the options in EXPLORING ENGLISH CAREER AREAS listed above:

- ENGL 2120 - Introduction to Writing and Document Design **Credits: (3)**
- ENGL 2130 - Media and Technology in Texts **Credits: (3)**
- ENGL 2140 - Introduction to Professional and Technical Editing **Credits: (3)**
- ENGL 2150 - Gender and Culture in Workplace Writing **Credits: (3)**
- ENGL 2160 - Introduction to Web-Based Technical Writing **Credits: (3)**

Foreign Language: (TWO courses / total of 6 credits)

Complete **two semesters** of one of the following languages: French, German, Spanish, Italian, Portuguese, American Sign Language, Chinese, or Japanese.

Institutional Certificate

Professional and Technical Writing Certificate of Proficiency

- **Program Prerequisite:** None required. However, some of the individual course options have a prerequisite or corequisite, as shown below.
- **Grade Requirements:** A grade of "C" or better in each required course.
- **Credit Hour Requirements:** A total of 18 credit hours of upper division technical writing courses.
-

Program Learning Outcomes

- Apply theories of technical communication in a variety of genres
- Write a variety of documents that reflect application of cognition
- Perform substantive edits
- Rhetorical approach to document design
- Construct documentation projects
- Develop a portfolio

Course Requirements for Certificate of Proficiency

Professional and Technical Writing Courses Required (18 credit hours)

1. Four required courses - 12 credit hours

- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3140 - Professional and Technical Editing **Credits: (3)**
- ENGL 3190 CEL - Document Design **Credits: (3)**
- ENGL 4120 CEL/INT - Seminar and Practicum in Professional and Technical Writing **Credits: (3)**

2. Two of the following courses - 6 credit hours

- ENGL 3120 - Foundations in Professional & Technical Writing **Credits: (3)**
- ENGL 3130 - Digital Writing Technologies **Credits: (3)**
- ENGL 3160 CEL - Grant Writing **Credits: (3)**
- ENGL 4100 - Issues in Professional and Technical Writing **Credits: (3)**
- ENGL 4110 - Content Management **Credits: (3)**

Bachelor of Arts

English (BA)

- **Program Prerequisite:** Not required.
- **Minor:** Required.
- **Grade Requirements:** A 2.0 or better in all courses required for this major in addition to an overall GPA of 2.00 (C) or higher.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 39 of these must be valid English courses. A total of 40 upper division credit hours is required (courses numbered 3000 and above); a minimum of 27 of these must be English courses.
- **Program Code:** 3022BA
- **CIPC:** 230101

Advisement

English majors are required to meet with a faculty advisor at least twice annually for course and program advisement. If this requirement is not met, students may not be allowed to register for classes within their major. Call 801-626-6251 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study at the English department office, Elizabeth Hall 413. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

Consult with a departmental advisor for detailed general education guidelines.

Program Learning Outcomes

- Read, explicate & analyze texts within their cultural, historical, & critical contexts.
- Research using a variety of methods & sources & document sources.
- Apply relevant critical theories.
- Write effectively about texts for varied purposes & audiences.
- Demonstrate knowledge of writers, works, genres & periods.

Major Course Requirements for BA Degree

A minimum of 39 credit hours is required in English courses, of which at least 27 credit hours must be upper division (3000-4000 level courses). A Minor is also required.

Common courses - 9 credits

Take each of the following classes:

- ENGL 2200 HU/CC - Introduction to Literature **Credits: (3)**
- ENGL 2501 HU/CC - Literature Today **Credits: (3)**
- ENGL 2700 - Introduction to Critical Theory **Credits: (3)**

Distribution- 21 credits

*Courses fulfill one distribution requirement may NOT be used to fulfill a second designation requirement

Geography Distribution- 9 credits

Take one class in each of the following three geographical categories: British, American, and Global/World Literature

British Literature- 3 credits

Take one class

- ENGL 3040 - History of the English Language **Credits: (3)**
- ENGL 3500 HU - Introduction to Shakespeare **Credits: (3)**
- ENGL 3650 - British Literature I **Credits: (3)**
- ENGL 3660 - British Literature II **Credits: (3)**
- ENGL 4610 - British Literature: Medieval **Credits: (3)**
- ENGL 4620 - British Literature: Renaissance **Credits: (3)**
- ENGL 4630 - British Literature: Neoclassical and Romantic **Credits: (3)**
- ENGL 4640 - British Literature: Victorian **Credits: (3)**
- ENGL 4650 - British Literature: Modern **Credits: (3)**
- ENGL 4655 - British Literature - World War II to 2001 **Credits: (3)**

- ENGL 4660 - British Literature: Contemporary **Credits: (3)**
- ENGL 4730 - Studies in Shakespeare **Credits: (3)**

American Literature- 3 credits

Take one class

- ENGL 3040 - History of the English Language **Credits: (3)**
- ENGL 3610 - American Literature I **Credits: (3)**
- ENGL 3620 - American Literature II **Credits: (3)**
- ENGL 4520 - American Literature: Early and Romantic **Credits: (3)**
- ENGL 4530 - American Literature: Realism and Naturalism **Credits: (3)**
- ENGL 4540 - American Literature: Modern **Credits: (3)**
- ENGL 4545 - American Literature - World War II to 2001 **Credits: (3)**
- ENGL 4550 - American Literature: Contemporary **Credits: (3)**

Global/World Literature- 3 credits

Take one class

- ENGL 3010 - Introduction to Linguistics **Credits: (3)**
- ENGL 3352 - Studies in World Literary Genres **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- ENGL 3730 - Literatures of Cultures and Places **Credits: (3)**
- ENGL 3752 - Topics and Ideas in World Literature and Language **Credits: (3)**
- ENGL 4712 - Eminent World Authors **Credits: (3)**
- ENGL 4760 - Irish Literature **Credits: (3)**

Period Distribution- 6 credits

Take two classes, one dealing primarily with literature before 1800 and one after 1800

Literature before 1800- 3 credits

Take one class

- ENGL 3500 HU - Introduction to Shakespeare **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- ENGL 3650 - British Literature I **Credits: (3)**
- ENGL 4610 - British Literature: Medieval **Credits: (3)**
- ENGL 4620 - British Literature: Renaissance **Credits: (3)**
- ENGL 4730 - Studies in Shakespeare **Credits: (3)**

Literature from 1800 to the present- 3 credits

Take one class

- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- ENGL 3610 - American Literature I **Credits: (3)**

- ENGL 3620 - American Literature II **Credits: (3)**
- ENGL 3660 - British Literature II **Credits: (3)**
- ENGL 3755 - Teaching Language in the Secondary Schools **Credits: (3)**
- ENGL 4520 - American Literature: Early and Romantic **Credits: (3)**
- ENGL 4530 - American Literature: Realism and Naturalism **Credits: (3)**
- ENGL 4540 - American Literature: Modern **Credits: (3)**
- ENGL 4545 - American Literature - World War II to 2001 **Credits: (3)**
- ENGL 4550 - American Literature: Contemporary **Credits: (3)**
- ENGL 4560 - Contemporary Literature for Creative Writers **Credits: (3)**
- ENGL 4630 - British Literature: Neoclassical and Romantic **Credits: (3)**
- ENGL 4640 - British Literature: Victorian **Credits: (3)**
- ENGL 4650 - British Literature: Modern **Credits: (3)**
- ENGL 4655 - British Literature - World War II to 2001 **Credits: (3)**
- ENGL 4660 - British Literature: Contemporary **Credits: (3)**
- ENGL 4712 - Eminent World Authors **Credits: (3)**

Genre Distribution- 6 credits

Take one class in two of the following three categories: poetry, prose fiction/narrative, and drama/film/new media

Poetry- 3 credits

- ENGL 2240 HU/CC - Introduction to Poetry **Credits: (3)**
- ENGL 3260 - CW: Advanced Poetry Writing **Credits: (3)**

Prose Fiction/Narrative- 3 credits

- ENGL 2220 HU/CC - Introduction to Fiction **Credits: (3)**
- ENGL 3250 - CW: Advanced Fiction Writing **Credits: (3)**
- ENGL 3280 - Biographical Writing **Credits: (3)**
- ENGL 3352 - Studies in World Literary Genres **Credits: (3)**
- ENGL 3375 - CW: Notebooks and Journals Forms and Craft **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- ENGL 4712 - Eminent World Authors **Credits: (3)**

Drama/Film/New Media- 3 credits

- ENGL 2210 - Introduction to Film Theory and Criticism **Credits: (3)**
- ENGL 2230 HU/CC - Introduction to Drama **Credits: (3)**
- ENGL 3353 - Genres in Cultural and Media Studies **Credits: (3)**
- ENGL 3500 HU - Introduction to Shakespeare **Credits: (3)**
- ENGL 3540 - Adaptation Studies **Credits: (3)**
- ENGL 4730 - Studies in Shakespeare **Credits: (3)**

Electives- 6 credits

Take two elective classes

- ENGL 2420 - Young Adult Literature **Credits: (3)**
- ENGL 2710 HU/CC - Perspectives on Women's Literature **Credits: (3)**
- ENGL 2750 HU - Topics and Ideas in the Humanities **Credits: (3)**
- ENGL 3030 - Structure of English **Credits: (3)**
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3120 - Foundations in Professional & Technical Writing **Credits: (3)**
- ENGL 3130 - Digital Writing Technologies **Credits: (3)**
- ENGL 3210 - Advanced College Writing **Credits: (3)**
- ENGL 3280 - Biographical Writing **Credits: (3)**
- ENGL 3300 - Children's Literature **Credits: (3)**
- ENGL 3350 - CW: Studies in Literary Genres **Credits: (3)**
- ENGL 3352 - Studies in World Literary Genres **Credits: (3)**
- ENGL 3353 - Genres in Cultural and Media Studies **Credits: (3)**
- ENGL 3354 - Genres in Writing and Interdisciplinary Studies **Credits: (3)**
- ENGL 3520 HU - Literature of the Natural World **Credits: (3)**
- ENGL 3530 - The Literature of Business and Economics **Credits: (3)**
- ENGL 3540 - Adaptation Studies **Credits: (3)**
- ENGL 3551 - Queer Literature **Credits: (3)**
- ENGL 3730 - Literatures of Cultures and Places **Credits: (3)**
- ENGL 3750 HU - Topics and Ideas in Literature **Credits: (3)**
- ENGL 3752 - Topics and Ideas in World Literature and Language **Credits: (3)**
- ENGL 3753 - Topics and Ideas in Cultural and Media Studies **Credits: (3)**
- ENGL 3754 - Topics and Ideas in Writing and Interdisciplinary Studies **Credits: (3)**
- ENGL 3880 - Philosophy and Literature **Credits: (3)**
- ENGL 4100 - Issues in Professional and Technical Writing **Credits: (3)**
- ENGL 4560 - Contemporary Literature for Creative Writers **Credits: (3)**
- ENGL 4710 - Eminent Authors **Credits: (3)**
- ENGL 4712 - Eminent World Authors **Credits: (3)**
- ENGL 4713 - Eminent Authors in Cultural and Media Studies **Credits: (3)**
- ENGL 4760 - Irish Literature **Credits: (3)**
- ENGL 4900 INT - Internships in Literary and Textual Studies **Credits: (1-3)**
- ENGL 4990 - Senior Seminar **Credits: (3)**

Senior seminar or Internship- 3 credits

Take 1 senior seminar or internship class

- ENGL 4900 INT - Internships in Literary and Textual Studies **Credits: (1-3)**
- ENGL 4990 - Senior Seminar **Credits: (3)**

English (BA), Creative Writing Emphasis

- **Program Prerequisite:** Not required.
- **Minor:** Required.
- **Grade Requirements:** A 2.0 or better in all courses required for this major in addition to an overall GPA of 2.00 (C) or higher.

- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 39 of these must be English courses. A total of 40 upper division credit hours is required (courses numbered 3000 and above); a minimum of 30 of these must be English courses.
- **Program Code:** 3020BA
- **CIPC:** 231302

Advisement

English Creative Writing Emphasis majors are expected to meet with a faculty advisor at least twice annually for course and program advisement. Please call 801-626-6251 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study at the English department office, Elizabeth Hall 413. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

Consult with a departmental advisor for detailed general education guidelines.

For CA, students must take ENGL 2250 (Intro to Creative Writing. This course will be required before you may take upper division creative writing coursework.)

Program Learning Outcomes

- Experiment in writing and develop drafts into polished original work.
- Show critical self-awareness.
- Exhibit editorial proficiency.
- Understand the professional writing environment.
- Show knowledge of contemporary, canonical, and marginalized literature.

Major Course Requirements for BA Degree

A minimum of 39 credit hours is required in valid English courses, of which at least 30 credit hours must be upper division.

English Courses Required (39 credit hours)

The following courses are required. (ENGL 2200 , ENGL 2250 and ENGL 2700 should be taken early in the major; ENGL 4940 should be taken in the final year)

- ENGL 2200 HU/CC - Introduction to Literature **Credits: (3)**
- ENGL 2250 CA/CC - CW: Introduction to Creative Writing **Credits: (3)**
- ENGL 2700 - Introduction to Critical Theory **Credits: (3)**
- ENGL 4560 - Contemporary Literature for Creative Writers **Credits: (3)**

- ENGL 4940 - CW: Senior Project **Credits: (3)**

Students choose two literature surveys from the five 3000-level courses

- ENGL 3610 - American Literature I **Credits: (3)**
- ENGL 3620 - American Literature II **Credits: (3)**
- ENGL 3650 - British Literature I **Credits: (3)**
- ENGL 3660 - British Literature II **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**

Language & Literature (one of the following)

- ENGL 3010 - Introduction to Linguistics **Credits: (3)**
- ENGL 3030 - Structure of English **Credits: (3)**
- ENGL 3040 - History of the English Language **Credits: (3)**
- Any 4000-level literature course **Credits: (3)**

Introductory Writing Courses (one of the following)

- ENGL 2260 CA/CC - CW: Introduction to Writing Short Fiction **Credits: (3)**
- ENGL 2270 CA/CC - CW: Introduction to Writing Poetry **Credits: (3)**
- ENGL 2280 CA - CW: Introduction to Writing Creative Nonfiction **Credits: (3)**
- ENGL 2295 - CW: Introduction to Screenwriting **Credits: (3)**

Advanced Writing Courses (6 credits of the following)

- ENGL 3240 - CW: Writing Creative Nonfiction **Credits: (3)**
- ENGL 3250 - CW: Advanced Fiction Writing **Credits: (3)**
- ENGL 3260 - CW: Advanced Poetry Writing **Credits: (3)**
- ENGL 3290 - CW: Advanced Screenwriting **Credits: (3)**
- ENGL 4930 - Visiting Writing Master Class **Credits: (1)** (repeatable four times)

Forms and Craft Courses (any one of the following)

- ENGL 3350 - CW: Studies in Literary Genres **Credits: (3)**
- ENGL 3355 - CW: Creative Nonfiction Forms and Craft **Credits: (3)**
- ENGL 3360 - CW: Short Story Forms and Craft **Credits: (3)**
- ENGL 3365 - CW: Novel Forms and Craft **Credits: (3)**
- ENGL 3370 - CW: Poetic Forms and Craft **Credits: (3)**
- ENGL 3375 - CW: Notebooks and Journals Forms and Craft **Credits: (3)**
- ENGL 3380 - CW: Screenwriting Forms and Craft **Credits: (3)**

Editing and Publication (3 credit hours)

- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing **Credits: (3)**
- ENGL 4960 INT - Metaphor: Editing the Student Literary Journal **Credits: (3)**

Language Courses Required to fulfill the BA

English majors must take either 12-credit hours of a foreign language or 6 hours of a foreign language and 6 hours of language arts. Any 3000 or 4000 level English class may be used as a language arts course, but **one** course (3 credits) with a primary emphasis on language or writing is strongly recommended. Courses chosen for the BA language requirement cannot also be counted toward the English Creative Writing major.

English (BA), Professional & Technical Writing Emphasis

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Not required.
- **Minor:** Required.
- **Grade Requirements:** A 2.0 or better in all courses required for this major in addition to an overall GPA of 2.00 (C) or higher.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 39 of these must be English courses. A total of 40 upper division credit hours is required (courses numbered 3000 or above); a minimum of 36 must be English courses.
- **Program Code:** 3024BA
- **CIPC:** 231303

Advisement

English majors are required to meet with a faculty advisor at least twice annually for course and program advisement. If this requirement is not met, students may not be allowed to register for classes within their major. Call 801-626-6251 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study at the English department office, Elizabeth Hall 413. No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

Consult with a departmental advisor for detailed general education guidelines.

Program Learning Outcomes

- Students should apply theories of technical communication in a variety of genres demonstrating theoretical and practical foundation of the Professional and Technical Writing minor and emphasis.
- Students should write a variety of documents that reflect application of sophisticated levels of cognition in addition to mastering basic concepts in the discipline.
- Students should perform substantive editing in both hard copy and electronic copy. Students should demonstrate a rhetorical approach to document design by thoroughly analyzing situational audience, purpose, and context.
- Students should construct documentation projects using single-sourcing and modular-writing principles.

- Students should develop a portfolio of their best work containing a variety of documents created throughout the entire program; the portfolio may be in hardcopy, online, or a combination of media.

Major Course Requirements for BA Degree

A minimum of 39 credit hours is required in English courses, of which at least 33 credit hours must be upper division (3000-4000 level courses). A minor is also required.

Required English Courses (39 credit hours)

Foundation - 6 credit hours

3 credit hours

Critical Approaches Course (to be taken early in the major).

- ENGL 2700 - Introduction to Critical Theory **Credits: (3)**

3 credit hours

One 2000-level course (3 credits) excluding ENGL 2010 or ENGL 2015.

- ENGL 2200 HU/CC - Introduction to Literature **Credits: (3)**
- ENGL 2210 - Introduction to Film Theory and Criticism **Credits: (3)**
- ENGL 2220 HU/CC - Introduction to Fiction **Credits: (3)**
- ENGL 2230 HU/CC - Introduction to Drama **Credits: (3)**
- ENGL 2240 HU/CC - Introduction to Poetry **Credits: (3)**
- ENGL 2501 HU/CC - Literature Today **Credits: (3)**

Core - 6 credit hours

Choose two courses from the following areas.

American Literature Surveys

Prerequisite ENGL 2010 or ENGL 2015:

- ENGL 3610 - American Literature I **Credits: (3)**
- ENGL 3620 - American Literature II **Credits: (3)**

British Literature Surveys

Prerequisite ENGL 2010 or ENGL 2015:

- ENGL 3650 - British Literature I **Credits: (3)**
- ENGL 3660 - British Literature II **Credits: (3)**

World Literature

Prerequisite ENGL 2010 or ENGL 2015:

- ENGL 3510 HU/CC - World Literature **Credits: (3)**

Foundations in Professional and Technical Writing - 27 credit hours

Foundations in Professional and Technical Writing - 12 credit hours

- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3120 - Foundations in Professional & Technical Writing **Credits: (3)**
- ENGL 3140 - Professional and Technical Editing **Credits: (3)**
- ENGL 4120 CEL/INT - Seminar and Practicum in Professional and Technical Writing **Credits: (3)** (senior year; must have advisor approval)

Electives in Professional and Technical Writing - 15 credit hours

- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing **Credits: (3)**
- ENGL 3130 - Digital Writing Technologies **Credits: (3)**
- ENGL 3160 CEL - Grant Writing **Credits: (3)**
- ENGL 3190 CEL - Document Design **Credits: (3)**
- ENGL 3754 - Topics and Ideas in Writing and Interdisciplinary Studies **Credits: (3)**
- ENGL 4100 - Issues in Professional and Technical Writing **Credits: (3)**
- ENGL 4110 - Content Management **Credits: (3)**

Language Courses Required to Fulfill the BA

English majors must take either 12-credit hours of a foreign language or 6 hours of a foreign language and 6 hours of language arts. Any 3000 or 4000 level English class may be used as a language arts course, but **one** course (3 credits) with a primary emphasis on language or writing is strongly recommended. Courses chosen as electives cannot also count as language arts courses.

English Teaching (BA)

- **Program Prerequisite:** Must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor: Optional.** According to their career paths, some students may choose to complete a minor or teaching minor in another discipline, but it is not required to complete their English Education BA degree.
- **Grade Requirements:** A 2.0 or better in all courses required for this major.
- **Credit Hour Requirements:** A minimum of 120 credit hours is required for graduation; at least 39 of these must be English courses. Of those 120 credits, 40 must be upper division courses (courses numbered 3000 and above), with 36 or more upper division credits in English.
- No minor is required.
- **Program Code:** 3023BA
- **CIPC:** 131305

Advisement

To expedite their program, English Teaching Majors should seek advisement before taking any upper division English courses. The English Teaching Methodology Block must be scheduled in coordination with both Secondary Teacher Education and Student Teaching. Call 801-626-6251 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study at the English department office, Elizabeth Hall 413. Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

PSY SS1010, COMM HU1020 or COMM HU CEL2110 (take one), CHF SS/CC1500 and one 2000 level Humanities English Literature course are recommended. Consult with a departmental advisor for other detailed general education guidelines.

Student Teaching

Student Teaching takes place during Secondary Education Student Teaching, which generally takes place during students' last semester prior to graduation. Before student teaching, English majors must have completed all required English and Education courses and completed the language requirements for the Bachelor of Art degree. Students must apply for student teaching through Teacher Education according to deadlines set by that department.

Program Learning Outcomes

- Encourage Students to express their life experiences in writing a variety of genres such as journals, memoir, narrative, essay, and argument.
- Secondary Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (e.g. philosophical, ethical, aesthetic) of human experience.
- Plan a coherent curriculum based on student needs that integrate reading, writing, and language instructions guided by the Utah State Core Standards.
- Demonstrate to their students how to apply knowledge of language structure, usage, and conventions to communicate effectively with a variety of audiences for different purposes.
- Use appropriate formal and informal assessments to inform instruction and verify student learning.
- Articulate a professional and coherent philosophy of language arts instruction based on current practices, the connections between reading and writing processes, and current research in the field of teaching English that promotes respect ofr physical, ethnic, gender, and cultural diversity.

Major Course Requirements for English Teaching BA Degree

Minimum of 40 credit hours in English courses of which at least 34 credit hours must be upper division (3000-4000 level courses). A minor field of study is no longer required.

Required English Courses (40 credit hours)

Foundation - 6 credit hours

1. One 2000-level course (3 credits) excluding ENGL 2010 and ENGL 2015.

- ENGL 2200 HU/CC - Introduction to Literature **Credits: (3)**
- ENGL 2210 - Introduction to Film Theory and Criticism **Credits: (3)**
- ENGL 2220 HU/CC - Introduction to Fiction **Credits: (3)**
- ENGL 2230 HU/CC - Introduction to Drama **Credits: (3)**
- ENGL 2240 HU/CC - Introduction to Poetry **Credits: (3)**
- ENGL 2501 HU/CC - Literature Today **Credits: (3)**
- ENGL 2710 HU/CC - Perspectives on Women's Literature **Credits: (3)**

2. Critical Approaches Course (to be taken early in the major).

- ENGL 2700 - Introduction to Critical Theory **Credits: (3)**

Core - 12 credit hours

1. American Literature Surveys: (both of the following) / Prerequisite ENGL 2010 or ENGL 2015:

- ENGL 3610 - American Literature I **Credits: (3)**
- ENGL 3620 - American Literature II **Credits: (3)**

2. British Literature Surveys: (both of the following) / Prerequisite ENGL 2010 or ENGL 2015:

- ENGL 3650 - British Literature I **Credits: (3)**
- ENGL 3660 - British Literature II **Credits: (3)**

Areas of Specialization - 6 credit hours

Choose **one** course each (3 credits) from **both** of the areas listed below:

World Literatures and Language

Courses in this area will focus on world literatures excluding British and American literature / Prerequisites as specified for individual courses in course catalog:

- ENGL 3010 - Introduction to Linguistics **Credits: (3)**
- ENGL 3352 - Studies in World Literary Genres **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- ENGL 3730 - Literatures of Cultures and Places **Credits: (3)** / Variable Title Course
- ENGL 3752 - Topics and Ideas in World Literature and Language **Credits: (3)** / Variable Title Course
- ENGL 4712 - Eminent World Authors **Credits: (3)** / Variable Title Course
- ENGL 4760 - Irish Literature **Credits: (3)**

Writing and Interdisciplinary Studies

Courses in this area will focus on writing and/or the study of other disciplines as they connect with literature, language, or the craft of writing / Prerequisites as specified for individual courses in course catalog:

- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3210 - Advanced College Writing **Credits: (3)**

- ENGL 3250 - CW: Advanced Fiction Writing **Credits: (3)**
- ENGL 3260 - CW: Advanced Poetry Writing **Credits: (3)**
- ENGL 3280 - Biographical Writing **Credits: (3)**
- ENGL 3375 - CW: Notebooks and Journals Forms and Craft **Credits: (3)**
- ENGL 4560 - Contemporary Literature for Creative Writers **Credits: (3)**

Methodology - 13 credit hours

Take all of the following:

- ENGL 2420 - Young Adult Literature **Credits: (3)**
- ENGL 3020 - Teaching English/Language Arts **Credits: (3)**
- ENGL 3410 INT - The Teaching of Writing **Credits: (3)**
- ENGL 3755 - Teaching Language in the Secondary Schools **Credits: (3)**
- ENGL 4910 - Capstone in English Teaching **Credits: (1)**

Electives (minimum of 3 credit hours)

To complete the required 40 credit hours, English Teaching majors may choose as electives any 2000, 3000, or 4000 level English courses, excluding those they wish to count as language arts courses in partial fulfillment of the Bachelor of Arts requirement (see "Language Courses Required to fulfill the BA" below). / *Prerequisites as specified for individual courses in course catalog.*

English Teaching majors are encouraged to take either ENGL 3500 HU - Introduction to Shakespeare, or ENGL 4730 - Studies in Shakespeare.

Language Courses Required to Fulfill the BA

English Teaching majors must take either 12-credit hours of a foreign language or 6 hours of a foreign language and 6 hours of language arts. Any 3000 or 4000 level English class may be used as a language arts course. Courses chosen for the BA language requirement cannot also be counted toward the English major.

Emphasis Option for Bachelor of Interdisciplinary Studies

English (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

The English Department participates in the BIS degree program. For an English concentration, students should take a minimum of 18 credit hours as approved by the English Department. Students may choose either a literature concentration or a writing concentration. BIS students must meet with the English Department Chair to design their English component.

The Bachelor of Integrated Studies (BIS) best suits the student who has developed a sense of his or her educational and life goals, and who is looking for ways to express those goals through an individualized university program. The BIS Program serves the needs of the student who wants to:

- create a specific academic program

- obtain a broad liberal education
- prepare for particular career goals and/or graduate school

To accomplish these general outcomes, the BIS student completes course work in three different disciplines. As a culminating experience, the student then synthesizes the three disciplines in a capstone project. For information about the requirements of the BIS Program, look at the BIS web site at weber.edu/bis/.

- **Program Prerequisite:** Enroll into the BIS Program with an interview with the BIS Program Coordinator. Call 626-7713 to talk with the BIS secretary and schedule an appointment.
- **Grade Requirements:** Receive a minimum grade of "C" (2.0) in each of the courses taken for the three emphases in addition to a minimum cumulative GPA of 2.5. Classes listed on the BIS contract must be taken for a letter grade; special exams, CLEP or credit/no credit are not allowed for contract classes.
- **Program Code:** 3022
- **CIPC:** 230101

Program Learning Outcomes

- Interdisciplinary Work-Made multiple connections across three academic disciplines.
- High Impact Educational Experience-Engaged in high impact practices through at least one of these: (a) collaborative learning projects, (b) undergraduate research, (c) public performances, (d) diversity/global learning, (e) community engaged learning, (f) internships, or (g) intensive writing.
- Capstone Signature Work -Synthesized and reported key research/skills/theories from academic disciplines.
- Analysis and Reflection-Provided analyses/results/conclusions/reflections from the Capstone experience.
- Academic speaking and writing-Used effective oral and written English-language skills
- Post-Graduate Planning-Planned for careers and/or graduate programs.

Minor

English Minor

- **Grade Requirements:** A grade of 2.0 or better in all courses used toward the minor.
- **Credit Hour Requirements:** Minimum of 21 hours of English courses. ENGL 1005, ENGL 1006, ENGL 1007, ENGL 1010, ENGL 2010, and ENGL 2015 do not count toward an English minor, but ENGL 2010 or ENGL 2015 is a pre-requisite for some required courses and should be taken early.
- **Program Code:** 3022
- **CIPC:** 230101

Course Requirements for Minor

Take one class in each of the following three distributions: **Geography, Period, and Genre** for a total of 9 credit hours. Choose one additional course from the list of **Elective Courses** to complete the required 21 credits.

****Courses taken to fulfill one distribution requirement may NOT be used to fulfill a second designation requirement.****

Common Courses (9 credit hours)

Take each of the following classes:

- ENGL 2200 HU/CC - Introduction to Literature **Credits: (3)**
- ENGL 2501 HU/CC - Literature Today **Credits: (3)**
- ENGL 2700 - Introduction to Critical Theory **Credits: (3)**

DISTRIBUTIONS (9 credits)

Take one class in each of the following three distributions: **Geography, Period, and Genre** for a total of 9 credit hours. Choose one additional course from any area to complete your required 21 credits

****Courses taken to fulfill one distribution requirement may NOT be used to fulfill a second designation requirement.

Geography Distribution (3 credits)

Choose **one** course from the following for 3 credits:

- ENGL 3010 - Introduction to Linguistics **Credits: (3)**
- ENGL 3040 - History of the English Language **Credits: (3)**
- ENGL 3352 - Studies in World Literary Genres **Credits: (3)**
- ENGL 3500 HU - Introduction to Shakespeare **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- ENGL 3610 - American Literature I **Credits: (3)**
- ENGL 3620 - American Literature II **Credits: (3)**
- ENGL 3650 - British Literature I **Credits: (3)**
- ENGL 3660 - British Literature II **Credits: (3)**
- ENGL 3730 - Literatures of Cultures and Places **Credits: (3)**
- ENGL 3752 - Topics and Ideas in World Literature and Language **Credits: (3)**
- ENGL 4520 - American Literature: Early and Romantic **Credits: (3)**
- ENGL 4530 - American Literature: Realism and Naturalism **Credits: (3)**
- ENGL 4540 - American Literature: Modern **Credits: (3)**
- ENGL 4545 - American Literature - World War II to 2001 **Credits: (3)**
- ENGL 4550 - American Literature: Contemporary **Credits: (3)**
- ENGL 4610 - British Literature: Medieval **Credits: (3)**
- ENGL 4620 - British Literature: Renaissance **Credits: (3)**
- ENGL 4630 - British Literature: Neoclassical and Romantic **Credits: (3)**
- ENGL 4640 - British Literature: Victorian **Credits: (3)**
- ENGL 4650 - British Literature: Modern **Credits: (3)**
- ENGL 4655 - British Literature - World War II to 2001 **Credits: (3)**
- ENGL 4660 - British Literature: Contemporary **Credits: (3)**
- ENGL 4712 - Eminent World Authors **Credits: (3)**
- ENGL 4730 - Studies in Shakespeare **Credits: (3)**
- ENGL 4760 - Irish Literature **Credits: (3)**

Period Distribution (3 credits)

Choose **one** course from the following for 3 credits:

- ENGL 3500 HU - Introduction to Shakespeare **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**

- ENGL 3610 - American Literature I **Credits: (3)**
- ENGL 3620 - American Literature II **Credits: (3)**
- ENGL 3650 - British Literature I **Credits: (3)**
- ENGL 3660 - British Literature II **Credits: (3)**
- ENGL 3755 - Teaching Language in the Secondary Schools **Credits: (3)**
- ENGL 4520 - American Literature: Early and Romantic **Credits: (3)**
- ENGL 4530 - American Literature: Realism and Naturalism **Credits: (3)**
- ENGL 4540 - American Literature: Modern **Credits: (3)**
- ENGL 4545 - American Literature - World War II to 2001 **Credits: (3)**
- ENGL 4550 - American Literature: Contemporary **Credits: (3)**
- ENGL 4560 - Contemporary Literature for Creative Writers **Credits: (3)**
- ENGL 4610 - British Literature: Medieval **Credits: (3)**
- ENGL 4620 - British Literature: Renaissance **Credits: (3)**
- ENGL 4630 - British Literature: Neoclassical and Romantic **Credits: (3)**
- ENGL 4640 - British Literature: Victorian **Credits: (3)**
- ENGL 4650 - British Literature: Modern **Credits: (3)**
- ENGL 4655 - British Literature - World War II to 2001 **Credits: (3)**
- ENGL 4660 - British Literature: Contemporary **Credits: (3)**
- ENGL 4710 - Eminent Authors **Credits: (3)**
- ENGL 4712 - Eminent World Authors **Credits: (3)**
- ENGL 4730 - Studies in Shakespeare **Credits: (3)**

Genre Distribution (3 credits)

Choose **one** course from the following for 3 credits:

- ENGL 2210 - Introduction to Film Theory and Criticism **Credits: (3)**
- ENGL 2220 HU/CC - Introduction to Fiction **Credits: (3)**
- ENGL 2230 HU/CC - Introduction to Drama **Credits: (3)**
- ENGL 2240 HU/CC - Introduction to Poetry **Credits: (3)**
- ENGL 3250 - CW: Advanced Fiction Writing **Credits: (3)**
- ENGL 3260 - CW: Advanced Poetry Writing **Credits: (3)**
- ENGL 3280 - Biographical Writing **Credits: (3)**
- ENGL 3352 - Studies in World Literary Genres **Credits: (3)**
- ENGL 3353 - Genres in Cultural and Media Studies **Credits: (3)**
- ENGL 3375 - CW: Notebooks and Journals Forms and Craft **Credits: (3)**
- ENGL 3500 HU - Introduction to Shakespeare **Credits: (3)**
- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- ENGL 3540 - Adaptation Studies **Credits: (3)**
- ENGL 4712 - Eminent World Authors **Credits: (3)**
- ENGL 4730 - Studies in Shakespeare **Credits: (3)**

Elective Courses (3)

Choose **one** additional course from the following to complete the required 21 credit hours:

- ENGL 2240 HU/CC - Introduction to Poetry **Credits: (3)**
- ENGL 2710 HU/CC - Perspectives on Women's Literature **Credits: (3)**

- ENGL 2750 HU - Topics and Ideas in the Humanities **Credits: (3)**
- ENGL 3030 - Structure of English **Credits: (3)**
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3120 - Foundations in Professional & Technical Writing **Credits: (3)**
- ENGL 3130 - Digital Writing Technologies **Credits: (3)**
- ENGL 3210 - Advanced College Writing **Credits: (3)**
- ENGL 3280 - Biographical Writing **Credits: (3)**
- ENGL 3300 - Children's Literature **Credits: (3)**
- ENGL 3350 - CW: Studies in Literary Genres **Credits: (3)**
- ENGL 3352 - Studies in World Literary Genres **Credits: (3)**
- ENGL 3353 - Genres in Cultural and Media Studies **Credits: (3)**
- ENGL 3354 - Genres in Writing and Interdisciplinary Studies **Credits: (3)**
- ENGL 3520 HU - Literature of the Natural World **Credits: (3)**
- ENGL 3530 - The Literature of Business and Economics **Credits: (3)**
- ENGL 3540 - Adaptation Studies **Credits: (3)**
- ENGL 3730 - Literatures of Cultures and Places **Credits: (3)**
- ENGL 3750 HU - Topics and Ideas in Literature **Credits: (3)**
- ENGL 3752 - Topics and Ideas in World Literature and Language **Credits: (3)**
- ENGL 3753 - Topics and Ideas in Cultural and Media Studies **Credits: (3)**
- ENGL 3754 - Topics and Ideas in Writing and Interdisciplinary Studies **Credits: (3)**
- ENGL 3755 - Teaching Language in the Secondary Schools **Credits: (3)**
- ENGL 3880 - Philosophy and Literature **Credits: (3)**
- ENGL 4100 - Issues in Professional and Technical Writing **Credits: (3)**
- ENGL 4560 - Contemporary Literature for Creative Writers **Credits: (3)**
- ENGL 4710 - Eminent Authors **Credits: (3)**
- ENGL 4712 - Eminent World Authors **Credits: (3)**
- ENGL 4713 - Eminent Authors in Cultural and Media Studies **Credits: (3)**
- ENGL 4760 - Irish Literature **Credits: (3)**

Literary Editing Minor

The minor in Literary Editing introduces students to the knowledge base, skills, and practical experience needed to work in the literary publishing industry. It offers a good choice to anyone interested in literature, writing, visual design, communication, printing, or publishing, and it is an excellent complement to a variety of majors.

- **Program Prerequisite:** None required. However, some of the individual course options have a prerequisite or corequisite, as shown below.
- **Courses taken which are part of the student's major will not count as fulfillment of the minor requirement.**
- **Grade Requirements:** A grade of 2.0 or better in all courses used toward the minor.
- **Credit Hour Requirements:** 18 credit hours, apportioned as directed below.
- **Program Code:** 3086
- **CIPC:** 231302

Course Requirements for Literary Editing Minor

Students will select a course/course combination from each of the 6 areas below.

Introductory Creative Writing

Students will choose **one 3-credit course** from the following:

- ENGL 2250 CA/CC - CW: Introduction to Creative Writing **Credits: (3)**
- ENGL 2260 CA/CC - CW: Introduction to Writing Short Fiction **Credits: (3)**
- ENGL 2270 CA/CC - CW: Introduction to Writing Poetry **Credits: (3)**
- ENGL 2280 CA - CW: Introduction to Writing Creative Nonfiction **Credits: (3)**
- ENGL 2295 - CW: Introduction to Screenwriting **Credits: (3)**

Advanced Creative Writing

Students will choose **one 3-credit course** from the following:

- ENGL 3240 - CW: Writing Creative Nonfiction **Credits: (3)**
- ENGL 3250 - CW: Advanced Fiction Writing **Credits: (3)**
- ENGL 3260 - CW: Advanced Poetry Writing **Credits: (3)**
- ENGL 3290 - CW: Advanced Screenwriting **Credits: (3)**

Contemporary Creative Writing as Literature

Students will choose **one 3-credit course** from the following:

- ENGL 3510 HU/CC - World Literature **Credits: (3)**
- ENGL 4550 - American Literature: Contemporary **Credits: (3)**
- ENGL 4560 - Contemporary Literature for Creative Writers **Credits: (3)**
- ENGL 4660 - British Literature: Contemporary **Credits: (3)**

Grammar and Editing

Students will choose **one 3-credit course** from the following:

- ENGL 2140 - Introduction to Professional and Technical Editing **Credits: (3)**
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing **Credits: (3)**
- ENGL 3140 - Professional and Technical Editing **Credits: (3)**

Layout and Graphics

Students will choose **one 3-credit course or a 3-credit course combination** from the following:

- ART 2420A - Bitmap Imaging **Credits: (1)** and
- ART 2420B - Vector Drawing **Credits: (1)** and
- ART 2420C - Digital Page Composition **Credits: (1)**
- ART 2430 - Introduction to Graphic Design **Credits: (3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- ENGL 3190 CEL - Document Design **Credits: (3)**

Practical Experience

Students will choose **one 3-credit course** from the following:

- ENGL 4900 INT - Internships in Literary and Textual Studies **Credits: (1-3)**
- ENGL 4960 INT - Metaphor: Editing the Student Literary Journal **Credits: (3)**

Professional and Technical Writing Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade point of 2.0 or better in all courses within the academic minor.
- **Credit Hour Requirements:** This minor consists of 18 credit hours of upper division technical writing courses.
- **Program Code:** 3024
- **CIPC:** 231303

Course Requirements for Minor

Professional and Technical Writing Courses Required (18 credit hours)

1. Four required courses - 12 credit hours

- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3140 - Professional and Technical Editing **Credits: (3)**
- ENGL 3190 CEL - Document Design **Credits: (3)**
- ENGL 4120 CEL/INT - Seminar and Practicum in Professional and Technical Writing **Credits: (3)**

2. Two of the following elective courses - 6 credit hours

- ENGL 3120 - Foundations in Professional & Technical Writing **Credits: (3)**
- ENGL 3130 - Digital Writing Technologies **Credits: (3)**
- ENGL 3160 CEL - Grant Writing **Credits: (3)**
- ENGL 4100 - Issues in Professional and Technical Writing **Credits: (3)**
- ENGL 4110 - Content Management **Credits: (3)**

Screenwriting Minor

The Screenwriting Minor introduces students to the concepts, skills, and practical experience needed to enter the growing screenwriting industries. It offers an attractive opportunity for students interested in creative writing of any kind, film studies, theater, video game design, genre adaptation (print or stage to film), and film design or production. As such, it would complement many majors, among them English, Creative Writing, Theatre, Visual Art and Design, Communication, or Film Studies.

- **Program Prerequisite:** None required. However, some of the individual course options have a prerequisite or corequisite.

- **Courses taken which are part of the student's major will not count as fulfillment of the minor requirement.**
- **Grade Requirements:** A grade of 2.0 or better in all courses used toward the minor.
- **Credit Hour Requirements:** 18 credit hours, apportioned as directed below.
- **Program Code:** 3104
- **CIPC:** 500504

Course Requirements for Screenwriting Minor

Core (12 credit hours)

Complete the following 3-credit courses:

- ENGL 2210 - Introduction to Film Theory and Criticism **Credits: (3)**
- ENGL 2295 - CW: Introduction to Screenwriting **Credits: (3)** or
- COMM 3740 - Writing for Screen **Credits: (3)**
- ENGL 3290 - CW: Advanced Screenwriting **Credits: (3)**
- ENGL 3380 - CW: Screenwriting Forms and Craft **Credits: (3)**

Introductory (3 credit hours)

Choose one 3-credit course from the following:

- ENGL 2230 HU/CC - Introduction to Drama **Credits: (3)**
- ENGL 2250 CA/CC - CW: Introduction to Creative Writing **Credits: (3)**
- ENGL 2260 CA/CC - CW: Introduction to Writing Short Fiction **Credits: (3)**
- ENGL 2270 CA/CC - CW: Introduction to Writing Poetry **Credits: (3)**
- ENGL 2280 CA - CW: Introduction to Writing Creative Nonfiction **Credits: (3)**

Enhancement (3 credit hours)

Choose one 3-credit course from the following:

- ENGL 3240 - CW: Writing Creative Nonfiction **Credits: (3)**
- ENGL 3250 - CW: Advanced Fiction Writing **Credits: (3)**
- ENGL 3260 - CW: Advanced Poetry Writing **Credits: (3)**
- ENGL 3355 - CW: Creative Nonfiction Forms and Craft **Credits: (3)**
- ENGL 3360 - CW: Short Story Forms and Craft **Credits: (3)**
- ENGL 3365 - CW: Novel Forms and Craft **Credits: (3)**
- ENGL 3370 - CW: Poetic Forms and Craft **Credits: (3)**
- ENGL 3540 - Adaptation Studies **Credits: (3)**

Teaching Minor

English Teaching Minor

- **Grade Requirements:** A grade of 2.0 or better in all courses used toward the minor.
- **Credit Hour Requirements:** Minimum of 25 credit hours of English courses. ENGL 1005, ENGL 1006, ENGL 1007, ENGL 1010, ENGL 2010, ENGL 2015 and lower division HU general education literature courses do not count toward an English teaching minor.
- **Program Code:** 3023
- **CIPC:** 131305

Students who select the English Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education in this catalog).

Student Teaching

Student Teaching takes place during Secondary Education Student Teaching, which generally takes place during students' last semester prior to graduation. Before student teaching, English majors must have completed all required English and Education courses and completed the language requirements for the Bachelor of Art degree. Students must apply for student teaching through Teacher Education according to deadlines set by that department.

Course Requirements for Minor

Required English Courses (25 credit hours)

Foundation - 3 credit hours

Critical Approaches Course (to be taken early in the minor).

- ENGL 2700 - Introduction to Critical Theory **Credits: (3)**

Core - 6 credit hours

1. American Literature Surveys: (one of the following) / Prerequisite ENGL 2010 or ENGL 2015:

- ENGL 3610 - American Literature I **Credits: (3)**
- ENGL 3620 - American Literature II **Credits: (3)**

2. British Literature Surveys: (one of the following) / Prerequisite ENGL 2010 or ENGL 2015:

- ENGL 3650 - British Literature I **Credits: (3)**
- ENGL 3660 - British Literature II **Credits: (3)**

Methodology - 13 credit hours

Take all of the following:

- ENGL 2420 - Young Adult Literature **Credits: (3)**
- ENGL 3020 - Teaching English/Language Arts **Credits: (3)**
- ENGL 3410 INT - The Teaching of Writing **Credits: (3)**
- ENGL 3755 - Teaching Language in the Secondary Schools **Credits: (3)**
- ENGL 4910 - Capstone in English Teaching **Credits: (1)**

Areas of Specialization - 3 credit hours

Choose **one** course from the area listed below:

Writing and Interdisciplinary Studies

Courses in this area will focus on writing and/or the study of other disciplines as they connect with literature, language, or the craft of writing / Prerequisites as specified for individual courses in course catalog:

- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**
- ENGL 3210 - Advanced College Writing **Credits: (3)**
- ENGL 3250 - CW: Advanced Fiction Writing **Credits: (3)**
- ENGL 3260 - CW: Advanced Poetry Writing **Credits: (3)**
- ENGL 3280 - Biographical Writing **Credits: (3)**

Department of World Languages & Cultures

Department Chair: Isabel Asensio

Location: Elizabeth Hall, Room 434

Telephone Contact: Sandy Thomas 801-626-6183

Professors: Isabel Asensio, Diego Batista, Craig Bergeson, Thomas Mathews; **Associate Professors:** Electra Fielding, Aubrey Jones Kubiak, Kacy Peckenpaugh, John Trimble; **Assistant Professors:** Youn Soo Kim Goldstein, Cynthia Jones, Vicente Iranzo; **Instructors:** Tomono Adachi, Kate Batson, Javier Berzal Rojo, Dori Huang, Paul Rama, Andrea Schwartz

The Department of Foreign Languages promotes global awareness and intercultural understanding by providing instruction and study abroad opportunities in various languages. We prepare majors and minors to function effectively in a foreign language by offering courses in literature, culture, linguistics, pedagogy and language for professional purposes.

A bachelor of arts degree is offered. Students may select a regular major, a teaching major or a major with a commercial emphasis in French, German or Spanish. Regular and teaching minors are offered in these three languages as well. In addition, a Japanese minor is offered, and the department participates in Asian Studies, European Studies and Latin American Studies minors and in a departmental Honors Program. A language emphasis for the BIS degree requires a minimum of 18 hours, 15 of which must be upper-division course work. Courses in other languages may be offered as need and resources allow. The curriculum is based on the National Standards for measuring proficiency. Each course is designed to foster linguistic skills and to increase the student's ability to participate in the culture.

Foreign Language Requirement for the Bachelor of Arts Degree

The Bachelor of Arts degree includes a foreign language or ASL (American Sign Language) requirement which may be met by one of the following:

1. Documentation of a proficiency level of "Intermediate Low" or better through an examination administered by the WSU Foreign Language Department or through an examination by a recognized testing agency.
2. Completion of WSU foreign language course ASL 2020 or CHNS 2020 or FRCH 2020 or GRMN 2020 or ITLN 2020 or JPNS 2020 or PTGS 2020 or SPAN 2020 with a grade of "C" or higher, or comparable transfer credit.
3. Completion of any upper-division WSU foreign language course with a grade of "C" or higher, or comparable transfer credit.

4. Students for whom English is a second language may meet the BA foreign language requirement by verifying their proficiency in their native (non-English) language in cooperation with the Foreign Language Department and verifying their proficiency in English as a Second language by passing the ESL Special Examination.
5. Documentation of a minimum proficiency level in American Sign Language through an examination administered by the American Sign Language/Interpreting program at Salt Lake Community College (SLCC). The signer must "produce and maintain American Sign Language with continuity and precision."
6. Completion of SLCC's American Sign Language Course ASL 1050 with a grade of "C" or higher, or comparable transfer credit.
7. Completion of twelve semester-hours of foreign language.

Obtaining Foreign Language Credit for Prior Language Experience

Students with prior language experience may obtain lower-division foreign language credit by completing one of the following options:

1. Students may obtain credit for 1010, 1020, 2010 and 2020 by passing a higher numbered course with a minimum grade of "C"
2. Students may obtain credit for 1010, 1020, 2010 and 2021 through examination, but only in those languages in which the Department of Foreign Languages has expertise (usually limited to French, German, Japanese and Spanish). This examination is administered regularly by the department. Credit for Humanities General Education (2020) cannot be obtained through examination.

Upon payment of a nominal fee, hours earned through either option are recorded as "credit" on the transcript and do not affect the student's GPA. The department may accept results from other foreign language testing agencies as evidence of proficiency. Application for credit is to be made at the office of the Department of Foreign Languages.

Generally, students may not earn lower-division foreign language credit for proficiency in their native language. If a student's second language is English, then English may fill the BA foreign language requirement (see specific BA-major department advisors).

Interdisciplinary Minors

The Foreign Languages Department participates in the Asian Studies, European Studies, Linguistics, and Latin American Studies Minor Programs. Students who wish to enroll in one of these programs should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Engaged Learning, Honors, and Interdisciplinary Programs section of this catalog.)

Oral Proficiency Requirements

The American Council on the Teaching of Foreign Languages (ACTFL) has defined a scale for the evaluation of the language proficiency of students. The ACTFL Proficiency scale has four levels: Novice, Intermediate, Advanced and Superior. The Department of Foreign Languages requires that students achieve a determined proficiency level, depending on the students' goals. In addition, instructors assume that students entering any class have acquired the entry-level proficiency indicated for that class. (These levels are indicated in parentheses by the description of each course. N=Novice; NH=Novice High; IL=Intermediate Low; IM=Intermediate Mid; IH=Intermediate High; AL=Advanced Low.)

Novice (N)

Students at this level have no experience in the language they are studying. They begin by learning the sound and spelling system and by memorizing words and phrases. During the course, they will progress to the point of being able to create simple sentences, to ask some questions, and to initiate, sustain and conclude simple social tasks more than half of the time.

Novice High (NH)

At the Novice-High level student's progress from the ability to respond simply with learned utterances to the ability to create language face-to-face, to ask and answer simple questions, and to create sentence-level constructions.

Intermediate Low (IL)

At the Intermediate-Low level students continue to build mastery of personal social-oriented informational tasks and move to a higher level by practicing informational tasks beyond the immediate and personal. Students will move from simple-sentence to more complex sentence-level discourse. They will practice narration, description and comparison, but mastery is not expected.

Intermediate Mid (IM)

Students at this level build on an ability to perform informational tasks beyond immediate and personal needs while they continue to practice narration, description and comparison. In addition, students begin practice in supporting opinions and hypothesizing in the language. They move from complex sentence-level structures to paragraph-level discourse.

Intermediate High (IH)

At this level students can function at the Advanced level most of the time. They still need practice narrating, describing and comparing, and Linking sentences together smoothly. In addition, they encounter more tasks that require them to support opinion and to hypothesize. Student's progress from complex sentences to paragraphs to extended discourse.

Advanced Low (AL)

Students at this level function at the Advanced level all or almost all of the time. Students have no difficulty with extended discourse, narration in all tenses and explanation. They are able to and use language both oral and written in complex and sophisticated ways.

Associate of Arts

American Sign Language (ASL) (AA)

An Associate of Arts with an American Sign Language (ASL) major will indicate that a student has completed all WSU AA degree requirements and the core curriculum required for the Bachelor of Arts in ASL. It will also indicate students are prepared to enroll in upper division ASL courses. The ending proficiency expectation is "Intermediate Low."

- **Grade Requirements:** A grade of C or better in courses used for this major (a grade of C- is not acceptable).
- **Program Code:** 3050AA
- **CIPC:** 161601

Advisement

American Sign Language (ASL) majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree and General Education Requirements of this catalog for Associate of Arts requirements.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Describe and explain aspects of the culture(s) of the language being studied.

Required ASL Courses

- ASL 1010 - First Semester ASL **Credits: (3)**
- ASL 1020 - Second Semester ASL **Credits: (3)**
- ASL 2010 - Third Semester ASL **Credits: (3)**
- ASL 2020 HU - Fourth Semester ASL **Credits: (3)**
- ASL 2030 - Second Year Language Review **Credits: (3)**

Elective Courses

- ASL 3570 - Special Topics in Culture **Credits: (3)**

Chinese (AA)

An Associate of Arts with a Chinese major will indicate that a student has completed all WSU AA degree requirements and the core curriculum required for the Bachelor of Arts in Chinese. It will also indicate students are prepared to enroll in upper division Chinese courses. The ending proficiency expectation is "Intermediate Low."

- **Grade Requirements:** A grade of C or better in courses used for this major (a grade of C- is not acceptable).
- **Program Code:** 3074AA
- **CIPC:** 160301

Advisement

Chinese majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree and General Education Requirements of this catalog for Associate of Arts requirements.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Required Chinese Courses

- CHNS 1010 - First Semester Chinese **Credits: (3)**
- CHNS 1020 - Second Semester Chinese **Credits: (3)**
- CHNS 2010 - Third Semester Chinese **Credits: (3)**
- CHNS 2020 HU - Fourth Semester Chinese **Credits: (3)**

- CHNS 2030 - Second Year Language Review **Credits: (3)**
OR
- CHNS 1852 - Study Abroad **Credits: (1-3)**
OR
- CHNS 2851 - Study Abroad **Credits: (3)** or
- CHNS 2852 - Study Abroad **Credits: (1-3)**
OR
- CHNS 3000 - Proficiency Development **Credits: (3)**

French (AA)

An Associate of Arts with a French major will indicate that a student has completed all WSU AA degree requirements and the core curriculum required for the Bachelor of Arts in French. It will also indicate students are prepared to enroll in upper division French courses. The ending proficiency expectation is "Intermediate Low."

- **Grade Requirements:** A grade of C or better in courses used for this major (a grade of C- is not acceptable).
- **Program Code:** 3026AA
- **CIPC:** 160901

Advisement

French majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree Requirements of this catalog for Associate of Arts requirements.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Required French Courses

- FRCH 1010 - First Semester French **Credits: (3)**
- FRCH 1020 - Second Semester French **Credits: (3)**
- FRCH 2010 - Third Semester French **Credits: (3)**
- FRCH 2020 HU - Fourth Semester French **Credits: (3)**

- FRCH 2030 - Second Year Language Review **Credits: (3)**
OR
- FRCH 1852 - Study Abroad **Credits: (1-3)**
OR
- FRCH 2851 HU - Study Abroad **Credits: (3)** or
- FRCH 2852 - Study Abroad **Credits: (1-3)**
OR
- FRCH 3000 - Proficiency Development **Credits: (3)**

German (AA)

An Associate of Arts with a German major will indicate that a student has completed all WSU AA degree requirements and the core curriculum required for the Bachelor of Arts in German. It will also indicate students are prepared to enroll in upper division German courses. The ending proficiency expectation is "Intermediate Low."

- **Grade Requirements:** A grade of C or better in courses used for this major (a grade of C- is not acceptable).
- **Program Code:** 3028AA
- **CIPC:** 160501

Advisement

German majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree and General Education Requirements of this catalog for Associate of Arts requirements.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Required German Courses

- GRMN 1010 - First Semester German **Credits: (3)**
- GRMN 1020 - Second Semester German **Credits: (3)**
- GRMN 2010 - Third Semester German **Credits: (3)**
- GRMN 2020 HU - Fourth Semester German **Credits: (3)**

- GRMN 2030 - Second Year Language Review **Credits: (3)**
OR
- GRMN 1852 - Study Abroad **Credits: (1-3)**
OR
- GRMN 2851 - Study Abroad **Credits: (3)** or
- GRMN 2852 - Study Abroad **Credits: (1-3)**
OR
- GRMN 3000 - Proficiency Development **Credits: (3)**

Japanese (AA)

WSU currently offers a minor in Japanese. Adding an Associate of Arts with a Japanese major will indicate that a student has completed all WSU AA degree requirements in addition to the core curriculum in Japanese. The ending proficiency expectation is "Intermediate Low."

- **Grade Requirements:** A grade of C or better in courses used for this major (a grade of C- is not acceptable).
- **Program Code:** 3032AA
- **CIPC:** 160302

Advisement

Japanese majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree and General Education Requirements of this catalog for Associate of Arts requirements.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Required Japanese Courses

- JPNS 1010 - First Semester Japanese **Credits: (3)**
- JPNS 1020 - Second Semester Japanese **Credits: (3)**
- JPNS 2010 - Third Semester Japanese **Credits: (3)**
- JPNS 2020 HU - Fourth Semester Japanese **Credits: (3)**

- JPNS 2030 - Second Year Language Review **Credits: (3)**
OR
- JPNS 1852 - Study Abroad **Credits: (1-3)**
OR
- JPNS 2851 HU - Study Abroad **Credits: (3)** or
- JPNS 2852 - Study Abroad **Credits: (1-3)**
OR
- JPNS 3000 - Proficiency Development **Credits: (3)**

Localization (AA)

- **Grade requirements:** A grade of "C" or better in courses used for this major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Program Code:** 3082AA
- **CIPC:** 160103

Admissions

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for this major.

Advisement

Localization majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment.

General Education

Refer to Degree and General Education Requirements of this catalog for Associate of Arts requirements.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Explain the linguistic and cultural knowledge needed in adapting a product or service for specific locales associated with the language they are studying.
- Explain the application of localization in global technology (such as software engineering, web development, digital media, programming, etc.).
- Describe and explain aspects of the culture(s) of the language being studied.

Course Requirements

FL Courses (12 credit hours)

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- ASL 1010 - First Semester ASL **Credits: (3)**
- ASL 1020 - Second Semester ASL **Credits: (3)**
- ASL 2010 - Third Semester ASL **Credits: (3)**
- ASL 2020 HU - Fourth Semester ASL **Credits: (3)**

OR

- CHNS 1010 - First Semester Chinese **Credits: (3)**
- CHNS 1020 - Second Semester Chinese **Credits: (3)**
- CHNS 2010 - Third Semester Chinese **Credits: (3)**
- CHNS 2020 HU - Fourth Semester Chinese **Credits: (3)**

OR

- FRCH 1010 - First Semester French **Credits: (3)**
- FRCH 1020 - Second Semester French **Credits: (3)**
- FRCH 2010 - Third Semester French **Credits: (3)**
- FRCH 2020 HU - Fourth Semester French **Credits: (3)**

OR

- GRMN 1010 - First Semester German **Credits: (3)**
- GRMN 1020 - Second Semester German **Credits: (3)**
- GRMN 2010 - Third Semester German **Credits: (3)**
- GRMN 2020 HU - Fourth Semester German **Credits: (3)**

OR

- JPNS 1010 - First Semester Japanese **Credits: (3)**
- JPNS 1020 - Second Semester Japanese **Credits: (3)**
- JPNS 2010 - Third Semester Japanese **Credits: (3)**
- JPNS 2020 HU - Fourth Semester Japanese **Credits: (3)**

OR

- KOR 1010 - First Semester Korean **Credits: (3)**
- KOR 1020 - Second Semester Korean **Credits: (3)**
- KOR 2010 - Third Semester Korean **Credits: (3)**
- KOR 2020 HU - Fourth Semester Korean **Credits: (3)**

OR

- PTGS 1010 - First Semester Portuguese **Credits: (3)**
- PTGS 1020 - Second Semester Portuguese **Credits: (3)**
- PTGS 2010 - Third Semester Portuguese **Credits: (3)**
- PTGS 2020 HU - Fourth Semester Portuguese **Credits: (3)**

OR

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**

Localization Course (3 credit hours)

Complete the following 3 credit hours

- WLC 2410 GLB - Introduction to Localization **Credits: (3)**

Language and Culture Elective (3 credit hours)

Select one course (a minimum of 3 credit hours) from the following.

- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)**
- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)**

Technology Electives (6 credit hours)

Select two courses (a minimum of 6 credit hours) from the following. Prerequisites may be specified for individual courses in the course catalog.

- ART 2430 - Introduction to Graphic Design **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- CS 1400 - Programming I **Credits: (4)**
- CS 2350 - Client Side Web Development **Credits: (4)**
- CS 2450 - Software Engineering I **Credits: (4)**
- MIS 2110 - Software Development I **Credits: (3)**
- WEB 1400 - Web Design and Usability **Credits: (3)**
- WEB 1430 - Client Side Programming **Credits: (3)**
- WEB 2500 - User Experience Design **Credits: (3)**

Spanish (AA)

An Associate of Arts with a Spanish major will indicate that a student has completed all WSU AA degree requirements and the core curriculum required for the Bachelor of Arts in Spanish. It will also indicate students are prepared to enroll in upper division Spanish courses. The ending proficiency expectation is "Intermediate Low."

- **Grade Requirements:** A grade of C or better in courses used for this major (a grade of C- is not acceptable).

- **Program Code:** 3030AA
- **CIPC:** 160905

Advisement

Spanish majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment.

Admissions

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree Requirements of this catalog for Associate of Arts requirements.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Required Spanish Courses

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**
- SPAN 2030 - Second Year Language Review **Credits: (3)**
OR
- SPAN 1852 - Study Abroad **Credits: (1-3)**
OR
- SPAN 2851 HU - Study Abroad **Credits: (3)** or
- SPAN 2852 - Study Abroad **Credits: (1-3)**
OR
- SPAN 3000 - Proficiency Development **Credits: (3)**

Institutional Certificate

American Sign Language (ASL) Certificate of Proficiency

The Certificate of Proficiency in American Sign Language (ASL) will allow students and professionals to validate intermediate competency in ASL, affording them an advantage in employment, broadening business opportunities and enriching their cultural and social understanding of our community and of the francophone world. This Certificate provides concrete evidence of communication skills for employers and associates.

- **Grade Requirements:** A grade of "C" or better in all courses used for this certificate
- **Credit Hour Requirements:** A total of 18 credit hours is required.
- **Program Code:** 3050CP
- **CIPC:** 16.1601

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles. (3000 level courses)
- Write an analysis or a literary or cultural work in the language. (3000 level courses)
- Describe and explain aspects of the culture(s) of the language being studied.

Core Courses

Complete the following (12 credit hours):

- ASL 1010 - First Semester ASL **Credits: (3)**
- ASL 1020 - Second Semester ASL **Credits: (3)**
- ASL 2010 - Third Semester ASL **Credits: (3)**
- ASL 2020 HU - Fourth Semester ASL **Credits: (3)**

Elective Courses

6 credit hours in ASL at the 3000 level or higher.

Chinese Certificate of Proficiency

The Certificate of Proficiency in Chinese will allow students and professionals to validate intermediate competency in oral and written Chinese, affording them an advantage in employment, broadening business opportunities and enriching their cultural and social understanding of our community and of the francophone world. This Certificate provides concrete evidence of speaking and writing skills for employers and associates.

- **Grade Requirements:** A grade of "C" or better in all courses used for this certificate
- **Credit Hour Requirements:** A total of 18 credit hours is required.
- **Program Code:** 3074CP
- **CIPC:** 16.0301

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles. (3000 level courses)
- Write an analysis or a literary or cultural work in the language. (3000 level courses)
- Describe and explain aspects of the culture(s) of the language being studied.

Core Courses

Complete the following (12 credit hours):

- CHNS 1010 - First Semester Chinese **Credits: (3)**
- CHNS 1020 - Second Semester Chinese **Credits: (3)**
- CHNS 2010 - Third Semester Chinese **Credits: (3)**
- CHNS 2020 HU - Fourth Semester Chinese **Credits: (3)**

Elective Courses

6 credit hours in Chinese at the 3000 level or higher.

French Certificate of Proficiency

The Certificate of Proficiency in French will allow students and professionals to validate intermediate competency in oral and written French, affording them an advantage in employment, broadening business opportunities and enriching their cultural and social understanding of our community and of the francophone world. This Certificate provides concrete evidence of speaking and writing skills for employers and associates.

- **Grade Requirements:** A grade of "C" or better in all courses used for this certificate
- **Credit Hour Requirements:** A total of 18 credit hours is required.
- **Program Code:** 3026CP
- **CIPC:** 16.0901

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles. (3000 level courses)
- Write an analysis or a literary or cultural work in the language. (3000 level courses)
- Describe and explain aspects of the culture(s) of the language being studied.

Core Courses

Complete the following (12 credit hours):

- FRCH 1010 - First Semester French **Credits: (3)**
- FRCH 1020 - Second Semester French **Credits: (3)**
- FRCH 2010 - Third Semester French **Credits: (3)**
- FRCH 2020 HU - Fourth Semester French **Credits: (3)**

Elective Courses

6 credit hours in French at the 3000 level or higher.

German Certificate of Proficiency

The Certificate of Proficiency in German will allow students and professionals to validate intermediate competency in oral and written German, affording them an advantage in employment, broadening business opportunities and enriching their cultural and social understanding of our community and of the francophone world. This Certificate provides concrete evidence of speaking and writing skills for employers and associates.

- **Grade Requirements:** A grade of "C" or better in all courses used for this certificate
- **Credit Hour Requirements:** A total of 18 credit hours is required.
- **Program Code:** 3028CP
- **CIPC:** 16.0501

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles. (3000 level courses)
- Write an analysis or a literary or cultural work in the language. (3000 level courses)
- Describe and explain aspects of the culture(s) of the language being studied.

Core Courses

Complete the following (12 credit hours):

- GRMN 1010 - First Semester German **Credits: (3)**
- GRMN 1020 - Second Semester German **Credits: (3)**
- GRMN 2010 - Third Semester German **Credits: (3)**
- GRMN 2020 HU - Fourth Semester German **Credits: (3)**

Elective Courses

6 credit hours in German at the 3000 level or higher.

Japanese Certificate of Proficiency

The Certificate of Proficiency in Japanese will allow students and professionals to validate intermediate competency in oral and written Japanese, affording them an advantage in employment, broadening business opportunities and enriching their cultural and social understanding of our community and of the francophone world. This Certificate provides concrete evidence of speaking and writing skills for employers and associates.

- **Grade Requirements:** A grade of "C" or better in all courses used for this certificate
- **Credit Hour Requirements:** A total of 18 credit hours is required.
- **Program Code:** 3032CP

- **CIPC:** 16.0302

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles. (3000 level courses)
- Write an analysis or a literary or cultural work in the language. (3000 level courses)
- Describe and explain aspects of the culture(s) of the language being studied.

Core Courses

Complete the following (12 credit hours):

- JPNS 1010 - First Semester Japanese **Credits: (3)**
- JPNS 1020 - Second Semester Japanese **Credits: (3)**
- JPNS 2010 - Third Semester Japanese **Credits: (3)**
- JPNS 2020 HU - Fourth Semester Japanese **Credits: (3)**

Elective Courses

6 credit hours in Japanese at the 3000 level or higher.

Korean Certificate of Proficiency

The Certificate of Proficiency in Korean will allow students and professionals to validate intermediate competency in oral and written Korean, affording them an advantage in employment, broadening business opportunities, and enriching their cultural and social understanding of our community and of the Korean-speaking world. This Certificate provides concrete evidence of speaking and writing skills for employers and associates.

- **Grade Requirements:** A grade of "C" or better in all courses used for this certificate
- **Credit Hour Requirements:** A total of 18 credit hours is required.
- **Program Code:** 3124CP
- **CIPC:** 16.0303

Advisement

Students are advised by Korean faculty and the Academic Advisor for the College of Arts & Humanities.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles. (3000-level courses)
- Write an analysis of a literary or cultural work in the language. (3000-level courses)
- Describe and explain aspects of culture(s) of the language being studied.

Major Course Requirements

Required Courses (12 credit hours)

Complete the following (12 credit hours):

- KOR 1010 - First Semester Korean **Credits: (3)**
- KOR 1020 - Second Semester Korean **Credits: (3)**
- KOR 2010 - Third Semester Korean **Credits: (3)**
- KOR 2020 HU - Fourth Semester Korean **Credits: (3)**

Elective Courses (6 credit hours)

6 credit hours in Korean at the 3000 level or higher.

Spanish Certificate of Proficiency

The Certificate of Proficiency in Spanish will allow students and professionals to validate intermediate competency in oral and written Spanish, affording them an advantage in employment, broadening business opportunities and enriching their cultural and social understanding of our community and of the francophone world. This Certificate provides concrete evidence of speaking and writing skills for employers and associates.

- **Grade Requirements:** A grade of "C" or better in all courses used for this certificate
- **Credit Hour Requirements:** A total of 18 credit hours is required.
-

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles. (3000 level courses)
- Write an analysis or a literary or cultural work in the language. (3000 level courses)
- Describe and explain aspects of the culture(s) of the language being studied.

Core Courses

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**

Elective Courses

6 credit hours in Spanish at the 3000 level or higher.

Spanish for Healthcare Certificate of Proficiency

The Certificate of Proficiency in Spanish for Healthcare will provide students with concrete evidence that they possess intermediate listening, speaking, reading, and writing proficiency in Spanish; intercultural awareness in a medical setting; and foundational knowledge of medical terminology in Spanish.

- **Program Prerequisite:** SPAN 1010, 1020, 2010, and 2020
- **Grade Requirements:** A grade of "C" or better in all courses used for this certificate.
- **Credit Hour Requirements:** A total of 21 credit hours is required.
- **Program Code:** 3128CP
- **CIPC:** 160905

Advisement

Students will be advised by faculty of the Spanish section, of the Department of World Languages and Cultures.

Admission Requirements

This program is for students who wish to provide potential employers with concrete evidence that they possess intermediate listening, speaking, reading, and writing proficiency in Spanish; intercultural awareness in a medical setting; and foundational knowledge of medical terminology in Spanish. Any student admitted to Weber State University may declare this program.

Program Learning Outcomes

- Demonstrate at least an intermediate level of listening, speaking, reading, and writing proficiency in Spanish.
- Demonstrate a foundational knowledge of medical vocabulary in Spanish.
- Demonstrate intercultural awareness in a medical setting.

Requirements

Prerequisite Courses (12 credit hours)

Complete the following 12 credit hours:

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**

Core Course (3 credit hours)

Complete the following course:

- SPAN 3060 - Grammar & Composition **Credits: (3)**

Spanish for Healthcare Courses (6 credit hours)

Select two of the following courses:

- SPAN 3720 CEL - Medical Spanish I **Credits: (3)**

- SPAN 4720 - Medical Spanish II **Credits: (3)**
- SPAN 3750 - Healthcare Interpreting **Credits: (3)**
- SPAN 4770 - Medical Translation **Credits: (3)**

Bachelor of Arts

French (BA)

- **Program Prerequisite:** Completion of first and second-year courses in French or equivalent preparation.
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses used for this major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 40 hours of these must be upper division (courses numbered 3000 and above). For the major, a minimum of 31.5 upper division hours is required beyond the prerequisite lower division courses (prerequisite courses, if needed, total 12 credit hours). At least 6 credit hours of major courses must be completed at WSU.
- **Program Code:** 3026BA
- **CIPC:** 160901

Advisement

French majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree Requirements of this catalog for Bachelor of Arts requirements. FRCH 2020 HU will fulfill the 3 credit hours for the Humanities General Education requirement. A student who completes an upper-division French course with a "C" or better will also meet this requirement. Credit for Humanities General Education (HU2020) cannot be obtained through examination. The prerequisite courses listed under the major requirements will also fulfill the BA Language requirement.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Assessment

During their senior year, all French majors will complete WLC 4990 in order to help the department assess how well it has met its goals. Students are encouraged to keep copies of their best work from each course taken in the major. These samples will be used in WLC 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- FRCH 1010 - First Semester French **Credits: (3)**
- FRCH 1020 - Second Semester French **Credits: (3)**
- FRCH 2010 - Third Semester French **Credits: (3)**
- FRCH 2020 HU - Fourth Semester French **Credits: (3)**

Required Courses (7.5 credit hours)

- FRCH 2960 - Introduction to World Languages and Cultures **Credits: (1)**
- FRCH 3060 - Grammar & Composition **Credits: (3)**
Or
- FRCH 3320 - Applied Language Studies **Credits: (1-3)**
Or
- FRCH 3550 - Cultural Heritage I **Credits: (3)**
- FRCH 3160 - Introduction to Literature **Credits: (3)**
Or
- FRCH 3610 - Literature Survey I **Credits: (3)**
Or
- FRCH 3690 - Special Topics in Literature **Credits: (3)**
- WLC 4990 - Senior Assessment **Credits: (.5)**

Literature Requirement (3 credit hours)

- FRCH 3160 - Introduction to Literature **Credits: (3)**
- FRCH 3610 - Literature Survey I **Credits: (3)**
- FRCH 3620 - Literature Survey II **Credits: (3)**
- FRCH 3630 - Literature Poetry **Credits: (3)**
- FRCH 3631 - Literature: Prose **Credits: (3)**
- FRCH 3632 - Literature: Drama **Credits: (3)**
- FRCH 3650 - Literature Periods **Credits: (3)**
- FRCH 3670 - Literature Authors **Credits: (3)**
- FRCH 3680 - Literature: Film **Credits: (3)**
- FRCH 3690 - Special Topics in Literature **Credits: (3)**
- FRCH 4620 - Survey of Literature I **Credits: (3)**
- FRCH 4630 - Survey of Literature II **Credits: (3)**
- FRCH 4690 - Special Topics in Literature **Credits: (3)**

Elective Courses

Select a minimum of 21 credit hours.

To complete the required 31.5 credit hours, majors in the French BA program may choose as electives any 3000 and 4000 level French courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**WLC 3320 (Applied Language Studies variable title course) when taken as Language & Culture of Europe will only count towards a French major if course assignments are completed in French. Speak with the instructor before registering for this class.*

French for Translation and Global Industry (BA)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Completion of first and second-year courses in French or equivalent preparation.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses used for this major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation -- 40 hours of these must be upper division (courses numbered 3000 and above). For the major, a minimum of 46.5 upper division hours is required beyond the prerequisite lower division courses (prerequisite courses, if needed, total 12 credit hours). At least 6 credit hours of major courses must be completed at WSU.
- **Program Code:** 3108BA
- **CIPC:** 160901

Advisement

French majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626- 6183 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree Requirements of this catalog for Bachelor of Arts requirements. FRCH 2020 will fulfill the 3 credit hours for the Humanities General Education requirement. A student who completes an upper-division French course with a "C" or better will also meet this requirement. Credit for Humanities General Education (HU2020) cannot be obtained through examination. The prerequisite courses listed under the major requirements will also fulfill the BA Language requirement.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.

- Demonstrate the ability to write in different styles.
- Write an analysis of a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.
- Demonstrate proficiency with technological tools and methodologies used to perform tasks within the context of a specific professional field (translation, business, or international relations).

Assessment

During their senior year, all French majors will complete WLC 4990 in order to help the department assess how well it has met its goals. Students are encouraged to keep copies of their best work from each course taken in the major. These samples will be used in WLC 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency).

- FRCH 1010 - First Semester French **Credits: (3)**
- FRCH 1020 - Second Semester French **Credits: (3)**
- FRCH 2010 - Third Semester French **Credits: (3)**
- FRCH 2020 HU - Fourth Semester French **Credits: (3)**

Language and Structure Courses (7 credit hours)

Complete FRCH 2960 and select two courses (a minimum of 7 credit hours) from the following

- FRCH 2960 - Introduction to World Languages and Cultures **Credits: (1)**
- FRCH 3060 - Grammar & Composition **Credits: (3)**
- FRCH 3360 - Advanced Grammar **Credits: (3)**
- FRCH 3550 - Cultural Heritage I **Credits: (3)**
- FRCH 3560 - Cultural Heritage II **Credits: (3)**

Translation and Localization Requirements (12 credit hours)

- WLC 2410 GLB - Introduction to Localization **Credits: (3)**
- FRCH 3740 - Translation I **Credits: (3)**
- WLC 3430 GLB - Translation Technology **Credits: (3)**

Select one course from the following.

- FRCH 3760 - Special Topics in Translation **Credits: (3)**
- FRCH 4740 - Translation II **Credits: (3)**
- FRCH 3750 - Introduction to Interpreting **Credits: (3)**

Global Industry Requirements (6 credit hours)

Select two courses (a minimum of 6 credit hours) from the following.

- FRCH 3710 - Business Language I **Credits: (3)**
- FRCH 3715 - Business Language II **Credits: (3)**
- FRCH 3720 - Language for Specific Purposes I **Credits: (3)**
- FRCH 3730 - Language for Specific Purposes II **Credits: (3)**

Support and Application Courses

Technology Elective (6 credit hours)

Select two courses (a minimum of 6 credit hours) from the following.

- ART 2430 - Introduction to Graphic Design **Credits: (3)**
- ART 3430 - Typography 1 **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- CS 1400 - Programming I **Credits: (4)**
- MIS 2110 - Software Development I **Credits: (3)**
- WEB 1400 - Web Design and Usability **Credits: (3)**

Writing Course (3 credit hours)

Select one course (a minimum of 3 credit hours) from the following.

- ENGL 3030 - Structure of English **Credits: (3)**
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**

Linguistics Course (3 credit hours)

Select one course (a minimum of 3 credit hours) from the following.

- FRCH 3220 - Phonetics and Phonology **Credits: (3)**
- FRCH 3270 - Special Topics in Linguistics **Credits: (3)**
- FRCH 3320 - Applied Language Studies **Credits: (1-3)**
- ENGL 3010 - Introduction to Linguistics **Credits: (3)**

Internship

Complete at least 1 credit hour in an internship; it is recommended that this be completed during the senior year. An internship may, on occasion, earn up to three credit hours.

- WLC 4860 INT - Foreign Language Internship **Credits: (1-3)**

Senior Assessment

- WLC 4990 - Senior Assessment **Credits: (.5)**

Elective Courses (9 credit hours)

Select three courses (a minimum of 9 credit hours) from the following.

- FRCH 3000 - Proficiency Development **Credits: (3)**
- FRCH 3060 - Grammar & Composition **Credits: (3)**
- FRCH 3116 - DLI Bridge Course I **Credits: (3)**
- FRCH 3117 - DLI Bridge Course II **Credits: (3)**
- FRCH 3118 - DLI Bridge Course III **Credits: (3)**
- FRCH 3160 - Introduction to Literature **Credits: (3)**
- FRCH 3220 - Phonetics and Phonology **Credits: (3)**
- FRCH 3270 - Special Topics in Linguistics **Credits: (3)**
- FRCH 3320 - Applied Language Studies **Credits: (1-3)**
- FRCH 3360 - Advanced Grammar **Credits: (3)**
- FRCH 3550 - Cultural Heritage I **Credits: (3)**
- FRCH 3560 - Cultural Heritage II **Credits: (3)**
- FRCH 3570 GLB - Special Topics in Culture **Credits: (3)**
- FRCH 3630 - Literature Poetry **Credits: (3)**
- FRCH 3631 - Literature: Prose **Credits: (3)**
- FRCH 3632 - Literature: Drama **Credits: (3)**
- FRCH 3650 - Literature Periods **Credits: (3)**
- FRCH 3670 - Literature Authors **Credits: (3)**
- FRCH 3680 - Literature: Film **Credits: (3)**
- FRCH 3690 - Special Topics in Literature **Credits: (3)**
- FRCH 3710 - Business Language I **Credits: (3)**
- FRCH 3715 - Business Language II **Credits: (3)**
- FRCH 3720 - Language for Specific Purposes I **Credits: (3)**
- FRCH 3730 - Language for Specific Purposes II **Credits: (3)**
- FRCH 3740 - Translation I **Credits: (3)**
- FRCH 3750 - Introduction to Interpreting **Credits: (3)**
- FRCH 3760 - Special Topics in Translation **Credits: (3)**
- FRCH 3810 - Experimental Course **Credits: (1-6)**
- FRCH 3850 - Study Abroad **Credits: (1-6)**
- FRCH 4190 - Foreign Language Journal **Credits: (3)**
- FRCH 4740 - Translation II **Credits: (3)**
- FRCH 4830 - Directed Readings **Credits: (1-3)**
- FRCH 4850 - Study Abroad **Credits: (3)**
- FRCH 4920 - Short Courses, Workshops, Institutes, and Special Programs **Credits: (1-6)**
- FRCH 4960 - Senior Project **Credits: (3)**

****Note: WLC 3320 - Applied Language Studies when taken as Language & Culture of Europe will only count towards a French major if course assignments are completed in French. Speak with the instructor before registering for this class.***

French Teaching (BA)

- **Program Prerequisite:** Completion of first and second-year courses in French or equivalent preparation. In addition, teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses used for this major (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A total of 120 hours is required for graduation; 40 hours of these must be upper division (courses numbered 3000 and above). For the major, a minimum of 36.5 upper division hours is required beyond the prerequisite lower division courses (prerequisite courses, if needed, total 12 credit hours). At least 6 credit hours of major courses must be completed at WSU.
- **Program Code:** 3027BA
- **CIPC:** 131325

Advisement

French Teaching majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment. Teaching majors are also encouraged to consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269).

Admission Requirements

Declare your program of study (see Enrollment Services and Information). Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. FRCH 2020 will fulfill the 3 credit hours for the Humanities General Education requirement. A student who completes an upper-division French course with a "C" or better will also meet this requirement. Credit for Humanities General Education (HU2020) cannot be obtained through examination. The prerequisite courses listed under the major requirements will also fulfill the BA Language requirement.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Assessment

During their senior year, all French Teaching majors will complete WLC 4990 in order to help the department assess how well it has met its goals. Students are encouraged to keep copies of their best work from each course taken in the major. These samples will be used in WLC 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- FRCH 1010 - First Semester French **Credits: (3)**
- FRCH 1020 - Second Semester French **Credits: (3)**
- FRCH 2010 - Third Semester French **Credits: (3)**
- FRCH 2020 HU - Fourth Semester French **Credits: (3)**

Required Courses (12.5 credit hours)

- FRCH 2960 - Introduction to World Languages and Cultures **Credits: (1)**
- FRCH 3060 - Grammar & Composition **Credits: (3)**
or
- FRCH 3320 - Applied Language Studies **Credits: (1-3)**
or
- FRCH 3550 - Cultural Heritage I **Credits: (3)**
- FRCH 3160 - Introduction to Literature **Credits: (3)**
or
- FRCH 3610 - Literature Survey I **Credits: (3)**
or
- FRCH 3690 - Special Topics in Literature **Credits: (3)**
- WLC 4400 - Methods for Teaching Languages **Credits: (5)**
- WLC 4990 - Senior Assessment **Credits: (.5)**

Literature Requirement (3 credit hours)

- FRCH 3610 - Literature Survey I **Credits: (3)**
- FRCH 3620 - Literature Survey II **Credits: (3)**
- FRCH 3630 - Literature Poetry **Credits: (3)**
- FRCH 3631 - Literature: Prose **Credits: (3)**
- FRCH 3632 - Literature: Drama **Credits: (3)**
- FRCH 3650 - Literature Periods **Credits: (3)**
- FRCH 3670 - Literature Authors **Credits: (3)**
- FRCH 3680 - Literature: Film **Credits: (3)**
- FRCH 3690 - Special Topics in Literature **Credits: (3)**
- FRCH 4620 - Survey of Literature I **Credits: (3)**
- FRCH 4630 - Survey of Literature II **Credits: (3)**

Elective Courses

To complete the required 36.5 credit hours, majors in the French Teaching BA program may choose as electives any 3000 and 4000 level French courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**Students must take an ACTFL Oral Proficiency Examination prior to taking WLC 4400 and student teaching. The department standard for Proficiency is the Advanced-Low level. Students must also complete the Praxis II Content Knowledge Exam in their language prior to student teaching. (Please see the foreign language advisor.)*

German (BA)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Completion of first and second-year courses in German or equivalent preparation.
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses used for this major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 40 hours of these must be upper division (courses numbered 3000 and above). For the major, a minimum of 31.5 upper division hours is required beyond the prerequisite lower division courses (prerequisite courses, if needed, total 12 credit hours). At least 6 credit hours of major courses must be completed at WSU.
- **Program Code:** 3028BA
- **CIPC:** 160501

Advisement

German majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree Requirements of this catalog for Bachelor of Arts requirements. FL 2020 will fulfill the 3 credit hours for the Humanities General Education requirement. A student who completes an upper-division German course with a "C" or better will also meet this requirement. Credit for Humanities General Education (HU2020) cannot be obtained through examination. The prerequisite courses listed under the major requirements will also fulfill the BA Language requirement.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Assessment

During their senior year, all German majors will complete WLC 4990 in order to help the department assess how well it has met its goals. Students are encouraged to keep copies of their best work from each course taken in the major. These samples will be used in WLC 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- GRMN 1010 - First Semester German **Credits: (3)**
- GRMN 1020 - Second Semester German **Credits: (3)**
- GRMN 2010 - Third Semester German **Credits: (3)**
- GRMN 2020 HU - Fourth Semester German **Credits: (3)**

Required Courses (7.5 credit hours)

- GRMN 2960 - Introduction to World Languages and Cultures **Credits: (1)**
- GRMN 3060 - Grammar & Composition **Credits: (3)**
or
- GRMN 3320 - Applied Language Studies **Credits: (1-3)**
or
- GRMN 3550 - Cultural Heritage I **Credits: (3)**
- GRMN 3160 - Introduction to Literature **Credits: (3)**
or
- GRMN 3610 - Literature Survey I **Credits: (3)**
or
- GRMN 3690 - Special Topics in Literature **Credits: (1-3)**
- WLC 4990 - Senior Assessment **Credits: (.5)**

Literature Requirement (3 credit hours)

Select one course (a minimum of 3 credit hours) from the following

- GRMN 3160 - Introduction to Literature **Credits: (3)**
- GRMN 3610 - Literature Survey I **Credits: (3)**
- GRMN 3620 - Literature Survey II **Credits: (3)**
- GRMN 3630 - Literature Poetry **Credits: (3)**
- GRMN 3631 - Literature: Prose **Credits: (3)**
- GRMN 3632 - Literature: Drama **Credits: (3)**
- GRMN 3650 - Literature Periods **Credits: (3)**
- GRMN 3670 - Literature Authors **Credits: (3)**
- GRMN 3680 - Literature: Film **Credits: (3)**
- GRMN 3690 - Special Topics in Literature **Credits: (1-3)**
- GRMN 4620 - Survey of Literature I **Credits: (3)**
- GRMN 4630 - Survey of Literature II **Credits: (3)**
- GRMN 4690 - Special Topics in Literature **Credits: (3)**

Elective Courses

Select a minimum of 21 credit hours.

To complete the required 31.5 credit hours, majors in the German BA program may choose as electives any 3000 and 4000 level German courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**WLC 3320 (Applied Language Studies variable title course) when taken as Language & Culture of Europe will only count towards a German major if course assignments are completed in German. Speak with the instructor before registering for this class.*

German for the Professions (BA)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Completion of first and second-year courses in German or equivalent preparation.
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses used for this major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation -- 40 hours of these must be upper division (courses numbered 3000 and above). For the major, a minimum of 31.5 upper division hours is required beyond the prerequisite lower division courses (prerequisite courses, if needed, total 12 credit hours). At least 6 credit hours of major courses must be completed at WSU.
- **Program Code:** 3088BA
- **CIPC:** 160501

Advisement

German majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree Requirements of this catalog for Bachelor of Arts requirements. FL 2020 will fulfill the 3 credit hours for the Humanities General Education requirement. A student who completes an upper-division German course with a "C" or better will also meet this requirement. Credit for Humanities General Education (HU2020) cannot be obtained through examination. The prerequisite courses listed under the major requirements will also fulfill the BA Language requirement.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Assessment

During their senior year, all German majors will complete WLC 4990 in order to help the department assess how well it has met its goals. Students are encouraged to keep copies of their best work from each course taken in the major. These samples will be used in WLC 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- GRMN 1010 - First Semester German **Credits: (3)**
- GRMN 1020 - Second Semester German **Credits: (3)**
- GRMN 2010 - Third Semester German **Credits: (3)**
- GRMN 2020 HU - Fourth Semester German **Credits: (3)**

Required Courses (13.5 credit hours)

- GRMN 2960 - Introduction to World Languages and Cultures **Credits: (1)**
- GRMN 3060 - Grammar & Composition **Credits: (3)**
or
- GRMN 3320 - Applied Language Studies **Credits: (1-3)**
or
- GRMN 3550 - Cultural Heritage I **Credits: (3)**
- GRMN 3160 - Introduction to Literature **Credits: (3)**
or
- GRMN 3610 - Literature Survey I **Credits: (3)**
or
- GRMN 3690 - Special Topics in Literature **Credits: (1-3)**
- GRMN 3710 - Business Language I **Credits: (3)**
- GRMN 3715 - Business Language II **Credits: (3)**
- WLC 4990 - Senior Assessment **Credits: (.5)**

Select 3 credit hours from the following

- GRMN 3550 - Cultural Heritage I **Credits: (3)**
- GRMN 3560 - Cultural Heritage II **Credits: (3)**
- GRMN 3570 GLB - Special Topics in Culture **Credits: (3)**

Elective Courses

Select a minimum of 15 credit hours.

To complete the required 31.5 credit hours, majors in the German, Commercial Emphasis, BA program may choose as electives any 3000 and 4000 level German courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**WLC 3320 (Applied Language Studies variable title course) when taken as Language & Culture of Europe will only count towards a German major if course assignments are completed in German. Speak with the instructor before registering for this class.*

German Teaching (BA)

- **Program Prerequisite:** Completion of first and second-year courses in German or equivalent preparation. In addition, teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses used for this major (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A total of 120 hours is required for graduation; 40 hours of these must be upper division (courses numbered 3000 and above). For the major, a minimum of 36.5 upper division hours is required beyond the prerequisite lower division courses (prerequisite courses, if needed, total 12 credit hours). At least 6 credit hours of major courses must be completed at WSU.
- **Program Code:** 3029BA
- **CIPC:** 131326

Advisement

German Teaching majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment. Teaching majors are also encouraged to consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269).

Admission Requirements

Declare your program of study (see Enrollment Services and Information). Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. GRMN 2020 will fulfill the 3 credit hours for the Humanities General Education requirement. A student who completes an upper-division German course with a "C" or better will also meet this requirement. Credit for Humanities General Education (HU2020) cannot be obtained through examination. The prerequisite courses listed under the major requirements will also fulfill the BA Language requirement.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Assessment

During their senior year, all German Teaching majors will complete WLC 4990 in order to help the department assess how well it has met its goals. Students are encouraged to keep copies of their best work from each course taken in the major. These samples will be used in WLC 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- GRMN 1010 - First Semester German **Credits: (3)**
- GRMN 1020 - Second Semester German **Credits: (3)**
- GRMN 2010 - Third Semester German **Credits: (3)**
- GRMN 2020 HU - Fourth Semester German **Credits: (3)**

Required Courses (12.5 credit hours)

- GRMN 2960 - Introduction to World Languages and Cultures **Credits: (1)**
- GRMN 3060 - Grammar & Composition **Credits: (3)**
or
- GRMN 3320 - Applied Language Studies **Credits: (1-3)**
or
- GRMN 3550 - Cultural Heritage I **Credits: (3)**
- GRMN 3160 - Introduction to Literature **Credits: (3)**
or
- GRMN 3610 - Literature Survey I **Credits: (3)**
or
- GRMN 3690 - Special Topics in Literature **Credits: (1-3)**
- WLC 4400 - Methods for Teaching Languages **Credits: (5) ***
- WLC 4990 - Senior Assessment **Credits: (.5)**

Literature Requirement (3 credit hours)

- GRMN 3160 - Introduction to Literature **Credits: (3)**
- GRMN 3610 - Literature Survey I **Credits: (3)**
- GRMN 3620 - Literature Survey II **Credits: (3)**
- GRMN 3630 - Literature Poetry **Credits: (3)**
- GRMN 3631 - Literature: Prose **Credits: (3)**
- GRMN 3632 - Literature: Drama **Credits: (3)**
- GRMN 3650 - Literature Periods **Credits: (3)**
- GRMN 3670 - Literature Authors **Credits: (3)**
- GRMN 3680 - Literature: Film **Credits: (3)**
- GRMN 3690 - Special Topics in Literature **Credits: (1-3)**
- GRMN 4620 - Survey of Literature I **Credits: (3)**
- GRMN 4630 - Survey of Literature II **Credits: (3)**
- GRMN 4690 - Special Topics in Literature **Credits: (3)**

Elective Courses

To complete the required 36.5 credit hours, majors in the German Teaching BA program may choose as electives any 3000 and 4000 level German courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**Students must take an ACTFL Oral Proficiency Examination prior to taking WLC 4400 and student teaching. The department standard for Proficiency is the Advanced-Low level. Students must also complete the Praxis II Content Knowledge Exam in their language prior to student teaching. (Please see the foreign language advisor.)*

Spanish (BA)

- **Program Prerequisite:** Completion of first and second-year courses in Spanish or equivalent preparation.
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses used for this major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 40 hours of these must be upper division (courses numbered 3000 and above). For the major, a minimum of 31.5 upper division hours is required beyond the prerequisite lower division courses (prerequisite courses, if needed, total 12 credit hours). At least 6 credit hours of major courses must be completed at WSU.
- **Program Code:** 3030BA
- **CIPC:** 160905

Advisement

Spanish majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree Requirements of this catalog for Bachelor of Arts requirements. FL 2020 will fulfill the 3 credit hours for the Humanities General Education requirement. A student who completes an upper-division Spanish course with a "C" or better will also meet this requirement. Credit for Humanities General Education (HU2020) cannot be obtained through examination. The prerequisite courses listed under the major requirements will also fulfill the BA Language requirement.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Assessment

During their senior year, all Spanish majors will complete WLC 4990 in order to help the department assess how well it has met its goals. Students are encouraged to keep copies of their best work from each course taken in the major. These samples will be used in WLC 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**

Required Courses (7.5 credit hours)

- SPAN 2960 - Introduction to World Languages and Cultures **Credits: (1)**
- SPAN 3060 - Grammar & Composition **Credits: (3)**
- SPAN 3160 - Introduction to Literature **Credits: (3)**
- WLC 4990 - Senior Assessment **Credits: (.5)**

Linguistics Requirement (3 credit hours)

Take one of the following courses:

- SPAN 3220 - Phonetics and Phonology **Credits: (3)**
- SPAN 3360 - Advanced Grammar **Credits: (3)**
- SPAN 3270 - Special Topics in Linguistics **Credits: (3)**

Culture Requirement (3 credit hours)

Complete one of the following courses:

- SPAN 3550 GLB - Cultural Heritage of Spain **Credits: (3)**
- SPAN 3560 - Cultural Heritage of Latin America **Credits: (3)**
- SPAN 3570 GLB - Special Topics in Culture **Credits: (3)**

Literature Requirement (6 credit hours)

Complete two of the following courses:

- SPAN 3610 - Peninsular Literature I **Credits: (3)**
- SPAN 3615 - Latin American Literature I **Credits: (3)**
- SPAN 3620 - Peninsular Literature II **Credits: (3)**
- SPAN 3625 - Latin American Literature II **Credits: (3)**

- SPAN 3630 - Literature Poetry **Credits: (3)**
- SPAN 3631 - Literature: Prose **Credits: (3)**
- SPAN 3650 - Literature Periods **Credits: (3)**
- SPAN 3670 - Literature Authors **Credits: (3)**
- SPAN 3680 - Literature: Film **Credits: (3)**
- SPAN 3690 - Special Topics in Literature **Credits: (1-3)**

Senior-level courses (6 credit hours)

Take two of the following courses:

- SPAN 4570 - Special Topics in Culture **Credits: (3)**
- SPAN 4690 - Special Topics in Literature **Credits: (3)**
- SPAN 4720 - Medical Spanish II **Credits: (3)**
SPAN 3270 is a prerequisite for SPAN 4720.
- SPAN 4710 - Business Language II **Credits: (3)**
- SPAN 4740 - Translation II **Credits: (3)**
- SPAN 4770 - Medical Translation **Credits: (3)**

Elective Courses (6 credit hours)

To complete the required 31.5 credit hours, majors in the Spanish BA program may choose as electives any 3000 and 4000 level Spanish courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**WLC 3320 (Applied Language Studies variable title course) when taken as Language & Culture of Europe will only count towards a Spanish major if course assignments are completed in Spanish. Speak with the instructor before registering for this class.*

Spanish for the Professions (BA)

- **Program Prerequisite:** Completion of first and second-year courses in Spanish or equivalent preparation.
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses used for this major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation -- 40 hours of these must be upper division (courses numbered 3000 and above). For the major, a minimum of 31.5 upper division hours is required beyond the prerequisite lower division courses (prerequisite courses, if needed, total 12 credit hours). At least 6 credit hours of major courses must be completed at WSU.
- **Program Code:** 3087BA
- **CIPC:** 160905

Advisement

Spanish majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree Requirements of this catalog for Bachelor of Arts requirements. SPAN 2020 will fulfill the 3 credit hours for the Humanities General Education requirement. A student who completes an upper-division Spanish course with a "C" or better will also meet this requirement. Credit for Humanities General Education (HU2020) cannot be obtained through examination. The prerequisite courses listed under the major requirements will also fulfill the BA Language requirement.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Assessment

During their senior year, all Spanish majors will complete WLC 4990 in order to help the department assess how well it has met its goals. Students are encouraged to keep copies of their best work from each course taken in the major. These samples will be used in WLC 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**

Required Courses (13.5 credit hours)

- SPAN 2960 - Introduction to World Languages and Cultures **Credits: (1)**
- SPAN 3060 - Grammar & Composition **Credits: (3)**
- SPAN 3160 - Introduction to Literature **Credits: (3)**

- SPAN 3710 - Business Language I **Credits: (3)** and
- SPAN 4710 - Business Language II **Credits: (3)**
- **OR**
- SPAN 3720 CEL - Medical Spanish I **Credits: (3)** and

- SPAN 3730 CEL - Spanish for Specific Purposes **Credits: (3)**
OR
- SPAN 4720 - Medical Spanish II **Credits: (3)**
- SPAN 3740 - Translation I **Credits: (3)** and
- SPAN 4740 - Translation II **Credits: (3)**
- WLC 4990 - Senior Assessment **Credits: (.5)**

Culture course

Select one course (a minimum of 3 credit hours) from the following:

- SPAN 3540 - Latin American Environment and Cultures **Credits: (3)**
- SPAN 3550 GLB - Cultural Heritage of Spain **Credits: (3)**
- SPAN 3560 - Cultural Heritage of Latin America **Credits: (3)**
- SPAN 3570 GLB - Special Topics in Culture **Credits: (3)**

Specific purposes course

Select one course (a minimum of 3 credit hours) from the following:

- SPAN 3730 CEL - Spanish for Specific Purposes **Credits: (3)**
- SPAN 3750 - Healthcare Interpreting **Credits: (3)**
- SPAN 3760 - Special Topics in Translation **Credits: (3)**
- SPAN 4770 - Medical Translation **Credits: (3)**

Elective Courses

Select a minimum of 12 credit hours.

To complete the required 12 credit hours, minors in the Spanish, Commercial Emphasis, minor program may choose as electives any 3000 and 4000 level Spanish courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**WLC 3320 (Applied Language Studies variable title course) when taken as Language & Culture of Europe will only count towards a Spanish major if course assignments are completed in Spanish. Speak with the instructor before registering for this class.*

Spanish Teaching (BA)

- **Program Prerequisite:** Completion of first and second-year courses in Spanish or equivalent preparation. In addition, teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses used for this major (a grade of "C-" is not acceptable).

- **Credit Hour Requirements:** A total of 120 hours is required for graduation; 40 hours of these must be upper division (courses numbered 3000 and above). For the major, a minimum of 36.5 upper division hours is required beyond the prerequisite lower division courses (prerequisite courses, if needed, total 12 credit hours). At least 6 credit hours of major courses must be completed at WSU.
- **Program Code:** 3031BA
- **CIPC:** 131330

Advisement

Spanish Teaching majors are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment. Teaching majors are also encouraged to consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269).

Admission Requirements

Declare your program of study (see Enrollment Services and Information). Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. SPAN 2020 will fulfill the 3 credit hours for the Humanities General Education requirement. A student who completes an upper-division Spanish course with a "C" or better will also meet this requirement. Credit for Humanities General Education (HU2020) cannot be obtained through examination. The prerequisite courses listed under the major requirements will also fulfill the BA Language requirement.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Assessment

During their senior year, all Spanish Teaching majors will complete WLC 4990 in order to help the department assess how well it has met its goals. Students are encouraged to keep copies of their best work from each course taken in the major. These samples will be used in WLC 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**

- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**

Required Courses (12.5 credit hours)

- SPAN 2960 - Introduction to World Languages and Cultures **Credits: (1)**
- SPAN 3060 - Grammar & Composition **Credits: (3)**
- SPAN 3160 - Introduction to Literature **Credits: (3)**
- WLC 4400 - Methods for Teaching Languages **Credits: (5) ***
- WLC 4990 - Senior Assessment **Credits: (.5)**

Literature Requirement (3 credit hours)

- SPAN 3610 - Peninsular Literature I **Credits: (3)**
- SPAN 3615 - Latin American Literature I **Credits: (3)**
- SPAN 3620 - Peninsular Literature II **Credits: (3)**
- SPAN 3625 - Latin American Literature II **Credits: (3)**
- SPAN 3630 - Literature Poetry **Credits: (3)**
- SPAN 3631 - Literature: Prose **Credits: (3)**
- SPAN 3650 - Literature Periods **Credits: (3)**
- SPAN 3670 - Literature Authors **Credits: (3)**
- SPAN 3680 - Literature: Film **Credits: (3)**
- SPAN 3690 - Special Topics in Literature **Credits: (1-3)**
- SPAN 4690 - Special Topics in Literature **Credits: (3)**

Elective Courses

To complete the required 35.5 credit hours, majors in the Spanish Teaching BA program may choose as electives any 3000 and 4000 level Spanish courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**Students must take an ACTFL Oral Proficiency Examination prior to taking WLC 4400 and student teaching. The department standard for Proficiency is the Advanced-Low level. Students must also complete the Praxis II Content Knowledge Exam in their language prior to student teaching. (Please see the foreign language advisor.)*

Spanish Translation (BA)

Program Prerequisite: Completion of first and second-year courses in Spanish or equivalent preparation.

Minor: Not Required.

Grade Requirements: A grade of "C" or better in courses used for this major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; 40 of these must be upper division (courses numbered 3000 and above). For the major, a minimum of 53.5 upper division courses is required beyond the prerequisite lower division courses (prerequisite courses, if needed, total 12 credit hours). At least 6 credit hours of major courses must be completed at WSU.

- **Program Code:** 3077BA
- **CIPC:** 160103

Advisement

Spanish Translation majors are encouraged to meet with Spanish faculty advisors and/or Academic Advisors for the College of Arts & Humanities at least annually for course and program advisement.

Use Grad MAPs to plan your degree

Admission Requirements

All students pursuing the Bachelor of Arts in Spanish Translation must follow the same application process for admittance to WSU. In addition, before students may declare the Spanish Translation major they will demonstrate at least Intermediate-Low proficiency in Spanish (following the ACTFL Proficiency Guidelines) by submitting:

1. a recording of an autobiographical statement in the candidate's non-native language (5 minutes).
2. an essay (in English or Spanish) on why the candidate wants to pursue a BA in Spanish Translation (250 words) to assess the candidate's formal language use.
3. a translation of the essay.

Outstanding bilingual students in Concurrent Enrollment, in the DLI Bridge Courses or in our prerequisite Spanish sequence will be identified and encouraged to submit documents 1, 2 and 3, before they take upper-division Spanish courses.

General Education

Refer to Bachelor of Arts requirements. SPAN HU2020 will fulfill the 3 credit hours for the Humanities General Education requirement. A student who completes an upper-division Spanish course with a "C" or better will also meet this requirement. Credit for Humanities General Education (HU2020) cannot be obtained through examination. The prerequisite courses listed under the major requirements will also fulfill the BA Language requirement.

Program Learning Outcomes

- Demonstrate speaking and listening proficiency in the language they are studying.
- Demonstrate writing ability, including a command of grammar and appropriate usage to express their ideas.
- Demonstrate the ability to write in different styles.
- Write an analysis or a literary or cultural work in the language.
- Describe and explain aspects of the culture(s) of the language being studied.

Assessment

During their senior year, all Spanish Translation majors will complete FL 4990 in order to help the department assess how well it has met its goals. Students are encouraged to keep copies of their best work from each course taken in the major. These samples will be used in FL 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**

Language and Structure Courses (19 credit hours)

Complete the following courses

- WLC 2960 - Introduction to World Languages and Cultures **Credits: (1)**
- SPAN 3060 - Grammar & Composition **Credits: (3)**
- SPAN 3160 - Introduction to Literature **Credits: (3)**
- SPAN 3360 - Advanced Grammar **Credits: (3)**
- ENGL 3030 - Structure of English **Credits: (3)**
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing **Credits: (3)**
- ENGL 3100 - Professional and Technical Writing **Credits: (3)**

Translation Courses (9 credit hours)

Complete the following 9 credit hours; must be taken in sequence:

- SPAN 3750 - Healthcare Interpreting **Credits: (3)**
- SPAN 3740 - Translation I **Credits: (3)**
- SPAN 4740 - Translation II **Credits: (3)**

Internship (1 credit hour)

Complete at least 1 credit hour in an internship; it is recommended that this be completed during the senior year. An internship may, on occasion, earn up to three credit hours.

- WLC 4860 INT - Foreign Language Internship **Credits: (1-3)**

Support and Application Courses

1. Culture Course (3 credit hours)

Select one course (a minimum of 3 credit hours) from the following

- SPAN 3550 GLB - Cultural Heritage of Spain **Credits: (3)**
- SPAN 3560 - Cultural Heritage of Latin America **Credits: (3)**
- SPAN 3570 GLB - Special Topics in Culture **Credits: (3)**

2. Linguistics Course (3 credit hours)

Select one course (a minimum of 3 credit hours) from the following

- SPAN 3320 - Applied Language Studies **Credits: (1-3)**
- SPAN 3270 - Special Topics in Linguistics **Credits: (3)**

3. Business Language (6 credit hours)

Complete the following 6 credit hours

- SPAN 3710 - Business Language I **Credits: (3)**
- SPAN 4710 - Business Language II **Credits: (3)**

4. Specific Purposes (3 credit hours)

Complete one course (a minimum of 3 credit hours) from the following

- SPAN 3720 CEL - Medical Spanish I **Credits: (3)**
- SPAN 3730 CEL - Spanish for Specific Purposes **Credits: (3)**

Elective Courses (9 credit hours)

Complete 9 credit hours from among all upper-division SPAN courses.

Senior Assessment (.5 credit hours)

Complete WLC 4990 - Senior Assessment (.5).

Emphasis Option for Bachelor of Interdisciplinary Studies

American Sign Language (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

The Department of Foreign Languages participates in the BIS degree program. For an American Sign Language emphasis, students should take a minimum of 18 credit hours as approved by their Foreign Language Advisor. BIS students must meet with the Foreign Language Advisor to design their ASL component.

- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the minor (a grade of "C-" is not acceptable) and an overall GPA of 2.00.
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** 3050

Chinese (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

The Department of Foreign Languages participates in the BIS degree program. For a Chinese emphasis, students should take a minimum of 18 credit hours as approved by their Foreign Language Advisor. BIS students must meet with the Foreign Language Advisor to design their Chinese component.

- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the minor (a grade of "C-" is not acceptable) and an overall GPA of 2.00.

- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** 3074

French (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

The Department of Foreign Languages participates in the BIS degree program. For a French emphasis, students should take a minimum of 18 credit hours as approved by their Foreign Language Advisor. BIS students must meet with the Foreign Language Advisor to design their French component.

- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the minor (a grade of "C-" is not acceptable) and an overall GPA of 2.00.
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** 3026
- **CIPC:** 160901

German (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

The Department of Foreign Languages participates in the BIS degree program. For a German emphasis, students should take a minimum of 18 credit hours as approved by their Foreign Language Advisor. BIS students must meet with the Foreign Language Advisor to design their German component.

- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the minor (a grade of "C-" is not acceptable) and an overall GPA of 2.00.
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** 3028
- **CIPC:** 160501

Japanese (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

The Department of Foreign Languages participates in the BIS degree program. For a Japanese emphasis, students should take a minimum of 18 credit hours as approved by their Foreign Language Advisor. BIS students must meet with the Foreign Language Advisor to design their Japanese component.

- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the minor (a grade of "C-" is not acceptable) and an overall GPA of 2.00.
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** 3032
- **CIPC:** 160302

Spanish (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

The Department of Foreign Languages participates in the BIS degree program. For a Spanish emphasis, students should take a minimum of 18 credit hours as approved by their Foreign Language Advisor. BIS students must meet with the Foreign Language Advisor to design their Spanish component.

- **Grade Requirements:** Minimum grade of "C" in courses counted toward fulfilling the minor (a grade of "C-" is not acceptable) and an overall GPA of 2.00.
- **Credit Hour Requirements:** Minimum of 18 credit hours.
- **Program Code:** 3030
- **CIPC:** 160905

Minor

French for the Professions Minor

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Completion of first and second-year courses in French or equivalent preparation.
- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 15 upper division hours in French. At least 3 credit hours of minor courses must be completed at WSU.
- **Program Code:** 3089
- **CIPC:** 160901

Course Requirements for Minor

Prerequisite Courses

*Complete the following 12 credit hours
(or demonstrate equivalent proficiency)*

- FRCH 1010 - First Semester French **Credits: (3)**
- FRCH 1020 - Second Semester French **Credits: (3)**
- FRCH 2010 - Third Semester French **Credits: (3)**
- FRCH 2020 HU - Fourth Semester French **Credits: (3)**

Required Courses (12 credit hours)

- FRCH 3060 - Grammar & Composition **Credits: (3)**
or
- FRCH 3320 - Applied Language Studies **Credits: (1-3)**
or
- FRCH 3550 - Cultural Heritage I **Credits: (3)**
- FRCH 3160 - Introduction to Literature **Credits: (3)**
or
- FRCH 3610 - Literature Survey I **Credits: (3)**
or
- FRCH 3690 - Special Topics in Literature **Credits: (3)**

- FRCH 3710 - Business Language I **Credits: (3)**
- FRCH 3715 - Business Language II **Credits: (3)**

Elective Courses

Select 3 credit hours from the following

- FRCH 3550 - Cultural Heritage I **Credits: (3)**
- FRCH 3560 - Cultural Heritage II **Credits: (3)**
- FRCH 3570 GLB - Special Topics in Culture **Credits: (3)**
- FRCH 3760 - Special Topics in Translation **Credits: (3)**

French Minor

- **Prerequisite Courses:** Completion of first and second-year courses in French or equivalent preparation.
- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 15 upper division hours in French. At least 3 credit hours of minor courses must be completed at WSU.
- **Program Code:** 3026
- **CIPC:** 160901

Course Requirements for Minor

Prerequisite Courses

*Complete the following 12 credit hours
(or demonstrate equivalent proficiency)*

- FRCH 1010 - First Semester French **Credits: (3)**
- FRCH 1020 - Second Semester French **Credits: (3)**
- FRCH 2010 - Third Semester French **Credits: (3)**
- FRCH 2020 HU - Fourth Semester French **Credits: (3)**

Required Courses (6 credit hours)

- FRCH 3060 - Grammar & Composition **Credits: (3)**
Or
- FRCH 3320 - Applied Language Studies **Credits: (1-3)**
Or
- FRCH 3550 - Cultural Heritage I **Credits: (3)**
- FRCH 3160 - Introduction to Literature **Credits: (3)**
Or
- FRCH 3610 - Literature Survey I **Credits: (3)**
Or
- FRCH 3690 - Special Topics in Literature **Credits: (3)**

Elective Courses (select a minimum of 9 credit hours)

To complete the required 15 credit hours, minors in the French minor program may choose as electives any 3000 and 4000 level French courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**WLC 3320 (Applied Language Studies variable title course) when taken as Language & Culture of Europe will only count towards a French minor if course assignments are completed in French. Speak with the instructor before registering for this class.*

German for the Professions Minor

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Completion of first and second-year courses in German or equivalent preparation.
- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 15 upper division hours in German. At least 3 credit hours of minor courses must be completed at WSU.
- **Program Code:** 3088
- **CIPC:** 160501

FL Courses

The following course descriptions are generic and apply to all languages. The acronym FL denotes foreign language courses. In the class schedule each semester courses will be language specific: FRCH for French, GRMN for German, JPNS for Japanese, and SPAN for Spanish, etc.

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- GRMN 1010 - First Semester German **Credits: (3)**
- GRMN 1020 - Second Semester German **Credits: (3)**
- GRMN 2010 - Third Semester German **Credits: (3)**
- GRMN 2020 HU - Fourth Semester German **Credits: (3)**

Required Courses (9 credit hours)

- GRMN 3060 - Grammar & Composition **Credits: (3)**
or
- GRMN 3320 - Applied Language Studies **Credits: (1-3)**
or
- GRMN 3550 - Cultural Heritage I **Credits: (3)**

- GRMN 3160 - Introduction to Literature **Credits: (3)**
or
- GRMN 3610 - Literature Survey I **Credits: (3)**
or
- GRMN 3690 - Special Topics in Literature **Credits: (1-3)**
- GRMN 3710 - Business Language I **Credits: (3)**

Elective Courses

Select 6 credit hours from the following

- GRMN 3550 - Cultural Heritage I **Credits: (3)**
- GRMN 3560 - Cultural Heritage II **Credits: (3)**
- GRMN 3570 GLB - Special Topics in Culture **Credits: (3)**

German Minor

- **Prerequisite Courses:** Completion of first and second-year courses in German or equivalent preparation.
- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 15 upper division hours in German. At least 3 credit hours of minor courses must be completed at WSU.
- **Program Code:** 3028
- **CIPC:** 160501

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- GRMN 1010 - First Semester German **Credits: (3)**
- GRMN 1020 - Second Semester German **Credits: (3)**
- GRMN 2010 - Third Semester German **Credits: (3)**
- GRMN 2020 HU - Fourth Semester German **Credits: (3)**

Required Courses (6 credit hours)

- GRMN 3060 - Grammar & Composition **Credits: (3)**
or
- GRMN 3320 - Applied Language Studies **Credits: (1-3)**
or
- GRMN 3550 - Cultural Heritage I **Credits: (3)**
- GRMN 3160 - Introduction to Literature **Credits: (3)**
or
- GRMN 3610 - Literature Survey I **Credits: (3)**
or
- GRMN 3690 - Special Topics in Literature **Credits: (1-3)**

Elective Courses (select a minimum of 9 credit hours)

To complete the required 15 credit hours, minors in the German minor program may choose as electives any 3000 and 4000 level German courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**WLC 3320 - Applied Language Studies (variable title course) when taken as Language & Culture of Europe will only count towards a German minor if course assignments are completed in German. Speak with the instructor before registering for this class.*

Japanese Minor

- **Prerequisite Courses:** Completion of first and second-year courses in Japanese or equivalent preparation.
- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 15 upper division hours in Japanese. At least 3 credit hours of minor courses must be completed at WSU.
- **Program Code:** 3032
- **CIPC:** 160302

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- JPNS 1010 - First Semester Japanese **Credits: (3)**
- JPNS 1020 - Second Semester Japanese **Credits: (3)**
- JPNS 2010 - Third Semester Japanese **Credits: (3)**
- JPNS 2020 HU - Fourth Semester Japanese **Credits: (3)**

Required Courses (6 credit hours)

- JPNS 3060 - Grammar & Composition **Credits: (3)**
- JPNS 3160 - Introduction to Literature **Credits: (3)**

Elective Courses (select a minimum of 9 credit hours)

To complete the required 15 credit hours, minors in the Japanese minor program may choose as electives any 3000 and 4000 level courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Localization Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Program Prerequisite:** Completion of first and second-year courses in a Foreign Language or equivalent preparation.
- **Grade Requirements:** A grade of "C" or better in courses used for this minor (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A minimum of 18 credit hours. At least 3 credit hours of minor courses must be completed at WSU.
- **Program Code:** 3082
- **CIPC:** 160103

Advisement

Localization minors are encouraged to meet with faculty advisors in the Department of Foreign Languages with expertise in Localization and/or Academic Advisors for the College of Arts & Humanities at least annually for course and program advisement.

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- ASL 1010 - First Semester ASL **Credits: (3)**
- ASL 1020 - Second Semester ASL **Credits: (3)**
- ASL 2010 - Third Semester ASL **Credits: (3)**
- ASL 2020 HU - Fourth Semester ASL **Credits: (3)**

OR

- CHNS 1010 - First Semester Chinese **Credits: (3)**
- CHNS 1020 - Second Semester Chinese **Credits: (3)**
- CHNS 2010 - Third Semester Chinese **Credits: (3)**
- CHNS 2020 HU - Fourth Semester Chinese **Credits: (3)**

OR

- FRCH 1010 - First Semester French **Credits: (3)**
- FRCH 1020 - Second Semester French **Credits: (3)**
- FRCH 2010 - Third Semester French **Credits: (3)**
- FRCH 2020 HU - Fourth Semester French **Credits: (3)**

OR

- GRMN 1010 - First Semester German **Credits: (3)**
- GRMN 1020 - Second Semester German **Credits: (3)**
- GRMN 2010 - Third Semester German **Credits: (3)**
- GRMN 2020 HU - Fourth Semester German **Credits: (3)**

OR

- JPNS 1010 - First Semester Japanese **Credits: (3)**
- JPNS 1020 - Second Semester Japanese **Credits: (3)**

- JPNS 2010 - Third Semester Japanese **Credits: (3)**
- JPNS 2020 HU - Fourth Semester Japanese **Credits: (3)**

OR

- KOR 1010 - First Semester Korean **Credits: (3)**
- KOR 1020 - Second Semester Korean **Credits: (3)**
- KOR 2010 - Third Semester Korean **Credits: (3)**
- KOR 2020 HU - Fourth Semester Korean **Credits: (3)**

OR

- PTGS 1010 - First Semester Portuguese **Credits: (3)**
- PTGS 1020 - Second Semester Portuguese **Credits: (3)**
- PTGS 2010 - Third Semester Portuguese **Credits: (3)**
- PTGS 2020 HU - Fourth Semester Portuguese **Credits: (3)**

OR

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**

Localization Core Courses (9 credit hours)

Complete the following 9 credit hours

- WLC 2410 GLB - Introduction to Localization **Credits: (3)**
- WLC 3420 GLB - Introduction to Translation **Credits: (3)**
- WLC 3430 GLB - Translation Technology **Credits: (3)**

Capstone Course (3 credit hours)

Complete a minimum of 3 credit hours from the following

- WLC 4860 INT - Foreign Language Internship **Credits: (1-3)**

Technology Elective (3 credit hours)

Select one course (a minimum of 3 credit hours) from the following. Prerequisites may be specified for individual courses in the course catalog.

- ART 2430 - Introduction to Graphic Design **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- CS 1400 - Programming I **Credits: (4)**
- MIS 2110 - Software Development I **Credits: (3)**
- WEB 1400 - Web Design and Usability **Credits: (3)**

Other Elective (3 credit hours)

Select one course (a minimum of 3 credit hours) from the following (other than the course chosen for the Technology Elective). Prerequisites may be specified for individual courses in the course catalog

- ANTH 1040 HU/CC - Language and Culture **Credits: (3)**
- ANTH 2010 SS/CC - Peoples and Cultures of the World **Credits: (3)**
- ART 2430 - Introduction to Graphic Design **Credits: (3)**
- ART 3430 - Typography 1 **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- COMM 3080 GLB - Intercultural Communication **Credits: (3)**
- CS 1400 - Programming I **Credits: (4)**
- CS 2350 - Client Side Web Development **Credits: (4)**
- CS 2450 - Software Engineering I **Credits: (4)**
- ENGL 4110 - Content Management **Credits: (3)**
- WLC 3570 GLB - Special Topics in Culture **Credits: (3)**
- WLC 3760 - Special Topics in Translation **Credits: (3)**
- GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet **Credits: (3)**
- MGMT 3400 - International Business **Credits: (3)**
- MIS 2110 - Software Development I **Credits: (3)**
- MKTG 3600 GLB - International Marketing **Credits: (3)**
- WEB 1400 - Web Design and Usability **Credits: (3)**
- WEB 1430 - Client Side Programming **Credits: (3)**
- WEB 2500 - User Experience Design **Credits: (3)**

Spanish for the Professions Minor

This program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Prerequisite:** Completion of first and second-year courses in Spanish or equivalent preparation.
- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 15 upper division hours in Spanish. At least 3 credit hours of minor courses must be completed at WSU.
- **Program Code:** 3087
- **CIPC:** 160905

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**

Required Courses (12 credit hours)

- SPAN 3060 - Grammar & Composition **Credits: (3)**
- SPAN 3160 - Introduction to Literature **Credits: (3)**
- SPAN 3710 - Business Language I **Credits: (3)** and
- SPAN 4710 - Business Language II **Credits: (3)**
OR
- SPAN 3720 CEL - Medical Spanish I **Credits: (3)** and
- SPAN 4720 - Medical Spanish II **Credits: (3)**
OR
- SPAN 3740 - Translation I **Credits: (3)** and
- SPAN 4740 - Translation II **Credits: (3)**

Elective Courses

Select one course (a minimum of 3 credit hours) from the following:

- SPAN 3540 - Latin American Environment and Cultures **Credits: (3)**
- SPAN 3550 GLB - Cultural Heritage of Spain **Credits: (3)**
- SPAN 3560 - Cultural Heritage of Latin America **Credits: (3)**
- SPAN 3570 GLB - Special Topics in Culture **Credits: (3)**
- SPAN 3750 - Healthcare Interpreting **Credits: (3)**
- SPAN 3760 - Special Topics in Translation **Credits: (3)**
- SPAN 3730 CEL - Spanish for Specific Purposes **Credits: (3)**
- SPAN 4770 - Medical Translation **Credits: (3)**

Spanish Minor

- **Prerequisite Courses:** Completion of first and second-year courses in Spanish or equivalent preparation.
- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 15 upper division hours in Spanish. At least 3 credit hours of minor courses must be completed at WSU.
- **Program Code:** 3030
- **CIPC:** 160905

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**

Required Courses (6 credit hours)

- SPAN 3060 - Grammar & Composition **Credits: (3)**
- SPAN 3160 - Introduction to Literature **Credits: (3)**

Elective Courses (select a minimum of 9 credit hours)

To complete the required 15 credit hours, minors in the Spanish minor program may choose as electives any 3000 and 4000 level Spanish courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**WLC 3320 (Applied Language Studies variable title course) when taken as Language & Culture of Europe will only count towards a Spanish minor if course assignments are completed in Spanish. Speak with the instructor before registering for this class.*

Teaching Minor

French Teaching Minor

- **Program Prerequisite:** Completion of first and second-year courses in French or equivalent preparation. Must satisfy the Education Licensure Program (see the Department of Teacher Education).
- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 20 upper division hours in French. At least 3 credit hours of minor courses must be completed at WSU.
- **Program Code:** 3027
- **CIPC:** 131325

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- FRCH 1010 - First Semester French **Credits: (3)**
- FRCH 1020 - Second Semester French **Credits: (3)**
- FRCH 2010 - Third Semester French **Credits: (3)**
- FRCH 2020 HU - Fourth Semester French **Credits: (3)**

Required Courses (11 credit hours)

- FRCH 3060 - Grammar & Composition **Credits: (3)**
or
- FRCH 3320 - Applied Language Studies **Credits: (1-3)**
or
- FRCH 3550 - Cultural Heritage I **Credits: (3)**
- FRCH 3160 - Introduction to Literature **Credits: (3)**

- or**
- FRCH 3610 - Literature Survey I **Credits: (3)**
- or**
- FRCH 3690 - Special Topics in Literature **Credits: (3)**
- WLC 4400 - Methods for Teaching Languages **Credits: (5)**

Note:

**Students must take an ACTFL Oral Proficiency Examination prior to taking WLC 4400 and student teaching. The department standard for Proficiency is the Advanced-Low level. Students must also complete the Praxis II Content Knowledge Exam in their language prior to student teaching. (Please see the foreign language advisor.)*

Elective Courses (select a minimum of 6 credit hours)

To complete the required 20 credit hours, minors in the French Teaching minor program may choose as electives any 3000 and 4000 level French courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

German Teaching Minor

- **Program Prerequisite:** Completion of first and second-year courses in German or equivalent preparation. Must satisfy the Education Licensure Program (see the Department of Teacher Education).
- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 20 upper division hours in German. At least 3 credit hours of minor courses must be completed at WSU.
- **Program Code:** 3029
- **CIPC:** 131326

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- GRMN 1010 - First Semester German **Credits: (3)**
- GRMN 1020 - Second Semester German **Credits: (3)**
- GRMN 2010 - Third Semester German **Credits: (3)**
- GRMN 2020 HU - Fourth Semester German **Credits: (3)**

Required Courses (11 credit hours)

- GRMN 3060 - Grammar & Composition **Credits: (3)**
- or**
- GRMN 3320 - Applied Language Studies **Credits: (1-3)**
- or**
- GRMN 3550 - Cultural Heritage I **Credits: (3)**
- GRMN 3160 - Introduction to Literature **Credits: (3)**

or

- GRMN 3610 - Literature Survey I **Credits: (3)**

or

- GRMN 3690 - Special Topics in Literature **Credits: (1-3)**
- WLC 4400 - Methods for Teaching Languages **Credits: (5) ***

Elective Courses (select a minimum of 6 credit hours)

To complete the required 20 credit hours, minors in the German Teaching minor program may choose as electives any 3000 and 4000 level German courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**Students must take an ACTFL Oral Proficiency Examination prior to taking WLC 4400 and student teaching. The department standard for Proficiency is the Advanced-Low level. Students must also complete the Praxis II Content Knowledge Exam in their language prior to student teaching. (Please see the foreign language advisor.)*

Spanish Teaching Minor

- **Program Prerequisite:** Completion of first and second-year courses in Spanish or equivalent preparation. Must satisfy the Education Licensure Program (see the Department of Teacher Education).
- **Grade Requirements:** A grade of "C" or better in courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 20 upper division hours in Spanish. At least 3 credit hours of minor courses must be completed at WSU.
- **Program Code:** 3031
- **CIPC:** 131330

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- SPAN 1010 - First Semester Spanish **Credits: (3)**
- SPAN 1020 - Second Semester Spanish **Credits: (3)**
- SPAN 2010 - Third Semester Spanish **Credits: (3)**
- SPAN 2020 HU - Fourth Semester Spanish **Credits: (3)**

Required Courses (11 credit hours)

- SPAN 3060 - Grammar & Composition **Credits: (3)**
- SPAN 3160 - Introduction to Literature **Credits: (3)**
- WLC 4400 - Methods for Teaching Languages **Credits: (5) ***

Elective Courses (select a minimum of 9 credit hours)

To complete the required 20 credit hours, minors in the Spanish Teaching minor program may choose as electives any 3000 and 4000 level Spanish courses, including those listed above. *Prerequisites may be specified for individual courses in the course catalog.*

Note:

**Students must take an ACTFL Oral Proficiency Examination prior to taking WLC 4400 and student teaching. The department standard for Proficiency is the Advanced-Low level. Students must also complete the Praxis II Content Knowledge Exam in their language prior to student teaching. (Please see the foreign language advisor.)*

Post Baccalaureate Certificate

Spanish Translation and Interpretation Post Baccalaureate Certificate

This Post-Baccalaureate Certificate will provide students with advanced training in Spanish translation and interpretation and will help them meet the increasing regional, national, and international demand for certified Spanish translators and interpreters. Students will study the theory, ethics, and practice of English-Spanish-English translation and interpretation and will develop into multilingual, interculturally competent professionals prepared to serve Utah and the world.

The Post-Baccalaureate Certificate is open to students who possess a BA or BS degree in any discipline, at least an advanced-mid level of proficiency in Spanish, and excellent command in English. Knowledge of a third language is desirable.

- **Grade Requirements:** Students must receive a grade of B or better in every course.
- **Credit Hour Requirement:** The program of study consists of 12 credit hours. This includes 9 credit hours of required courses and a minimum of 3 credit hours of electives.
- **Program Code:** 3126PBC
- **CIPC:** 160103

Advisement

Students are encouraged to meet with the designated faculty advisor at least annually for course and program advisement. Call 801-626-6183 for more information or to schedule an appointment.

Admission Requirements

Admission to the program requires a bachelor's degree in any field from an accredited institution (Spanish degree preferred).

Applicants must complete an online application. Criteria for acceptance into the program include:

- Bachelor's degree with a minimum GPA of 3.25 in the major (preferred).
- Submission of writing sample (4-8 pages).
- Transcripts from all institutions of higher education attended.
- Two letters of recommendation from educational or professional references.
- Interview with the program director for an assessment language interview.

Program Learning Outcomes

Upon the completion of the Post-Baccalaureate Certificate in Spanish Translation and Interpretation, students will:

- Identify, explain, and critically discuss theoretical and practical approaches to translation and interpretation, both as academic disciplines and as professional activities.
- Develop and enhance the linguistic, cultural, and technical skills necessary to effectively produce high-quality translations and interpretations in various professional settings.
- Demonstrate a deep understanding of the intercultural dimension of translation and interpretation and the ethical implications and responsibilities of professional translators and interpreters.
- Critically analyze and evaluate diverse technological tools and resources to successfully apply them to the practice of translation and interpretation.

Required Courses

Complete the following three (3) courses.

- SPAN 5750 - Advanced Healthcare Interpreting **Credits: (3)**
- WLC 5430 - Advanced Translation Technology **Credits: (3)**
- SPAN 5740 - Advanced Principles of Translation Theory and Practice **Credits: (3)**

Elective Courses

Choose at least one (1) of the following courses.

- MENG 6140 - Foundations of Professional and Technical Writing **Credits: (3)**
 - SPAN 5760 - Advanced Topics in Translation **Credits: (3)**
 - SPAN 5920 - Advanced Translation Workshop **Credits: (3)**
 - WLC 5860 - Advanced World Language Internship **Credits: (1-3)**
- Electives should be chosen in consultation with a faculty advisor.*

School of Performing Arts

Chair: Jessica Greenberg

Location: BC 331

Telephone: 801-626-6437

Professors: Karen Bruestle, Tracy Callahan, Carey Campbell, Francisco de Galvez, David Feller, Mark Henderson, Thomas Priest, Amanda Sowerby, Erik Stern, Viktor Uzur, Shi-Hwa Wang, Yu-Jane Yang, Catherine Zublin;

Associate Professors: Tamara Goldbogen, Jessica Greenberg, Daniel Jonas; **Assistant Professors:** Esther Ahn, Joseph Blake, Andrew Lewis, Cully Long; **Visiting Assistant Professor:** Kenneth Plain; **Instructors:** Samuel Bryson, Juan Carlos Claudio, Steven Henricks

The Department of Performing Arts at Weber State is based on five primary purposes: 1) to develop aesthetically aware and artistically discriminating citizens; 2) to provide opportunities for all students to participate in creative, artistic experiences and to encourage community members to participate in the performing arts; 3) to develop artistic competence and sensitivity; 4) to provide for career development in the arts through the preparation of teachers, performing artists, scholars, and technical specialists; and 5) to expose students and community to classic and contemporary works in all genres of the performing arts and to continue to provide the finest possible performances in the arts.

The department's degree programs prepare students for professional careers in teaching and performance as well as in technical specialties while providing the liberal arts background necessary for graduate study. In the department's Performing Arts Series, students and faculty participate in professionally produced dance, musical, and theatrical events.

Dance Area

The primary goals of the Dance area of the Department of Performing Arts are:

1. To develop aesthetically aware and artistically discriminating citizens;
2. To promote cultural understanding of ourselves and others through the study of dance;
3. To encourage appreciation of dance through critical thinking;
4. To engage the community in a range of dance experiences;
5. To foster an understanding of and engagement in the creative process through dance performance, improvisation, choreography, pedagogical studies, technology, and collaborative endeavors;
6. To provide the guidance, class work, and experience necessary to prepare teachers, performing artists, and scholars;
7. To prepare students for careers or advanced study that require creativity, collaboration, and an understanding of the human experience as explored in the study of dance;
8. To provide rigorous dance training.

Two majors are offered: 1) a Bachelor of Arts in Dance, with a focus on creativity in performance and choreography; and 2) a Bachelor of Arts or Bachelor of Science in Dance Education, with a focus on education and pedagogy. Dance majors follow a program based on growth beginning with foundational theory courses, technique courses appropriate to each dancer's ability, and a culminating senior project.

Dance Education majors follow a program based in the knowledge and understanding of dance education in relation to secondary education and/or studio teaching, focusing on pedagogy, choreography, history, and performance. The Dance Education major prepares students to be teachers of dance in the public sector, private sector, and non-profit environments. In addition, Education majors seeking secondary certification must satisfy all requirements for the Licensure Program as outlined by the Jerry and Vickie Moyes College of Education (including a minimum GPA of 3.0 for admission to the Education Program).

Two minors are offered: 1) Dance, with a focus on performance and choreography; and 2) Dance Teaching. Dance minors follow a program that provides for study in technique, creative and theoretical coursework. A minimum of eighteen (18) credit hours (GPA of 2.25 or better) must be completed in the Dance Area courses.

Dance Teaching minors must complete a minimum of eighteen (17-18) credit hours (GPA of 2.25 or better) from the Dance Area courses. This program is comprised of a dance teaching core (7-8 hours), dance history, technique in ballet and modern dance, additional dance forms and creative work. In addition, teaching minors seeking secondary certification must satisfy all requirements for the Licensure Program as outlined by the Jerry and Vickie Moyes College of Education (including a minimum GPA of 3.0 for admission to the Education Program). Dance teaching minors are strongly encouraged to select teaching majors in subject areas that are needed in Utah secondary schools.

Performance Opportunities

Orchesis Dance Theatre provides performance and production opportunities for qualified students who demonstrate technical abilities in dance. The company's activities include on-campus and dance festival concerts. Its repertoire consists of traditional and experimental modern dances, contemporary ballets, and theatrical and performance works choreographed/directed by dance faculty, students, and well-known artists. Auditions are required for performances sponsored by Orchesis. WSU Moving Company is the Dance Area's outreach program, which provides further performance, production and teaching opportunities. Significant dance works and lecture demonstrations are performed; teaching residencies are implemented in the public schools and for campus and community organizations.

School of Music

The School of Music is an accredited member of the National Association of Schools of Music. Programs leading to the Bachelor of Music degree are offered for students seeking emphases in performance, keyboard pedagogy, stringed instrument pedagogy, vocal pedagogy, or music education. Additional programs include the Bachelor of Arts in music, Bachelor of Integrated Studies, Minor in Music Performance, Music Studies Minor, Sound Production/Recording Minor, Certificate of Proficiency in Jazz Studies and Certificate of Proficiency in Music Entrepreneurship.

The primary goals of the School of Music are: 1) To develop individuals who are aware, artistically discriminating, and devoted to a lifelong association with music; 2) To provide opportunities for students and community members to participate in creative musical experiences; 3) To develop musical competence, sensitivity, and purpose; 4) To expose students and community to classic and contemporary musical works, and to provide the finest possible performances; 5) To provide for career development in music through the preparation of teachers, performers, and scholars.

Policies and Procedures

The following policies are subject to change. For current information, see the latest Performing Arts | School of Music student handbook and make an appointment with a music area advisor.

Freshman Registration and the Music Core

All freshman music majors and minors entering WSU as full-time students should register for the following courses: MUSC 1006, MUSC 1110, MUSC 1130, MUSC 1150, MUSC 1901, MUSC 1681 or MUSC 1682, and large ensemble. Piano Pedagogy and Piano Performance majors do not register for MUSC 1150.

General Policies and Performance Requirements

- A. All entering music majors and minors, including transfer students, must audition with the respective program faculty for admittance to that program.
- B. A \$445 Applied Music Fee is charged to music majors and minors for instrumental or vocal lessons. These lessons are 45 minutes in length and require attendance at a weekly master class. These lessons may be taken for one or two credit hours. There is also an option for two 45 minute lessons each week for two credit hours plus master class attendance and a research paper or project. The fee is \$890.
- C. A \$320 Applied Music Fee is charged to students registering as non-music majors or minors. These lessons are 30 minutes in length and may not be used as credit for music majors or minors in their primary performance area. A limited number of slots are available for students registering in this category.
- D. All music education, vocal, keyboard and string pedagogy majors should consult with the latest student handbook, and their major advisor.

Schedule for Performance Evaluations (Juries)

- A. Performance evaluations will be regularly conducted and scheduled:
 - 1. At the end of Fall and Spring semesters.
 - 2. By special request for evaluation during the year upon agreement of the student, the teacher and the committee. All special requests must be scheduled through the area head.
- B. All music majors and minors must take performance evaluations each semester. Performance evaluations are required until completion of the student's final recital as stipulated by the degree program.
- C. Students completing a junior or senior recital are excused from that performance area's performance evaluation the semester in which the recital is completed.

Procedures for Performance Evaluation (Juries)

- A. All incoming music majors and minors and all transfer students and current students who change their major or minor to music subsequent to their initial enrollment at Weber State University will enroll at the 1000 level of private instruction.
- B. A student may be placed in a higher competency level at the completion of any evaluation. A student will not be permitted to progress to the 3000 level until they have met with their major advisor. The advisor will review the student's graduation progress and determine whether it is in the student's best interest to move to the 3000 level.
- C. Student admittance to each competency level is granted only by general consent of the area faculty upon satisfactory completion of a performance level evaluation appropriate to that level.
- D. Refusal by the appropriate area faculty to allow admittance to the next level may be appealed by the student provided there is consent of the private teacher.
 - 1. This appeal should be made directly to the area head, who will in turn consult with the faculty regarding a repeat performance evaluation.
 - 2. Only one appeal will be accepted at each performance evaluation.
- E. More than three (3) semesters of study at any one competency level due to lack of improvement on the part of the student will be cause for a recommendation from the appropriate faculty that the student not continue as a music major or minor.
- F. Failure to attend proficiency evaluations will result in a grade of "E" being given for the private lesson during that semester.

Recital Performance

- A. All Bachelor of Music and Bachelor of Music Education students must participate in at least one general student recital or master class per semester. This should normally be a solo appearance, but this determination is left to the discretion of the applied music teacher.
- B. All music majors except those in the Bachelor of Arts and pedagogy programs, must present a half-hour formal junior recital upon reaching the 3000 competency level. All music performance minors must present a half-hour formal junior recital upon reaching the 3000 competency level. The student must register for MUSC 3991 during the semester the recital will be presented.
- C. All Bachelor of Music students must present a one-hour senior recital while at the 4000 competency level. The student must register for MUSC 4991 during the semester the recital will be presented.
- D. Repertoire for the senior recital must not contain music performed on the junior recital. Completion of a senior recital will exempt a student from further proficiency level evaluations.
- E. All students presenting a senior recital must perform that recital before a faculty review committee not less than two weeks prior to the recital date. The review committee will consist of the student's applied teacher, the appropriate area head, and one other music faculty member of the student's choice.
- F. The review committee will be present at the public performance of the senior recital and will recommend pass/fail for the recital.
- G. All students must complete a recital approval form for junior or senior recitals. The recital form must be completed and signed by the area head and applied teacher prior to scheduling any required faculty preview performance.
- H. Failure to complete a junior or senior recital in the semester in which the student is registered for the recital will result in a grade of "E" for the recital.

Recital/Concert Attendance

All music majors and minors must attend 24 music area recitals, concerts, and/or community concert events per year while enrolled in applied music at the 1000 and 2000 level. Attendance reports are required for two years and are maintained in the music office. To receive credit for graduation, students enroll in MUSC 1006 for their first two semesters attending 12 recitals or concerts each semester and MUSC 2006 for their third and fourth semesters attending 12 recital or concerts each semester.

Music Major Foreign Language Requirement

The Bachelor of Music degree requirement is for two semesters of foreign language chosen from French, German, Italian, and Spanish. The requirement may be satisfied by taking two semesters of the same language, or one semester each of two different languages. The Bachelor of Music Education degree with a Choral Emphasis requirement is one semester of foreign language chosen from French, German, Italian, and Spanish.

For the Bachelor of Arts in Music, please see Language Courses Required to fulfill the BA listed under the major requirements.

Bachelor of Integrated Studies

Students declaring an emphasis in music as one of their three BIS concentrations must abide by all guidelines and stipulations detailed in the BIS student handbook.

Courses taken in fulfillment of the music area emphasis must total a minimum of 18 credit hours and will be determined in consultation with the music BIS. These courses should directly and demonstratively contribute to the goals set forth by the student in his/her approved BIS application.

The following courses, however, are required for all music BIS students:

MUSC 1010 CA - Introduction to Music **(3)** *

MUSC 1110 - Music Theory I **(2)**

MUSC 1130 - Sight-Singing & Aural Skills I **(2)**

MUSC 1120 - Music Theory II **(2)**

MUSC 1140 - Sight-Singing & Aural Skills II **(2)**

Additionally, music BIS students must take at least one of the following:

MUSC 1030 CA - Introduction to Jazz **(3)** *

MUSC 1033 CA - Introduction to American Music **(3)** *

MUSC 1035 CA - History of Rock and Roll **(3)** *

MUSC 1040 CA - Music of World Cultures **(3)** *

MUSC 1043 HU - Music, the Arts & Civilizations **(3)** *

MUSC 1063 CA - Music in Religion **(3)** *

THEA 1043 CA - Introduction to American Musical Theatre **(3)** *

** Please note that according to the BIS student handbook, courses taken in completion of the university General Education requirements will not count toward a BIS emphasis. In other words, "double-dipping" is not allowed.*

School of Music Advisors

Bachelor of Music in Performance & Pedagogy Advisors

Keyboard Area: Dr. Yu-Jane Yang

Keyboard Area: Dr. Ralph Van der Beek

String Area: Dr. Shi-Hwa Wang

Vocal Area: Dr. Karen Bruestle

Winds & Percussion Area: Dr. Daniel Jonas

Bachelor of Integrated Studies Advisor

Dr. Carey Campbell

Bachelor of Arts Advisor

Dr. Carey Campbell

Bachelor of Music Education Advisors

Choral Area: Dr. Mark Henderson

Winds & Percussion Area: Dr. Thomas Priest

String Area: Dr. Thomas Priest

Keyboard Area: Dr. Thomas Priest

Music Minors Advisor

Dr. Viktor Uzur

Theatre Arts Area

The Theatre Arts area of the Department of Performing Arts provides scholarly, creative, collaborative and practical theatre experience for students.

The objectives of the program are to: 1) Encourage participation in and appreciation of theatre and drama; 2) Foster creativity and develop technical skills in acting, directing, costuming, scenic design, script writing and theatre management; 3) Prepare students for careers or professional schooling in those fields that require strong presentational skills, creative problem solving, effective collaboration, and an understanding of human experience.

Theatre students must complete a sequence of formal course work that includes University general education, core theatre courses, and focus or specialty courses. Formal course work is complemented by a sequence of experiential learning opportunities in the theatre. Students and faculty develop individualized programs of course work and practical experience, including a junior seminar, annual juries, portfolio preparation, various practica, and opportunities for individual theatre projects.

Study of theatre provides students with useful tools to contribute to and make positive changes in society. Theatre students learn about diverse historical eras, communities and technologies. Theatre challenges students to be creative and to translate that creativity into applied processes - to think precisely, speak confidently in public, work productively with others, visualize abstract concepts and represent those concepts concretely. Theatre skills are useful in a variety of professions including, but not limited to, business, government, law, journalism, and public relations.

Major Requirements

The department offers a Bachelor of Arts (BA) degree in Musical Theatre, Theatre Arts, and Theatre Arts Teaching. A minimum of 62 course units (2.0 or better GPA) or courses in the combined areas of Dance, Music, and Theatre are required to qualify for the Musical Theatre Major. A minimum of 45 course units (2.0 or better) of Theatre Arts courses must be completed to qualify for either the Theatre Arts or Theatre Arts Teaching programs.

Teaching majors must also satisfy all requirements for the Licensure Program as outlined by the Department of Teacher Education.

A \$350 Applied Music Fee is charged to Theatre Arts Area majors and minors enrolled in Individual Training in Stage Voice (THEA 4651). These lessons are 45 minutes in length. A limited number of slots are available for students registering for these lessons.

Performance Opportunities

Involvement in theatre productions is an important part of the Theatre program. The Weber State Theatre produces a full season of plays in the Austad, Allred and Eccles theatres of the state-of-the-art Val A. Browning Center for the Performing Arts. Theatre facilities include a variety of proscenium and flexible staging situations. Students are given first priority in all department productions.

The theatre season is offered by the Department of Performing Arts as part of the Performing Arts Series. Because the season is generously supported by the Associated Students of Weber State through student fees, students receive substantial discounts for performances.

In addition to performance opportunities at Weber State, theatre majors are encouraged to seek summer employment in stock or repertory companies relating to their interests.

Associate of Arts

Dance (AA)

An Associate of Arts with a Dance major will indicate that a student has completed all WSU AA degree requirements and the introductory classes required for the Bachelor of Arts in Dance. Students who have completed the AA degree may continue with intermediate and advanced coursework for the BA.

- **Grade Requirements:** A grade of "C" or better in all courses (a grade of "C-" is not acceptable).
- **Program Code:** 3045AA
- **CIPC:** 500301

Advisement

Dance majors are encouraged to meet with an advisor at least annually for course and program advisement.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for this major.

Degree Requirements

1. A minimum of 60 credit hours.
2. A minimum of 25 hours in residency (WSU courses).
3. At least a 2.0 (C) WSU grade point average (GPA).
4. Completion of WSU general education requirements.
The Associate of Arts Degree must include a world language or ASL (American Sign Language) requirement which may be met by one of the following:
 1. Documentation of a proficiency level of "Novice High" or better through an examination administered by the WSU World Languages & Cultures Department or through an examination by a recognized testing agency.
 2. Completion of WSU world language course 1020 with a grade of "C" or higher, or comparable transfer credit.
 3. Completion of any WSU world language course at a level beyond the first year with a grade of "C" or higher, or comparable transfer credit.
 4. Documentation of three years of the same language completed in high school with a minimum grade of "B".

5. Documentation of a minimum proficiency level in American Sign Language through an examination administered by the American Sign Language/Interpreting program at SLCC. The signer must "demonstrate proficiency in temporal aspect, spatial agreement and in describing things around her/him and the deaf culture."
6. Completion of ASL 1020 - Second Semester ASL with a grade of "C" or higher, or comparable transfer credit.

General Education

Refer to Degree Requirements of this catalog for Associate of Arts requirements. The following general education courses are required for the Dance (AA) Major: DANC 1010 CA/CC - Introduction to Dance **(3)** and NUTR 1020 LS SUS - Science and Application of Human Nutrition **(3)**.

Program Learning Outcomes

- Students will be introduced to dance technique and kinesiology principles in order to improve as dancers and performers
- Students will be introduced to the principles of dance theory and criticism in a variety of settings
- Students will begin to encounter the creative process in a variety of settings
- Students will begin to discover, express, and gain ownership of their own point of view about dance.

Dance Courses (19 credit hours)

Appropriate level technique courses in ballet and modern dance (initially to be determined by placement class) are required every semester of residence-2 courses in Ballet and 2 courses in Contemporary Modern (total of 8 credit hours).

- DANC 1100 - Ballet I **Credits: (2) 2**
- DANC 1200 - Contemporary/Modern I **Credits: (2) 2**
- DANC 1310 - Music for Dance **Credits: (2) 2**
- DANC 1500 - Jazz I **Credits: (2) 2**
- DANC 1580 - Rhythm Tap I **Credits: (2) 2**
- DANC 2250 - Alignment and Conditioning for Dance/Pilates **Credits: (1) 1**
- DANC 2410 - Improvisation **Credits: (2) 2**
- DANC 2470 - Ballet II **Credits: (2) 2**
- DANC 2490 - Contemporary/Modern II **Credits: (2) 2**
- DANC 2610 - Dance and Digital Technology **Credits: (2) 2**

Technical Theatre (AA)

An Associate of Arts with a Technical Theatre major will indicate that a student has completed all WSU AA degree requirements and the introductory classes required for the Bachelor of Arts in Theatre with the Design/Technology/Management track. Students who have completed the AA degree may continue with intermediate and advanced coursework for the BA.

- **Grade Requirements:** A grade of "C" or better in all courses (a grade of "C-" is not acceptable).
- **Program Code:** 3084AA
- **CIPC:** 500502

Advisement

Theatre majors are encouraged to meet with an advisor at least annually for course and program advisement.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for this major.

AA Degree Requirements

1. A minimum of 60 credit hours.
2. A minimum of 20 hours in residency (WSU courses).
3. At least a 2.0 (C) WSU grade point average (GPA).
4. Completion of WSU general education requirements.
The Associate of Arts Degree must include a world language or ASL (American Sign Language) requirement which may be met by one of the following:
 - a. Documentation of a proficiency level of "Novice High" or better through an examination administered by the WSU World Languages & Cultures Department or through an examination by a recognized testing agency.
 - b. Completion of WSU world language course 1020 with a grade of "C" or higher, or comparable transfer credit.
 - c. Completion of any WSU world language course at a level beyond the first year with a grade of "C" or higher, or comparable transfer credit.
 - d. Documentation of three years of the same language completed in high school with a minimum grade of "B".
 - e. Documentation of a minimum proficiency level in American Sign Language through an examination administered by the American Sign Language/Interpreting program at SLCC. The signer must "demonstrate proficiency in temporal aspect, spatial agreement and in describing things around her/him and the deaf culture."
 - f. Completion of WSU American Sign Language course 1020 with a grade of "C" or higher, or comparable transfer credit.

General Education

Refer to Degree Requirements of this catalog for Associate of Arts requirements. The following general education courses are required for the Technical Theatre Major: THEA 1013 CA - Introduction to Theatre **(3)** and COMM 1020 HU - Principles of Public Speaking **(3)**.

Program Learning Outcomes

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Technical Theatre Courses (23 credit hours)

Theatre Courses Required for an AA in Technical Theatre (15 credit hours)

- THEA 1063 - Theatre Foundations **Credits: (3)**
- THEA 1713 - Script Analysis **Credits: (3)**

Select a minimum of three of the following technical theatre classes (please note that some of these classes are prerequisites for UD classes, plan accordingly)

- THEA 1223 - Stage Makeup **Credits: (3)**
- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- THEA 2515 - Rendering and Modeling **Credits: (3)**
- THEA 2574 - Drafting for Theatre **Credits: (3)**
- THEA 2580 - Creative Computing for Theatre Design **Credits: (3)**
- THEA 2581 - Adobe Suite for Theatre Design **Credits: (3)**

Theatre Practicum (2 credit hours)

Select 2 credit hours from the following options

- THEA 4851 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4852 INT - Design/Tech Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4853 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4854 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4855 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4856 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4857 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4858 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4859 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit

Focus Area Electives (6 credit hours)

Select at least 6 credit hours from the following, see individual course descriptions for prerequisites.

- THEA 2203 - Costume Technology **Credits: (3)**
- THEA 3100 - Projection Design **Credits: (3)**
- THEA 3212 - Scenic Design **Credits: (3)**
- THEA 3222 - Lighting Design **Credits: (3)**
- THEA 3232 - Scenic Art and Painting **Credits: (3)**
- THEA 3243 - Costume History **Credits: (3)**

- THEA 3340 - Theatre Management **Credits: (3)**
- THEA 3500 - Sound Design **Credits: (3)**
- THEA 4120 - Collaboration in the Theatre **Credits: (3)**
- THEA 4203 - Costume Design **Credits: (3)**
- THEA 4890 INT - Cooperative Work Experience or Internship **Credits: (1-3)**
- THEA 3233 - Prop Design **Credits: (3)**
- THEA 2821 HU - Period Styles in Design **Credits: (3)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 1820 - The Art and Science of Recording I **Credits: (3)**
- MUSC 1821 - The Art and Science of Recording II **Credits: (3)**
- MUSC 4820 - Pro Tools 101 **Credits: (2)**
- MUSC 4823 - Pro Tools 110 **Credits: (2)**

Associate of Science

Sound Production/Recording (AS)

Sound Production/Recording is the art and science of capturing and editing music, sound, and dialog. The Associate of Science in Sound Production/Recording is a specialized two-year degree which offers students practical knowledge, training, and experience in a variety of production, recording, and performance applications.

In classes emphasizing hands-on learning with state-of-the-art equipment, students learn the skills needed to succeed as a music producer, recording technician, post-production designer, or other similar fields. Thus, students completing the degree will be well positioned to pursue a rewarding career in the vibrant and growing fields of recording, live sound, and music/post production.

Additionally, this Associate degree pairs well with a variety of majors, such as Music, Theatre, Film Studies, Communication, Creative Writing, Computer Science, and others, and serves as a valuable first degree for students continuing on to complete a Bachelor degree, as well as supporting students' own personal performance and production interests

- **Credit Hour Requirements:** The degree consists of a minimum of 37 credits of General Education classes and 25 hours of required sound technology courses.
- **Grade Requirements:** A grade of C or better (grades of C- are not acceptable) is required in all courses in the Sound Production/Recording program.
- **Program Code:** 3092AS
- **CIPC:** 150307

Advisement

Students are encouraged to meet with the academic advisor for the College of Arts & Humanities at least annually for course and program advisement. Email cahadvisor@weber.edu for more information or to schedule an appointment.

Students should also meet regularly with advisors in the Sound Production/Recording program as they progress through the requirements for their Associate of Science degree.

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). A brief informal interview is required for acceptance into the program.

General Education

Refer to Degree Requirements for Associate of Science requirements.

Sound Production and Recording Courses (25 Credits)

The following 12 courses are required:

It is recommended that courses be taken in roughly the order in which they are listed below. Check with your advisor in the Sound Production/Recording program for questions on best sequencing.

- MUSC 2820 - Pro Tools 101 **Credits: (2)**
- MUSC 2823 - Pro Tools 110 **Credits: (2)** *Pre-requisite: MUSC 2820*
- MUSC 1820 - The Art and Science of Recording I **Credits: (3)**
- MUSC 1821 - The Art and Science of Recording II **Credits: (3)**
- MUSC 1720 - Analog Audio **Credits: (3)**
- MUSC 1721 - Live Sound in the 21st Century **Credits: (3)**
- MUSC 1722 - History of Recording **Credits: (2)**

- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 1723 - Field Recording/Sound for Picture **Credits: (2)**
- MUSC 1724 - Studio Construction **Credits: (1)**
- MUSC 1725 - Alternative Digital Audio Workstations **Credits: (2)**
- MUSC 1726 - Creative Lab **Credits: (1)** *(May be repeated)*

Technical Theatre (AS)

An Associate of Science with a Technical Theatre major will indicate that a student has completed all WSU AS degree requirements and the introductory classes required for the Bachelor of Arts in Theatre within the Design/Technology/Management track. Students who have completed the AS degree may continue with intermediate and advanced coursework for the BA.

- **Grade Requirements:** A grade of "C" or better in all courses (a grade of "C-" is not acceptable).
- **Program Code:** 3084AS
- **CIPC:** 500502

Advisement

Theatre majors are encouraged to meet with an advisor at least annually for course and program advisement.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission or application requirements for this major.

Degree Requirements

1. A minimum of 60 credit hours.
2. A minimum of 20 hours in residency (WSU courses).
3. At least a 2.0 (C) WSU grade point average (GPA).
4. Completion of WSU general education requirements.

General Education

Refer to Degree Requirements of this catalog for Associate of Arts requirements. The following general education courses are required for the Technical Theatre Major: COMM 1020 HU - Principles of Public Speaking **(3)**.

Program Learning Outcomes

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Technical Theatre Courses (23 credit hours)

Theatre Courses Required for an AS in Technical Theatre (15 credit hours)

- THEA 1063 - Theatre Foundations **Credits: (3)**
- THEA 1713 - Script Analysis **Credits: (3)**

Select a minimum of three of the following technical theatre classes (please note that some of these classes are prerequisites for UD classes, plan accordingly)

- THEA 1223 - Stage Makeup **Credits: (3)**
- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- THEA 2515 - Rendering and Modeling **Credits: (3)**
- THEA 2574 - Drafting for Theatre **Credits: (3)**
- THEA 2580 - Creative Computing for Theatre Design **Credits: (3)**
- THEA 2581 - Adobe Suite for Theatre Design **Credits: (3)**

Theatre Practicum (2 credit hours)

Select 2 credit hours from the following options

- THEA 2851 - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit

- THEA 2852 - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 2853 - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 2854 - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 2855 - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 2856 - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 2857 - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 2858 - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 2859 - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4851 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4852 INT - Design/Tech Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4853 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4854 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4855 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4856 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4857 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4858 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit
- THEA 4859 INT - Design/Tech/Management Practicum **Credits: (1)** may be repeated for credit

Focus Area Electives (6 credit hours)

Select at least 6 credit hours from the following, see individual course descriptions for prerequisites.

- THEA 2203 - Costume Technology **Credits: (3)**
- THEA 2821 HU - Period Styles in Design **Credits: (3)**
- THEA 3100 - Projection Design **Credits: (3)**
- THEA 3212 - Scenic Design **Credits: (3)**
- THEA 3222 - Lighting Design **Credits: (3)**
- THEA 3232 - Scenic Art and Painting **Credits: (3)**
- THEA 3243 - Costume History **Credits: (3)**
- THEA 3340 - Theatre Management **Credits: (3)**
- THEA 3500 - Sound Design **Credits: (3)**
- THEA 4120 - Collaboration in the Theatre **Credits: (3)**
- THEA 4203 - Costume Design **Credits: (3)**
- THEA 4890 INT - Cooperative Work Experience or Internship **Credits: (1-3)**
- THEA 3233 - Prop Design **Credits: (3)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 1820 - The Art and Science of Recording I **Credits: (3)**
- MUSC 1821 - The Art and Science of Recording II **Credits: (3)**
- MUSC 4820 - Pro Tools 101 **Credits: (2)**
- MUSC 4823 - Pro Tools 110 **Credits: (2)**

Institutional Certificate

Jazz Studies Certificate of Proficiency

This program has been suspended pending formal discontinuance and is no longer accepting new students.

The Certificate of Proficiency in Jazz Studies is a course of study for music majors or minors that focuses on all aspects of the performance of jazz music. Students will learn improvisation, arranging, pedagogical practices, and performance practices. For more information on program requirements, please contact the School of Performing Arts.

- **Grade Requirements:** A minimum grade of "C" in all courses for the certificate and a minimum overall GPA of 2.0.
- **Credit Hour Requirements:** A minimum of 16 credits are required.
- **Program Code:** 3080CP
- **CIPC:** 50.0910

Complete the Following Courses (16 credits)

- MUSC 3801 - Jazz Improvisation I **Credits: (2)**
- MUSC 3802 - Jazz Improvisation II **Credits: (2)**
- MUSC 3803 - Jazz and Commercial Arranging **Credits: (2)**
- MUSC 3804 - Jazz Pedagogy **Credits: (2)**
- MUSC 3805 - Jazz Keyboard Skills **Credits: (2)**
- MUSC 1030 CA - Introduction to Jazz **Credits: (3)**

Minimum 2 semesters required:

- MUSC 1753 - Jazz Ensemble **Credits: (1)** or
- MUSC 3753 - Jazz Ensemble **Credits: (1)**

Minimum 2 semesters required:

- MUSC 1755 - Instrumental Chamber Ensemble **Credits: (1)** or
- MUSC 3755 - Instrumental Chamber Ensemble **Credits: (1)**

Music Entrepreneurship Certificate of Proficiency

This program has been suspended pending formal discontinuance and is no longer accepting new students.

The Certificate of Proficiency in Music Entrepreneurship prepares music students for the complex labor market and economy of the 21st Century. Courses in this program will teach students how to market themselves, manage their finances, start their own businesses (including teaching studios), and seek funding for their projects.

Grade Requirements: A minimum grade of "C" in all courses for the certificate and a minimum overall GPA of 2.0.

Credit Hour Requirements: A minimum of 18 credits are required.

Admission Requirements: Music major or minor.

Program: 3081CP

CIPC: 501003

Required Courses

- ACTG 2010 - Survey of Accounting I **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- ENTR 1002 - Startup Innovation **Credits: (3)**

- ENTR 2001 - Sales and Marketing: Scaling a Successful Business Model **Credits: (3)**
- MUSC 3701 - Music Entrepreneurship and You **Credits: (3)**
- MUSC 4701 - Grant Writing & Non-Profits **Credits: (3)**

Therapeutic Dance Certificate of Proficiency

The Certificate of Proficiency in Therapeutic Dance prepares students for employment as dance movement practitioners in adolescent residential centers, elderly care facilities, detention centers, and day programs for adults with disabilities (in long-term care or rehabilitation care facilities). Therapeutic Dance has been demonstrated to increase physical and mental health through stress reduction, social engagement, improved coordination, balance, flexibility, and creative expression.

- **Grade Requirements:** A minimum grade of "C" in all courses for the certificate and a minimum overall GPA of 2.0.
- **Credit Hour Requirements:** A minimum of 27 credits are required.
- **Program Code:** 3120CP
- **CIPC:** 51.2302

Program Learning Outcomes

- Demonstrate a basic understanding of physiology and biomechanical principles of dance.
- Demonstrate a baseline understanding of psychology and psychological theory.
- Complete minimum hour requirements at supervised practicum sites.
- Demonstrate and explain aspects of how dance can assist people of all ages and abilities through the experience of embodiment by employing a passion for creative movement in a therapeutic context.

Required Courses (27 credit hours)

- GERT 1010 SS - Introduction to Gerontology **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- HLTH 1030 SS - Healthy Lifestyles **Credits: (3)**
- DANC 1200 - Contemporary/Modern I **Credits: (2)**
- DANC 2300 - Dance Kinesiology **Credits: (3)**
- DANC 2350 - Dance for Aging Populations **Credits: (2)**
- DANC 2410 - Improvisation **Credits: (2)**
- PSY 2710 - Biopsychology **Credits: (3)**
- RHS 3505 - Standardized Patient Training **Credits: (3)**
- DANC 3640 INT - Elementary Dance Pedagogy **Credits: (3)**

Bachelor of Arts

Dance (BA)

The BA degree in Dance provides an awareness of the possibilities of dance: performance, choreography, community outreach and involvement, education, creative technology, social and cultural roles, and research/scholarly endeavors. The degree prepares enthusiastic and energetic graduates who will use their passion for the art form to guide their career interests and advanced study choices.

- **Language Requirement:** Option 1 or 2
- **Minor:** Not Required
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable) and an overall GPA of 2.50 or "C+." In addition, a grade of "B" or higher is in the 3000-level major course Contemporary Modern Dance.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation-a minimum of 60 of these must be Dance classes. A total of 40 upper division credit hours is required (courses numbered 3000 and above).
- **Program Code:** 3045BA
- **CIPC:** 500301

Advisement

Students should meet annually, if not more often, with the faculty advisor for course and program advisement. Email josephblake@weber.edu for more information or to schedule an appointment (also refer to the Department Advisor Referral List).

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). There are no special admission requirements for this major.

General Education

Refer to Degree Requirements of this catalog for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements. DANC 1010 CA/CC and NUTR 1020 LS SUS are prerequisites for required dance courses.

Program Learning Outcomes

- Technique/Performance - Students will apply dance technique and kinesiology principles to improve as dancers and performers.
- Theory/Criticism - Students will apply and communicate principles of dance theory and criticism in many settings.
- Creative Process - Students will engage in the evolving nature of the creative process in many settings.
- Meaning/Self-discovery - Students will discover, express and gain ownership of their own point of view about dance, to speak the language of dance

Course Requirements for BA Degree: 59 Credit Hours

Required Dance Forms (minumum of 22 credit hours)

- DANC 1100 - Ballet I **Credits: (2)**
- DANC 1200 - Contemporary/Modern I **Credits: (2)**
- DANC 1560 - African Dance and Culture I **Credits: (2)**
- DANC 1580 - Rhythm Tap I **Credits: (2)**
- DANC 2470 - Ballet II **Credits: (2)**
- DANC 2490 - Contemporary/Modern II **Credits: (2)**

- DANC 2500 - Jazz II **Credits: (2)**
- DANC 3450 - Special Topic: World Dance Experiences II **Credits: (2)**
- DANC 3490 - Contemporary/Modern III **Credits: (2)**
- DANC 3560 - African Dance and Culture II **Credits: (2)**

Creative Process and Performance (16 credit hours)

Note: The first three (3) courses must be taken in sequence.

- DANC 2410 - Improvisation **Credits: (2)**
- DANC 3500 - Choreographic Process **Credits: (3)**
- DANC 3520 INT - Choreography Practicum **Credits: (3)**
- DANC 3910 INT/CEL - Moving Company: Rehearsal & Development **Credits: (3)**
- DANC 3911 INT/CEL - Moving Company: Performance **Credits: (3)**
- DANC 4910 INT - Rehearsal and Performance **Credits: (1)** (take twice for a total of two credits)

Theory & Practice (16 credit hours)

- DANC 3015 - Dance History **Credits: (3)**
- DANC 1520 - Dance in World Cultures **Credits: (2)**
- DANC 2250 - Alignment and Conditioning for Dance/Pilates **Credits: (1)**
- DANC 2300 - Dance Kinesiology **Credits: (3)**
- DANC 2350 - Dance for Aging Populations **Credits: (2)**
- DANC 3320 INT - Secondary Dance Pedagogy **Credits: (3)** or
- DANC 3640 INT - Elementary Dance Pedagogy **Credits: (3)**
- DANC 4700 INT - Creative Synthesis in Dance **Credits: (3)**

Dance Production (7 credit hours)

- DANC 1310 - Music for Dance **Credits: (2)**
- *Choose one of the following below:*
- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- FILM 2200 CA - Fundamentals of Film **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- MUSC 3701 - Music Entrepreneurship and You **Credits: (3)**
- DANC 2610 - Dance and Digital Technology **Credits: (2)**

Language Courses Required to fulfill the BA

Refer to Degree Requirements in this catalog. Dance Majors must complete Option 1 - Foreign Language (12 credit hours of a foreign language, refer to the Foreign Language section of this catalog for additional information on obtaining foreign language credit) **OR** Option 2 - Foreign Language and Language Arts (**6 credit hours of a**

foreign language and 6 hours of language arts)--the required language arts course is: DANC 4800 - Individual Study Credits: (3) **taken 2 times for a total of (6) credit hours.**

Dance Education (BA)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

Dance Education Major K-12

The objective of this program is to help guide and prepare students for teaching dance in public school settings (grades K-12), private studios and non-profit organizations.

- **Program Prerequisites:** Students must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable) and an overall GPA of at least 2.75.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 56 of these are within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).
- **Program Code:** 3058BA or 3058BS
- **CIPC:** 131324

Based within the disciplinary core of the Dance program, the BA and BS Dance Education K-12 degree offerings help to guide and prepare students for teaching dance in public school settings (grades K-12), private studios, and/or non-profit environments. In addition to the core dance requirements, secondary licensure requirements are mandatory for all teaching degrees leading to eligibility for Utah State Board of Education licensure.

Advisement

Students must consult with the Dance Program advisor at least once each term. Email Joseph Blake or Amanda Sowerby for more information or to schedule an appointment. Students seeking secondary certification are encouraged to consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269). (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study. Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

General Education

Refer to General Requirements of this catalog for Bachelor of Science or Bachelor of Arts requirements. See also specific requirements for the BS or BA listed under the major course requirements.

Program Learning Outcomes

- **Technique/Performance** - Students will apply dance technique and kinesiology principles to improve as dancers and performers.

- Theory/Criticism - Students will apply and communicate principles of dance theory and criticism in many settings.
- Creative Process - Students will engage in the evolving nature of the creative process in many settings.
- Meaning/Self-discovery - Students will discover, express, and gain ownership of their own point of view about dance, to speak the language of dance.

Course Requirements for BS or BA Degree in Dance Education

Required Dance Forms (minimum of 18 credit hours)

- DANC 1100 - Ballet I **Credits: (2)**
- DANC 1200 - Contemporary/Modern I **Credits: (2)**
- DANC 1450 - Special Topic: World Dance Experiences I **Credits: (2)**
- DANC 1520 - Dance in World Cultures **Credits: (2)**
- DANC 1580 - Rhythm Tap I **Credits: (2)**
- DANC 2490 - Contemporary/Modern II **Credits: (2)**
- DANC 2500 - Jazz II **Credits: (2)**
- DANC 3490 - Contemporary/Modern III **Credits: (2)**
- DANC 3560 - African Dance and Culture II **Credits: (2)**

Creative Process and Performance (9 credit hours)

- DANC 2410 - Improvisation **Credits: (2)**
- DANC 3500 - Choreographic Process **Credits: (3)**
- DANC 3520 INT - Choreography Practicum **Credits: (3)**
- DANC 4910 INT - Rehearsal and Performance **Credits: (1)**

Dance Studies (10 credit hours)

- DANC 1010 CA/CC - Introduction to Dance **Credits: (3)**
- DANC 2300 - Dance Kinesiology **Credits: (3)**
- DANC 2250 - Alignment and Conditioning for Dance/Pilates **Credits: (1)**
- DANC 3015 - Dance History **Credits: (3)**

Teaching Methods (10 credit hours)

- DANC 3320 INT - Secondary Dance Pedagogy **Credits: (3)**
- EDUC 3430 - Creative Processes in the Elementary School **Credits: (3)**
- DANC 3640 INT - Elementary Dance Pedagogy **Credits: (3)**
- DANC 3860 INT - Field Experience **Credits: (1-3)**

Dance and Production (7 credit hours)

- DANC 1310 - Music for Dance **Credits: (2)**
- DANC 2610 - Dance and Digital Technology **Credits: (2)**

Choose one from the following below:

- THEA 2022 - Costume Fundamentals **Credits: (3)**

- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- FILM 2200 CA - Fundamentals of Film **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- MUSC 3701 - Music Entrepreneurship and You **Credits: (3)**

Language Courses Required to fulfill the BA in Dance Education

Refer to Degree Requirements in this catalog. Dance majors must complete Option 1 - Foreign Language (12 credit hours of a foreign language, refer to the Foreign Language section of this catalog for additional information on obtaining foreign language credit) **OR** Option 2 - Foreign Language and Language Arts **(6 credit hours of a foreign language and 6 hours of language arts)**--the required language arts course is: DANC 4800 - Individual Study Credits: (3) **taken 2 times for a total of (6) credit hours.**

Music (BA)

- **Program Prerequisite:** Audition required for admission to program.
- **Minor:** Not required.
- **Grade Requirement:** A grade of "C" or better in courses required for these majors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 49 credit hours is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 15 of these are required within the major.
- **Program Code:** 3037BA
- **CIPC:** 500901

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to School of Music Advisors.

Admission Requirements

Declare your program of study (see Enrollment Services and Information).

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

Refer to the Department of Performing Arts policies and procedures.

Program Learning Outcomes

- Employ writing and research skills to examine and communicate ideas about music.
- Demonstrate competency as performers through the preparation of repertoire and technical studies.
- Synthesize skills of performance, aural analysis, score analysis, technology, musicology, improvisation and composition.

School of Music Required Core Courses (29 credit hours)

- MUSC 1006 - Concert Attendance I **Credits: (0)** Students must take this course twice.
- MUSC 2006 - Concert Attendance II **Credits: (0)** Students must take this course twice.
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2120 - Music Theory IV **Credits: (2)**
- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- MUSC 2140 - Sight Singing & Aural Skills IV **Credits: (2)**
- MUSC 3205 - Music History I: Music before 1800 **Credits: (3)**
- MUSC 3206 - Music History II: Music after 1800 **Credits: (3)**
- MUSC 3208 - World Music **Credits: (3)**
- MUSC 3840 - Advanced Concepts in Music Theory **Credits: (2)**

Additional Courses for the BA Music

- MUSC 1150 - Class Piano I **Credits: (2)**
- MUSC 1160 - Class Piano II **Credits: (2)**
- MUSC 4830 - Directed Readings **Credits: (1-3)**
- MUSC 4900 - Senior Project--BA in Music **Credits: (3)**
- MUSC 3701 - Music Entrepreneurship and You **Credits: (3)**

A total of four classes in one-credit private instruction in appropriate area.

- MUSC 1681 - Private Instruction **Credits: (1)** (To be taken twice for credit)
- MUSC 2681 - Private Instruction **Credits: (1)** (To be taken twice for credit)

***A total of two classes in one-credit Large Ensemble:
(courses may be repeated for credit)***

- MUSC 1740 - Weber State Concert Choir **Credits: (1)**
- MUSC 3740 - Weber State Concert Choir **Credits: (1)**
- MUSC 1750 - Symphonic Band **Credits: (1-2)**
- MUSC 3750 - Symphonic Band **Credits: (1-2)**
- MUSC 1760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 3760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 1763 - Guitar Ensemble **Credits: (1)**
- MUSC 1726 - Creative Lab **Credits: (1)**
- MUSC 3763 - Guitar Ensemble **Credits: (1)**

An additional two classes in any ensemble, small or large.

(Courses may be repeated for credit, and may also include the large ensembles listed above).

- MUSC 1730 - Keyboard Ensemble **Credits: (1)**

- MUSC 1741 - Chamber Choir **Credits: (1)**
- MUSC 1743 - Vocal Chamber Ensemble **Credits: (1)**
- MUSC 1752 - Marching Band **Credits: (2)**
- MUSC 1753 - Jazz Ensemble **Credits: (1)**
- MUSC 1754 - Percussion Ensemble **Credits: (1)**
- MUSC 1755 - Instrumental Chamber Ensemble **Credits: (1)**
- MUSC 1756 - Pep Band **Credits: (1)**
- MUSC 1761 - Chamber Orchestra **Credits: (1)**
- MUSC 3730 - Keyboard Ensemble **Credits: (1)**
- MUSC 3741 - Chamber Choir **Credits: (1)**
- MUSC 3743 - Vocal Chamber Ensemble **Credits: (1)**
- MUSC 3752 - Marching Band **Credits: (2)**
- MUSC 3754 - Percussion Ensemble **Credits: (1)**
- MUSC 3755 - Instrumental Chamber Ensemble **Credits: (1)**
- MUSC 3756 - Pep Band **Credits: (1)**
- MUSC 3761 - Chamber Orchestra **Credits: (1)**

Music Electives (8 credits)

Music electives must have the MUSC designation and are in addition to the courses in the Music Core and Required Courses.

Free Electives (26 credits)

Language Courses Required to fulfill the BA

Six semester-hours of foreign language is required. This requirement may be satisfied by taking two semesters of the same language or one semester each of two different languages.

An additional six semester hours of foreign language or language arts is required.

Musical Theatre (BA)

- **Program Prerequisite:** Completion of the required pre-major core courses listed under the following Course Requirements with a grade of "C" or better and an audition are required for admission to this program.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable) in addition to an overall GPA of 2.00 or better.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; 68-69 of these are required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); a minimum of 19 of these is required within the major.
- **Program Code:** 3049BA with cohort MTPERF (Performance Track) or MTDIRECT (Music Direction Track)
- **CIPC:** 500509

Advisement

Students should meet annually with a faculty advisor for course and program advisement. Call 801-626-6437 for more information and referrals for an appointment.

Admission Requirements

An audition is required for admission to this program after completing the pre-major core courses. Auditions will be scheduled in spring semester each year.

General Education

Refer to General Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements. The following courses required for this major may also be applied to fill general education requirements: DANC 1010 CA/CC - Introduction to Dance (3), THEA 1033 CA - Introduction to Acting (3) and THEA 1043 CA - Introduction to American Musical Theatre (3).

Program Learning Outcomes

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Major Course Requirements for BA Degree

Language Courses Required to fulfill the BA

Refer to Degree Requirements in this catalog. Musical Theatre majors must complete Option 1 - Foreign Language (12 credit hours of a foreign language, *refer to the Foreign Language section of this catalog for additional information on obtaining foreign language credit*) **OR** Option 2 - Foreign Language and Language Arts (6 credit hours of a foreign language and 6 hours of language arts-the required language arts courses are: THEA 3343 - History & Literature of Musical Theatre and either THEA 3303 - History and Literature of Theatre I **(3)** or THEA 3313 - History and Literature of Theatre II **(3)**).

Required Courses for Musical Theatre, Performance Track (65 credit hours)

Dance (8 credit hours)

- THEA 3440 - Dance for Musical Theatre I **Credits: (2)**
- THEA 3441 - Dance for Musical Theatre II **Credits: (2)**

- THEA 4144 - Choreography for Musical Theatre **Credits: (2)**
Select one of the following:
- DANC 1100 - Ballet I **Credits: (2)**
- DANC 1200 - Contemporary/Modern I **Credits: (2)**
- DANC 1450 - Special Topic: World Dance Experiences I **Credits: (2)**
- DANC 1500 - Jazz I **Credits: (2)**
- DANC 1520 - Dance in World Cultures **Credits: (2)**

Musicianship (11 credit hours)

- THEA 1143 - Musical Theatre Musicianship I **Credits: (2)**
- THEA 3143 - Musical Theatre Musicianship II **Credits: (3)**
- THEA 4651 - Individual Training in Stage Voice **Credits: (1)** (repeated 6 times)

Theatre (37 credit hours)

The Theatre component includes 3 credit hours of Creative Arts General Education.

- THEA 1030 - Voice and Movement for the Actor **Credits: (3)**
- THEA 1043 CA - Introduction to American Musical Theatre **Credits: (3)**
- THEA 1063 - Theatre Foundations **Credits: (3)**
- THEA 1075 - Class Voice for Musical Theatre **Credits: (1)** (repeated twice)
- THEA 1220 - Acting I **Credits: (3)**
- THEA 1223 - Stage Makeup **Credits: (3)**
- THEA 1713 - Script Analysis **Credits: (3)**
- THEA 2033 - Acting II **Credits: (3)**
- THEA 2443 - Acting for Musical Theatre **Credits: (3)**
- THEA 3103 INT - Directing I **Credits: (3)**
- THEA 3343 - History & Literature of Musical Theatre **Credits: (3)**
- THEA 3651 - Musical Theatre Repertoire **Credits: (1)** (repeated twice)
- THEA 3443 - Scene Study for Musical Theatre **Credits: (3)**
- THEA 3991 - Junior Seminar **Credits: (1)**
- THEA 4143 - Directing for Musical Theatre **Credits: (3)**

Select one of the following Theatre History classes

- THEA 3303 - History and Literature of Theatre I **Credits: (3)**
- THEA 3313 - History and Literature of Theatre II **Credits: (3)**

Technical Theatre (6 credits)

Select two courses from the following courses.

- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- THEA 2203 - Costume Technology **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- THEA 2515 - Rendering and Modeling **Credits: (3)**

- THEA 2574 - Drafting for Theatre **Credits: (3)**
- THEA 2580 - Creative Computing for Theatre Design **Credits: (3)**
- THEA 2581 - Adobe Suite for Theatre Design **Credits: (3)**
- THEA 2821 HU - Period Styles in Design **Credits: (3)**

Theatre Design (3 credit hours)

Select one of the following Theatre Design classes, prerequisites may need to be met first.

- THEA 3100 - Projection Design **Credits: (3)**
- THEA 3212 - Scenic Design **Credits: (3)**
- THEA 3222 - Lighting Design **Credits: (3)**
- THEA 3233 - Prop Design **Credits: (3)**
- THEA 3500 - Sound Design **Credits: (3)**
- THEA 4203 - Costume Design **Credits: (3)**

Required Courses for Musical Theatre, Music Direction Track (57 credit hours)

Musicianship (24 credit hours)

- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- THEA 3143 - Musical Theatre Musicianship II **Credits: (3)**
- THEA 4250 - Music Direction Seminar **Credits: (1-3)**
- THEA 4652 - Individual Training in Music Direction **Credits: (1)** (repeated 8 times)

Theatre (24 credit hours)

- THEA 1030 - Voice and Movement for the Actor **Credits: (3)**
- THEA 1043 CA - Introduction to American Musical Theatre **Credits: (3)**
- THEA 1075 - Class Voice for Musical Theatre **Credits: (1)** (repeated twice)
- THEA 1220 - Acting I **Credits: (3)**
- THEA 1223 - Stage Makeup **Credits: (3)**
- THEA 1713 - Script Analysis **Credits: (3)**
- THEA 2443 - Acting for Musical Theatre **Credits: (3)**
- THEA 3343 - History & Literature of Musical Theatre **Credits: (3)**
- THEA 3651 - Musical Theatre Repertoire **Credits: (1)** (repeated twice)
- THEA 3991 - Junior Seminar **Credits: (1)**
- THEA 4143 - Directing for Musical Theatre **Credits: (3)**

Select one of the following Theatre History classes

- THEA 3303 - History and Literature of Theatre I **Credits: (3)**

- THEA 3313 - History and Literature of Theatre II **Credits: (3)**

Technical Theatre (6 credits)

Select two courses from the following courses.

- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- THEA 2203 - Costume Technology **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- THEA 2515 - Rendering and Modeling **Credits: (3)**
- THEA 2574 - Drafting for Theatre **Credits: (3)**
- THEA 2580 - Creative Computing for Theatre Design **Credits: (3)**
- THEA 2581 - Adobe Suite for Theatre Design **Credits: (3)**
- THEA 2821 HU - Period Styles in Design **Credits: (3)**

Theatre Design (3 credit hours)

Select one of the following Theatre Design classes, prerequisites may need to be met first.

- THEA 3100 - Projection Design **Credits: (3)**
- THEA 3212 - Scenic Design **Credits: (3)**
- THEA 3222 - Lighting Design **Credits: (3)**
- THEA 3233 - Prop Design **Credits: (3)**
- THEA 3500 - Sound Design **Credits: (3)**
- THEA 4203 - Costume Design **Credits: (3)**

Theatre Arts (BA)

Areas of Emphasis

Select one of the following areas of emphasis

- Theatre Arts (BA), Acting/Directing Emphasis
- Theatre Arts (BA), Design/Technical/Management Emphasis
- Theatre Arts (BA), Theatre Studies Emphasis

Program Learning Outcomes:

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Theatre Arts (BA), Acting/Directing Emphasis

Program Learning Outcomes:

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Theatre Arts (BA)

- **Program Prerequisite:** Not Required.
- **Minor:** Not Required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable) in addition to an overall GPA of 2.00 or higher.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 43-47 credit hours must be earned in Theatre Arts courses. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); a minimum of 19 of these is required within the major.
- **Program Code:** 3046BA with one of the following emphasis codes 3127 (Studies), 3106 (Acting/Directing), 3107 (Design/Technical/Management)
- **CIPC:** 500501

Advisement

Students should meet annually with a faculty advisor for course and program advisement. Call 801-626-6437 for more information and referrals for an appointment. The faculty advisor must approve courses taken in focus areas. (Also refer to the Department Advisor Referral List which includes email addresses for faculty advisors.)

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). No special admission or application requirements are needed for this program.

Language Courses Required to Fulfill the BA

Refer to Degree Requirements in this catalog. Theatre majors must complete Option 1 - Foreign Language (12 credit hours of a foreign language, refer to the Foreign Language section of this catalog for additional information on obtaining foreign language credit) **OR** Option 2 - Foreign Language and Language Arts (6 credit hours of a foreign language and 6 hours of language arts-the required language arts courses are: THEA 1033 CA - Introduction to Acting, and THEA 3313 - History and Literature of Theatre II).

Program Learning Outcomes

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Acting/Directing Emphasis Requirements

Required Courses (28 credit hours)

- THEA 1030 - Voice and Movement for the Actor **Credits: (3)**
- THEA 1063 - Theatre Foundations **Credits: (3)**
- THEA 1713 - Script Analysis **Credits: (3)**
- THEA 1220 - Acting I **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- THEA 3103 INT - Directing I **Credits: (3)**
- THEA 3303 - History and Literature of Theatre I **Credits: (3)**
- THEA 3313 - History and Literature of Theatre II **Credits: (3)**
- THEA 3991 - Junior Seminar **Credits: (1)**
- ENGL 4730 - Studies in Shakespeare **Credits: (3)**

Focus Area (6 credits)

Select 6 credits of the following courses.

- THEA 2033 - Acting II **Credits: (3)**
- THEA 3033 - Advanced Acting **Credits: (3)**
- THEA 3116 - Auditioning **Credits: (2)**
- THEA 4890 INT - Cooperative Work Experience or Internship **Credits: (1-3)**
- THEA 4230 - Performance Seminar **Credits: (1-3)**
- THEA 4103 INT - Directing II **Credits: (3)**
- THEA 4143 - Directing for Musical Theatre **Credits: (3)**
- COMM 3070 - Performance Studies **Credits: (3)**

Technical Theatre (12 Credit Hours)

Select four of the following technical theatre courses.

- THEA 1223 - Stage Makeup **Credits: (3)**
- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- THEA 2203 - Costume Technology **Credits: (3)**
- THEA 2574 - Drafting for Theatre **Credits: (3)**
- THEA 2580 - Creative Computing for Theatre Design **Credits: (3)**
- THEA 2581 - Adobe Suite for Theatre Design **Credits: (3)**

Theatre Design (3 credit hours)

Select one of the following theatre design courses.

- THEA 3212 - Scenic Design **Credits: (3)**
- THEA 3222 - Lighting Design **Credits: (3)**
- THEA 3233 - Prop Design **Credits: (3)**
- THEA 4203 - Costume Design **Credits: (3)**
- THEA 3500 - Sound Design **Credits: (3)**
- THEA 3100 - Projection Design **Credits: (3)**

Theatre Practicum (3 credit hours)

Select 3 credit hours from the following options. These courses may be repeated for credit.

- THEA 4851 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4852 INT - Design/Tech Management Practicum **Credits: (1)**
- THEA 4853 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4854 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4855 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4856 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4857 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4858 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4859 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4861 INT - Performance Practicum **Credits: (1)**
- THEA 4862 INT - Performance Practicum **Credits: (1)**
- THEA 4862 INT - Performance Practicum **Credits: (1)**
- THEA 4863 INT - Performance Practicum **Credits: (1)**
- THEA 4864 INT - Performance Practicum **Credits: (1)**
- THEA 4865 INT - Performance Practicum **Credits: (1)**
- THEA 4866 INT - Performance Practicum **Credits: (1)**
- THEA 4867 INT - Performance Practicum **Credits: (1)**
- THEA 4868 INT - Performance Practicum **Credits: (1)**
- THEA 4869 INT - Performance Practicum **Credits: (1)**

Theatre Arts (BA), Design/Technical/Management Emphasis

Program Learning Outcomes:

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Theatre Arts (BA)

- **Program Prerequisite:** Not Required.
- **Minor:** Not Required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable) in addition to an overall GPA of 2.00 or higher.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 43-47 credit hours must be earned in Theatre Arts courses. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); a minimum of 19 of these is required within the major.
- **Program Code:** 3046BA with one of the following emphasis codes 3127 (Studies), 3106 (Acting/Directing), 3107 (Design/Technical/Management)
- **CIPC:** 500501

Advisement

Students should meet annually with a faculty advisor for course and program advisement. Call 801-626-6437 for more information and referrals for an appointment. The faculty advisor must approve courses taken in focus areas. (Also refer to the Department Advisor Referral List which includes email addresses for faculty advisors.)

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). No special admission or application requirements are needed for this program.

Language Courses Required to Fulfill the BA

Refer to Degree Requirements in this catalog. Theatre majors must complete Option 1 - Foreign Language (12 credit hours of a foreign language, refer to the Foreign Language section of this catalog for additional information on obtaining foreign language credit) **OR** Option 2 - Foreign Language and Language Arts (6 credit hours of a foreign

language and 6 hours of language arts-the required language arts courses are: THEA 1033 CA - Introduction to Acting, and THEA 3313 - History and Literature of Theatre II).

Program Learning Outcomes

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Design/Technical/Management Emphasis Requirements (52-53 credit hours)

Required Courses (25 credit hours)

- THEA 1033 CA - Introduction to Acting **Credits: (3)** or
- THEA 1220 - Acting I **Credits: (3)**
- THEA 1030 - Voice and Movement for the Actor **Credits: (3)** or
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)**
- THEA 1063 - Theatre Foundations **Credits: (3)**
- THEA 1713 - Script Analysis **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- THEA 3303 - History and Literature of Theatre I **Credits: (3)**
- THEA 3313 - History and Literature of Theatre II **Credits: (3)**
- THEA 3991 - Junior Seminar **Credits: (1)**

Technical Theatre Courses (9 credit hours)

Select three of the following technical theatre courses.

Note: Some of these courses are pre-requisites for UD classes. Plan accordingly.

- THEA 1223 - Stage Makeup **Credits: (3)**
- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- THEA 2203 - Costume Technology **Credits: (3)**
- THEA 2515 - Rendering and Modeling **Credits: (3)**
- THEA 2574 - Drafting for Theatre **Credits: (3)**

- THEA 2580 - Creative Computing for Theatre Design **Credits: (3)**
- THEA 2581 - Adobe Suite for Theatre Design **Credits: (3)**
- THEA 2821 HU - Period Styles in Design **Credits: (3)**

Theatre Design (3 credit hours)

Select one of the following theatre design courses.

- THEA 3100 - Projection Design **Credits: (3)**
- THEA 3500 - Sound Design **Credits: (3)**
- THEA 3212 - Scenic Design **Credits: (3)**
- THEA 3233 - Prop Design **Credits: (3)**
- THEA 3222 - Lighting Design **Credits: (3)**
- THEA 4203 - Costume Design **Credits: (3)**

Design/Technical/Management Focus Area Requirements (9 credit hours)

Select at least 9 credit hours from the following courses to supplement your course of study. To propose another option, consult your academic advisor. Courses listed below as options for more than one requirement may be used to fulfill only one requirement.

- THEA 2203 - Costume Technology **Credits: (3)**
- THEA 2515 - Rendering and Modeling **Credits: (3)**
- THEA 2574 - Drafting for Theatre **Credits: (3)**
- THEA 2581 - Adobe Suite for Theatre Design **Credits: (3)**
- THEA 2821 HU - Period Styles in Design **Credits: (3)**
- THEA 3100 - Projection Design **Credits: (3)**
- THEA 3103 INT - Directing I **Credits: (3)**
- THEA 3203 - Costume Technology II **Credits: (3)**
- THEA 3212 - Scenic Design **Credits: (3)**
- THEA 3222 - Lighting Design **Credits: (3)**
- THEA 3232 - Scenic Art and Painting **Credits: (3)**
- THEA 3233 - Prop Design **Credits: (3)**
- THEA 3243 - Costume History **Credits: (3)**
- THEA 3343 - History & Literature of Musical Theatre **Credits: (3)**
- THEA 3350 - Marketing and Communication for the Arts **Credits: (3)**
- THEA 3500 - Sound Design **Credits: (3)**
- THEA 4120 - Collaboration in the Theatre **Credits: (3)**
- THEA 4203 - Costume Design **Credits: (3)**
- THEA 4220 - Design Seminar **Credits: (1-3)**
- THEA 4890 INT - Cooperative Work Experience or Internship **Credits: (1-3)**
- THEA 4900 INT - Senior Project **Credits: (1)**

***Additional classes from other departments include but are not limited to:
(See individual course descriptions for pre-requisites)***

- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)**
- ART 3120 - Figure Drawing **Credits: (3)**
- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 **Credits: (4)**

- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4)**
- ID 1020 - Presentation Techniques **Credits: (3)**
- ID 2010 SUS - Sustainability I: Textiles and Soft Materials **Credits: (3)**
- ID 3040 - Design Rendering **Credits: (2)**
- ID 2820 - Historical Interiors **Credits: (3)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 1820 - The Art and Science of Recording I **Credits: (3)**
- MUSC 1821 - The Art and Science of Recording II **Credits: (3)**
- MUSC 4820 - Pro Tools 101 **Credits: (2)**
- MUSC 4823 - Pro Tools 110 **Credits: (2)**
- WEB 2200 - Image Editing **Credits: (3)**
- WEB 2300 - Video Editing **Credits: (3)**

Theatre Practicum (3 credit hours)

Select 3 credit hours from the following options. These courses may be repeated for credit.

- THEA 4851 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4852 INT - Design/Tech Management Practicum **Credits: (1)**
- THEA 4853 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4854 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4855 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4856 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4857 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4858 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4859 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4861 INT - Performance Practicum **Credits: (1)**
- THEA 4862 INT - Performance Practicum **Credits: (1)**
- THEA 4862 INT - Performance Practicum **Credits: (1)**
- THEA 4863 INT - Performance Practicum **Credits: (1)**
- THEA 4864 INT - Performance Practicum **Credits: (1)**
- THEA 4865 INT - Performance Practicum **Credits: (1)**
- THEA 4866 INT - Performance Practicum **Credits: (1)**
- THEA 4867 INT - Performance Practicum **Credits: (1)**
- THEA 4868 INT - Performance Practicum **Credits: (1)**
- THEA 4869 INT - Performance Practicum **Credits: (1)**

Required General Education Courses (3-4 credit hours)

The following general education courses are required for the Theatre Major:

- THEA 2821 HU - Period Styles in Design **Credits: (3)** or
- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4)**

Theatre Arts (BA), Theatre Studies Emphasis

Theatre Arts (BA)

- **Program Prerequisite:** Not Required.
- **Minor:** Not Required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable) in addition to an overall GPA of 2.00 or higher.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 43-47 credit hours must be earned in Theatre Arts courses. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); a minimum of 19 of these is required within the major.
- **Program Code:** 3046BA with one of the following emphasis codes 3127 (Studies), 3106 (Acting/Directing), 3107 (Design/Technical/Management)
- **CIPC:** 500501

Advisement

Students should meet annually with a faculty advisor for course and program advisement. Call 801-626-6437 for more information and referrals for an appointment. The faculty advisor must approve courses taken in focus areas. (Also refer to the Department Advisor Referral List which includes email addresses for faculty advisors.)

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). No special admission or application requirements are needed for this program.

Language Courses Required to Fulfill the BA

Refer to Degree Requirements in this catalog. Theatre majors must complete Option 1 - Foreign Language (12 credit hours of a foreign language, refer to the Foreign Language section of this catalog for additional information on obtaining foreign language credit) **OR** Option 2 - Foreign Language and Language Arts (6 credit hours of a foreign language and 6 hours of language arts-the required language arts courses are: THEA 1033 CA - Introduction to Acting, and THEA 3313 - History and Literature of Theatre II).

Program Learning Outcomes

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Theatre Arts Studies Emphasis Requirements

Required Courses (23 credit hours)

- THEA 1063 - Theatre Foundations **Credits: (3)**
- THEA 1713 - Script Analysis **Credits: (3)**
- THEA 2330 - Dramaturgy and Criticism **Credits: (3)**
- THEA 3103 INT - Directing I **Credits: (3)**
- THEA 3303 - History and Literature of Theatre I **Credits: (3)**
- THEA 3313 - History and Literature of Theatre II **Credits: (3)**
- THEA 3991 - Junior Seminar **Credits: (1)**
- ENGL 4730 - Studies in Shakespeare **Credits: (3)**
- THEA 4900 INT - Senior Project **Credits: (1)**

Select 21 credits from the following courses (21 credit hours)

Note: Pre-requisites may need to be met first.

- THEA 1223 - Stage Makeup **Credits: (3)**
- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- THEA 2203 - Costume Technology **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- THEA 2515 - Rendering and Modeling **Credits: (3)**
- THEA 2574 - Drafting for Theatre **Credits: (3)**
- THEA 2580 - Creative Computing for Theatre Design **Credits: (3)**
- THEA 2581 - Adobe Suite for Theatre Design **Credits: (3)**
- THEA 2821 HU - Period Styles in Design **Credits: (3)**
- THEA 3203 - Costume Technology II **Credits: (3)**
- THEA 3343 - History & Literature of Musical Theatre **Credits: (3)**
- THEA 3505 - Playwriting **Credits: (3)**
- THEA 4103 INT - Directing II **Credits: (3)**
- THEA 4120 - Collaboration in the Theatre **Credits: (3)**
- THEA 4230 - Performance Seminar **Credits: (1-3)**
- THEA 4270 - Dramatic Theory and Analysis **Credits: (3)**
- THEA 4860 - Advanced Playwriting **Credits: (3)**
- THEA 4890 INT - Cooperative Work Experience or Internship **Credits: (1-3)**
- COMM 3070 - Performance Studies **Credits: (3)**

Theatre Design (3 credit hours)

Select one of the following theatre design courses.

- THEA 3100 - Projection Design **Credits: (3)**
- THEA 3212 - Scenic Design **Credits: (3)**
- THEA 3222 - Lighting Design **Credits: (3)**
- THEA 3233 - Prop Design **Credits: (3)**
- THEA 3500 - Sound Design **Credits: (3)**
- THEA 4203 - Costume Design **Credits: (3)**

Theatre Practicum (3 credit hours)

Select 3 credit hours from the following options. These courses may be repeated for credit.

- THEA 4851 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4852 INT - Design/Tech Management Practicum **Credits: (1)**
- THEA 4853 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4854 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4855 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4856 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4857 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4858 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4859 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4861 INT - Performance Practicum **Credits: (1)**
- THEA 4862 INT - Performance Practicum **Credits: (1)**
- THEA 4863 INT - Performance Practicum **Credits: (1)**
- THEA 4864 INT - Performance Practicum **Credits: (1)**
- THEA 4865 INT - Performance Practicum **Credits: (1)**
- THEA 4866 INT - Performance Practicum **Credits: (1)**
- THEA 4867 INT - Performance Practicum **Credits: (1)**
- THEA 4868 INT - Performance Practicum **Credits: (1)**
- THEA 4869 INT - Performance Practicum **Credits: (1)**

Theatre Arts Teaching (BA)

- **Program Prerequisite:** Not Required.
- **Minor:** Required
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable) in addition to an overall GPA of 2.75 or higher.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 50 credit hours must be earned in Theatre Arts courses. A total of 40 upper division credit hours is required (courses numbered 3000 and above); a minimum of 19 of these is required within the major. 24 Credits of Education Department Classes
- **Program Code:** Theatre Arts Teaching (3047BA)
- **CIPC:** Theatre Arts Teaching (131324)

Advisement

Students should meet annually with a faculty advisor for course and program advisement. Call 801-626-6437 for more information and referrals for an appointment. The faculty advisor must approve courses taken in focus areas. (Also refer to the Department Advisor Referral List which includes email addresses for faculty advisors.)

Use Grad MAPs to plan your degree

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree Requirements of this catalog for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

Program Learning Outcomes

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Major Course Requirements for BA Degree

50 Credit Hours (exclusive of required general education courses)

Theatre Courses Required (52 credit hours)

- THEA 1030 - Voice and Movement for the Actor **Credits: (3)**
- THEA 1063 - Theatre Foundations **Credits: (3)**
- THEA 1220 - Acting I **Credits: (3)**
- THEA 1223 - Stage Makeup **Credits: (3)**
- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 1713 - Script Analysis **Credits: (3)**
- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- THEA 2330 - Dramaturgy and Criticism **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- THEA 2713 INT - Teaching Theatre in the Secondary School **Credits: (3)**
- THEA 3103 INT - Directing I **Credits: (3)**
- THEA 3303 - History and Literature of Theatre I **Credits: (3)**
- THEA 3313 - History and Literature of Theatre II **Credits: (3)**
- THEA 3505 - Playwriting **Credits: (3)**
- THEA 3991 - Junior Seminar **Credits: (1)**
- THEA 4143 - Directing for Musical Theatre **Credits: (3)**
- ENGL 4730 - Studies in Shakespeare **Credits: (3)**

Theatre Design (3 credit hours)

Select one of the following theatre design classes

- THEA 3100 - Projection Design **Credits: (3)**

- THEA 3212 - Scenic Design **Credits: (3)**
- THEA 3222 - Lighting Design **Credits: (3)**
- THEA 3233 - Prop Design **Credits: (3)**
- THEA 3500 - Sound Design **Credits: (3)**
- THEA 4203 - Costume Design **Credits: (3)**

Theatre Practicum (3 credit hours)

Select 3 credit hours from the following options, may be repeated for credit

- THEA 4851 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4852 INT - Design/Tech Management Practicum **Credits: (1)**
- THEA 4853 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4854 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4855 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4856 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4857 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4858 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4859 INT - Design/Tech/Management Practicum **Credits: (1)**
- THEA 4861 INT - Performance Practicum **Credits: (1)**
- THEA 4862 INT - Performance Practicum **Credits: (1)**
- THEA 4863 INT - Performance Practicum **Credits: (1)**
- THEA 4864 INT - Performance Practicum **Credits: (1)**
- THEA 4865 INT - Performance Practicum **Credits: (1)**
- THEA 4866 INT - Performance Practicum **Credits: (1)**
- THEA 4867 INT - Performance Practicum **Credits: (1)**
- THEA 4868 INT - Performance Practicum **Credits: (1)**
- THEA 4869 INT - Performance Practicum **Credits: (1)**

General Education Courses Required (3 credit hours)

The following general education courses are required for the Theatre Major:

- THEA 1043 CA - Introduction to American Musical Theatre **Credits: (3)**

Language Courses Required to fulfill the BA

Refer to Degree Requirements in this catalog. Theatre majors must complete Option 1 - Foreign Language (12 credit hours of a foreign language, *refer to the Foreign Language section of this catalog for additional information on obtaining foreign language credit*) **OR** Option 2 - Foreign Language and Language Arts (6 credit hours of a foreign language and 6 hours of language arts-the required language arts courses are: THEA 3303 - History and Literature of Theatre I, and THEA 3313 - History and Literature of Theatre II).

Note:

Theatre teaching majors must also satisfy the Teacher Education admissions and licensure requirements.

Bachelor of Music

Music (BM)

Music (BM)

- **Program Prerequisite:** Audition required for admission to program.
- **Minor:** Not required.
- **Grade Requirement:** A grade of "C" or better in courses required for these majors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 52 credit hours is required within the major for the Bachelor of Music in Performance and a minimum of 58 credit hours is required within the major for the Bachelor of Music in Keyboard Pedagogy, Stringed Instrument Pedagogy, or Vocal Pedagogy. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); 18-28 of these are required within the major.
- **Program Code: Music (3122BM)** with one of the following emphases: **Keyboard Performance** (3097), **Vocal Performance** (3098), **Instrumental Performance** (3099), **Keyboard Pedagogy** (3100), **Stringed Instrument Pedagogy** (3101), **Vocal Pedagogy** (3102)
- **CIPC: Music** (500903), **Keyboard Performance** (500903), **Vocal Performance** (500903), **Instrumental Performance** (500903), **Keyboard Pedagogy** (500912), **Stringed Instrument Pedagogy** (500912), **Vocal Pedagogy** (500912)

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to School of Performing Arts.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). All students in these Bachelor of Music programs must audition with the appropriate area head prior to admission to the program.

General Education

Refer to Degree Requirements for Bachelor of Music requirements.

Program Learning Outcomes

- Employ writing and research skills to examine and communicate ideas about music.
- Demonstrate competency as performers through the preparation of repertoire and technical studies.
- Synthesize skills of performance, aural analysis, score analysis, technology, musicology, improvisation and composition.

School of Music Policies and Procedures

Refer to the School of Music Policies and Procedures in this catalog.

School of Music Required Core Courses (29 credit hours)

- MUSC 1006 - Concert Attendance I **Credits: (0)** Students must take this course twice.

- MUSC 2006 - Concert Attendance II **Credits: (0)** Students must take this course twice.
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2120 - Music Theory IV **Credits: (2)**
- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- MUSC 2140 - Sight Singing & Aural Skills IV **Credits: (2)**
- MUSC 3205 - Music History I: Music before 1800 **Credits: (3)**
- MUSC 3206 - Music History II: Music after 1800 **Credits: (3)**
- MUSC 3208 - World Music **Credits: (3)**
- MUSC 3840 - Advanced Concepts in Music Theory **Credits: (2)**

Areas of Emphasis

Select one of the following areas of emphasis:

- Music (BM), Instrumental Performance Emphasis
- Music (BM), Keyboard Pedagogy Emphasis
- Music (BM), Keyboard Performance Emphasis
- Music (BM), Stringed Instrument Pedagogy Emphasis
- Music (BM), Vocal Pedagogy Emphasis
- Music (BM), Vocal Performance Emphasis

Music (BM), Instrumental Performance Emphasis

Music (BM)

- **Program Prerequisite:** Audition required for admission to program.
- **Minor:** Not required.
- **Grade Requirement:** A grade of "C" or better in courses required for these majors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 52 credit hours is required within the major for the Bachelor of Music in Performance and a minimum of 58 credit hours is required within the major for the Bachelor of Music in Keyboard Pedagogy, Stringed Instrument Pedagogy, or Vocal Pedagogy. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); 18-28 of these are required within the major.
- **Program Code: Music (3122BM)** with one of the following emphases: **Keyboard Performance** (3097), **Vocal Performance** (3098), **Instrumental Performance** (3099), **Keyboard Pedagogy** (3100), **Stringed Instrument Pedagogy** (3101), **Vocal Pedagogy** (3102)
- **CIPC: Music** (500903), **Keyboard Performance** (500903), **Vocal Performance** (500903), **Instrumental Performance** (500903), **Keyboard Pedagogy** (500912), **Stringed Instrument Pedagogy** (500912), **Vocal Pedagogy** (500912)

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to School of Performing Arts.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). All students in these Bachelor of Music programs must audition with the appropriate area head prior to admission to the program.

General Education

Refer to Degree Requirements for Bachelor of Music requirements.

Program Learning Outcomes

- Employ writing and research skills to examine and communicate ideas about music.
- Demonstrate competency as performers through the preparation of repertoire and technical studies.
- Synthesize skills of performance, aural analysis, score analysis, technology, musicology, improvisation and composition.

School of Music Policies and Procedures

Refer to the School of Music Policies and Procedures in this catalog.

School of Music Required Core Courses (29 credit hours)

- MUSC 1006 - Concert Attendance I **Credits: (0)** Students must take this course twice.
- MUSC 2006 - Concert Attendance II **Credits: (0)** Students must take this course twice.
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2120 - Music Theory IV **Credits: (2)**
- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- MUSC 2140 - Sight Singing & Aural Skills IV **Credits: (2)**
- MUSC 3205 - Music History I: Music before 1800 **Credits: (3)**
- MUSC 3206 - Music History II: Music after 1800 **Credits: (3)**
- MUSC 3208 - World Music **Credits: (3)**
- MUSC 3840 - Advanced Concepts in Music Theory **Credits: (2)**

Additional Courses Required (41-46 credit hours)

- MUSC 1150 - Class Piano I **Credits: (2)**

- MUSC 1160 - Class Piano II **Credits: (2)**
- MUSC 3822 - Instrumental Conducting I **Credits: (2)**
- MUSC 3991 - Junior Recital **Credits: (0)**
- MUSC 4991 - Senior Recital **Credits: (0)**
- MUSC 3701 - Music Entrepreneurship and You **Credits: (3)**

Choose courses from the following group that are most closely related to the student's major performance area:

- MUSC 2821 - Percussion Methods **Credits: (2)** or
- MUSC 2841 - Brass Methods **Credits: (2)** or
- MUSC 2851 - Woodwind Methods **Credits: (2)** or
- MUSC 2871 - String Methods **Credits: (2)** and
- MUSC 3851 - Stringed Instrument Pedagogy I **Credits: (2)** and
- MUSC 3852 - Stringed Instrument Pedagogy II **Credits: (2)**
- MUSC 4771 - Stringed Instrument Literature I **Credits: (2)** and
- MUSC 4772 - Stringed Instrument Literature II **Credits: (2)**
or
- MUSC 3202 - Winds/Percussion Literature **Credits: (2)**

Applied Lessons (8 credit hours)

Minimum of 8 classes required. Courses may be repeated for credit.

- MUSC 1681 - Private Instruction **Credits: (1)**
- MUSC 2681 - Private Instruction **Credits: (1)**
- MUSC 3681 - Private Instruction **Credits: (1)**
- MUSC 4681 - Private Instruction **Credits: (1)**

Large Ensemble (16 credit hours)

Minimum of 8 classes required. Courses may be repeated for credit.

- MUSC 1740 - Weber State Concert Choir **Credits: (1)**
- MUSC 3740 - Weber State Concert Choir **Credits: (1)**
- MUSC 1750 - Symphonic Band **Credits: (1-2)**
- MUSC 3750 - Symphonic Band **Credits: (1-2)**
- MUSC 1760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 3760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 1763 - Guitar Ensemble **Credits: (1)**
- MUSC 3763 - Guitar Ensemble **Credits: (1)**

Chamber Ensembles (4 credit hours)

Minimum of 4 classes required. Courses may be repeated for credit.

- MUSC 1755 - Instrumental Chamber Ensemble **Credits: (1)**
- MUSC 3755 - Instrumental Chamber Ensemble **Credits: (1)**

Music (BM), Keyboard Pedagogy Emphasis

Music (BM)

- **Program Prerequisite:** Audition required for admission to program.
- **Minor:** Not required.
- **Grade Requirement:** A grade of "C" or better in courses required for these majors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 52 credit hours is required within the major for the Bachelor of Music in Performance and a minimum of 58 credit hours is required within the major for the Bachelor of Music in Keyboard Pedagogy, Stringed Instrument Pedagogy, or Vocal Pedagogy. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); 18-28 of these are required within the major.
- **Program Code: Music (3122BM)** with one of the following emphases: **Keyboard Performance** (3097), **Vocal Performance** (3098), **Instrumental Performance** (3099), **Keyboard Pedagogy** (3100), **Stringed Instrument Pedagogy** (3101), **Vocal Pedagogy** (3102)
- **CIPC: Music** (500903), **Keyboard Performance** (500903), **Vocal Performance** (500903), **Instrumental Performance** (500903), **Keyboard Pedagogy** (500912), **Stringed Instrument Pedagogy** (500912), **Vocal Pedagogy** (500912)

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to School of Performing Arts.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). All students in these Bachelor of Music programs must audition with the appropriate area head prior to admission to the program.

General Education

Refer to Degree Requirements for Bachelor of Music requirements.

Program Learning Outcomes

- Employ writing and research skills to examine and communicate ideas about music.
- Demonstrate competency as performers through the preparation of repertoire and technical studies.
- Synthesize skills of performance, aural analysis, score analysis, technology, musicology, improvisation and composition.

School of Music Policies and Procedures

Refer to the School of Music Policies and Procedures in this catalog.

School of Music Required Core Courses (29 credit hours)

- MUSC 1006 - Concert Attendance I **Credits: (0)** Students must take this course twice.

- MUSC 2006 - Concert Attendance II **Credits: (0)** Students must take this course twice.
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2120 - Music Theory IV **Credits: (2)**
- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- MUSC 2140 - Sight Singing & Aural Skills IV **Credits: (2)**
- MUSC 3205 - Music History I: Music before 1800 **Credits: (3)**
- MUSC 3206 - Music History II: Music after 1800 **Credits: (3)**
- MUSC 3208 - World Music **Credits: (3)**
- MUSC 3840 - Advanced Concepts in Music Theory **Credits: (2)**

Additional Required Music Courses (48-51 credit hours)

- MUSC 2170 - Functional Piano Skills for Piano Majors/Minors **Credits: (2)**
- MUSC 2321 - The Principles of Collaborative Piano I **Credits: (1)**
- MUSC 2331 - The Principles of Collaborative Piano II **Credits: (1)**
- MUSC 3302 - Keyboard Literature I **Credits: (2)**
- MUSC 3312 - Keyboard Literature II **Credits: (2)**
- MUSC 3701 - Music Entrepreneurship and You **Credits: (3)**
- MUSC 3872 - Choral Conducting I **Credits: (2)** or
- MUSC 3822 - Instrumental Conducting I **Credits: (2)**
- MUSC 4302 - Keyboard Pedagogy I **Credits: (2)**
- MUSC 4312 - Keyboard Pedagogy II **Credits: (2)**
- MUSC 4322 - Keyboard Pedagogy III **Credits: (2)**
- MUSC 4332 - Keyboard Pedagogy IV **Credits: (2)**
- MUSC 4860 INT - Internship in Music **Credits: (1-3)** (to be repeated twice for credit)
- MUSC 4991 - Senior Recital **Credits: (0)**

Large Ensemble (2 credit hours)

Choose two courses from the following to be taken over two semesters:

- MUSC 1740 - Weber State Concert Choir **Credits: (1)**
- MUSC 1750 - Symphonic Band **Credits: (1-2)**
- MUSC 1760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 3740 - Weber State Concert Choir **Credits: (1)**
- MUSC 3750 - Symphonic Band **Credits: (1-2)**
- MUSC 3760 - Weber State Symphony Orchestra **Credits: (1-2)**

Applied Lessons (8 credit hours)

Minimum of 8 classes required. Courses may be repeated for credit.

- MUSC 1681 - Private Instruction **Credits: (1)**
- MUSC 2681 - Private Instruction **Credits: (1)**
- MUSC 3681 - Private Instruction **Credits: (1)**
- MUSC 4681 - Private Instruction **Credits: (1)**

Other Required Support Courses (10 credit hours)

- THEA 1033 CA - Introduction to Acting **Credits: (3)**
- FIN 1010 - Personal Finance **Credits: (3)**
- HLTH 2400 - Mind/Body Wellness **Credits: (3)**
- DANC 1200 - Contemporary/Modern I **Credits: (2)** or
- DANC 1100 - Ballet I **Credits: (2)**

Elective Courses (6 credit hours)

Choose 6 credits from the following:

- 1 Foreign Language Course
- MUSC 1755 - Instrumental Chamber Ensemble **Credits: (1)** or (may be repeated twice for credit) OR
- MUSC 3755 - Instrumental Chamber Ensemble **Credits: (1)** (may be repeated twice for credit)
- ENTR 1002 - Startup Innovation **Credits: (3)**
- MUSC 1753 - Jazz Ensemble **Credits: (1)** (may be repeated twice for credit)
- MUSC 1601 - Private Instruction **Credits: (1)** in Jazz Piano (may be repeated twice for credit) OR
- MUSC 3601 - Private Instruction **Credits: (1)** in Jazz Piano (may be repeated twice for credit)

One of the following courses may be used toward the 6 elective credits:

- MUSC 4820 - Pro Tools 101 **Credits: (2)**
- MUSC 1820 - The Art and Science of Recording I **Credits: (3)**
- MUSC 1720 - Analog Audio **Credits: (3)**
- MUSC 1721 - Live Sound in the 21st Century **Credits: (3)**
- MUSC 1722 - History of Recording **Credits: (2)**

Music (BM), Keyboard Performance Emphasis

Music (BM)

- **Program Prerequisite:** Audition required for admission to program.
- **Minor:** Not required.
- **Grade Requirement:** A grade of "C" or better in courses required for these majors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 52 credit hours is required within the major for the Bachelor of Music in Performance and a minimum of 58 credit hours is required within the major for the Bachelor of Music in Keyboard Pedagogy, Stringed

Instrument Pedagogy, or Vocal Pedagogy. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); 18-28 of these are required within the major.

- **Program Code: Music (3122BM)** with one of the following emphases: **Keyboard Performance** (3097), **Vocal Performance** (3098), **Instrumental Performance** (3099), **Keyboard Pedagogy** (3100), **Stringed Instrument Pedagogy** (3101), **Vocal Pedagogy** (3102)
- **CIPC: Music** (500903), **Keyboard Performance** (500903), **Vocal Performance** (500903), **Instrumental Performance** (500903), **Keyboard Pedagogy** (500912), **Stringed Instrument Pedagogy** (500912), **Vocal Pedagogy** (500912)

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to School of Performing Arts.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). All students in these Bachelor of Music programs must audition with the appropriate area head prior to admission to the program.

General Education

Refer to Degree Requirements for Bachelor of Music requirements.

Program Learning Outcomes

- Employ writing and research skills to examine and communicate ideas about music.
- Demonstrate competency as performers through the preparation of repertoire and technical studies.
- Synthesize skills of performance, aural analysis, score analysis, technology, musicology, improvisation and composition.

School of Music Policies and Procedures

Refer to the School of Music Policies and Procedures in this catalog.

School of Music Required Core Courses (29 credit hours)

- MUSC 1006 - Concert Attendance I **Credits: (0)** Students must take this course twice.
- MUSC 2006 - Concert Attendance II **Credits: (0)** Students must take this course twice.
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2120 - Music Theory IV **Credits: (2)**
- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- MUSC 2140 - Sight Singing & Aural Skills IV **Credits: (2)**

- MUSC 3205 - Music History I: Music before 1800 **Credits: (3)**
- MUSC 3206 - Music History II: Music after 1800 **Credits: (3)**
- MUSC 3208 - World Music **Credits: (3)**
- MUSC 3840 - Advanced Concepts in Music Theory **Credits: (2)**

Additional Required Music Courses (46 credit hours)

- MUSC 2170 - Functional Piano Skills for Piano Majors/Minors **Credits: (2)**
- MUSC 2321 - The Principles of Collaborative Piano I **Credits: (1)**
- MUSC 2331 - The Principles of Collaborative Piano II **Credits: (1)**
- MUSC 3302 - Keyboard Literature I **Credits: (2)**
- MUSC 3312 - Keyboard Literature II **Credits: (2)**
- MUSC 3872 - Choral Conducting I **Credits: (2)** or
- MUSC 3822 - Instrumental Conducting I **Credits: (2)**
- MUSC 3701 - Music Entrepreneurship and You **Credits: (3)**
- MUSC 4302 - Keyboard Pedagogy I **Credits: (2)**
- MUSC 4312 - Keyboard Pedagogy II **Credits: (2)**
- MUSC 3991 - Junior Recital **Credits: (0)**
- MUSC 4991 - Senior Recital **Credits: (0)**

Large Ensemble (2 credit hours)

Choose two courses from the following to be taken over two semesters:

- MUSC 1740 - Weber State Concert Choir **Credits: (1)**
- MUSC 3740 - Weber State Concert Choir **Credits: (1)**
- MUSC 1750 - Symphonic Band **Credits: (1-2)**
- MUSC 3750 - Symphonic Band **Credits: (1-2)**
- MUSC 1760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 3760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 1753 - Jazz Ensemble **Credits: (1)**
- MUSC 3753 - Jazz Ensemble **Credits: (1)**

Chamber Lessons (2 credit hours)

To be taken over two semesters for a total of 2 credits:

- MUSC 1755 - Instrumental Chamber Ensemble **Credits: (1)**
- MUSC 3755 - Instrumental Chamber Ensemble **Credits: (1)**

Applied Lessons (8 credit hours)

Minimum of 8 classes required. Courses may be repeated for credit.

- MUSC 1681 - Private Instruction **Credits: (1)**
- MUSC 2681 - Private Instruction **Credits: (1)**

- MUSC 3681 - Private Instruction **Credits: (1)**
- MUSC 4681 - Private Instruction **Credits: (1)**

Other Required Support Courses (10 credit hours)

- THEA 1033 CA - Introduction to Acting **Credits: (3)**
- FIN 1010 - Personal Finance **Credits: (3)**
- HLTH 2400 - Mind/Body Wellness **Credits: (3)**
- DANC 1100 - Ballet I **Credits: (2)** or
- DANC 1200 - Contemporary/Modern I **Credits: (2)**

Elective Courses (6 credit hours)

Choose 6 credits from the following:

- MUSC 4322 - Keyboard Pedagogy III **Credits: (2)**
- MUSC 4332 - Keyboard Pedagogy IV **Credits: (2)**
- MUSC 4860 INT - Internship in Music **Credits: (1-3)**
- MUSC 1601 - Private Instruction **Credits: (1)** in Jazz Piano (may be repeated twice for credit)
- MUSC 3601 - Private Instruction **Credits: (1)** in Jazz Piano (may be repeated twice for credit)

One of the following courses may be used toward the 6 elective credits:

- MUSC 4820 - Pro Tools 101 **Credits: (2)**
- MUSC 1820 - The Art and Science of Recording I **Credits: (3)**
- MUSC 1720 - Analog Audio **Credits: (3)**
- MUSC 1721 - Live Sound in the 21st Century **Credits: (3)**
- MUSC 1722 - History of Recording **Credits: (2)**

Foreign Language

See Foreign Language Requirements in the Music Area procedures and policies.

Music (BM), Stringed Instrument Pedagogy Emphasis

Music (BM)

- **Program Prerequisite:** Audition required for admission to program.
- **Minor:** Not required.
- **Grade Requirement:** A grade of "C" or better in courses required for these majors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 52 credit hours is required within the major for the Bachelor of Music in Performance and a minimum of 58 credit hours is required within the major for the Bachelor of Music in Keyboard Pedagogy, Stringed

Instrument Pedagogy, or Vocal Pedagogy. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); 18-28 of these are required within the major.

- **Program Code: Music (3122BM)** with one of the following emphases: **Keyboard Performance** (3097), **Vocal Performance** (3098), **Instrumental Performance** (3099), **Keyboard Pedagogy** (3100), **Stringed Instrument Pedagogy** (3101), **Vocal Pedagogy** (3102)
- **CIPC: Music** (500903), **Keyboard Performance** (500903), **Vocal Performance** (500903), **Instrumental Performance** (500903), **Keyboard Pedagogy** (500912), **Stringed Instrument Pedagogy** (500912), **Vocal Pedagogy** (500912)

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to School of Performing Arts.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). All students in these Bachelor of Music programs must audition with the appropriate area head prior to admission to the program.

General Education

Refer to Degree Requirements for Bachelor of Music requirements.

Program Learning Outcomes

- Employ writing and research skills to examine and communicate ideas about music.
- Demonstrate competency as performers through the preparation of repertoire and technical studies.
- Synthesize skills of performance, aural analysis, score analysis, technology, musicology, improvisation and composition.

School of Music Policies and Procedures

Refer to the School of Music Policies and Procedures in this catalog.

School of Music Required Core Courses (29 credit hours)

- MUSC 1006 - Concert Attendance I **Credits: (0)** Students must take this course twice.
- MUSC 2006 - Concert Attendance II **Credits: (0)** Students must take this course twice.
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2120 - Music Theory IV **Credits: (2)**
- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- MUSC 2140 - Sight Singing & Aural Skills IV **Credits: (2)**

- MUSC 3205 - Music History I: Music before 1800 **Credits: (3)**
- MUSC 3206 - Music History II: Music after 1800 **Credits: (3)**
- MUSC 3208 - World Music **Credits: (3)**
- MUSC 3840 - Advanced Concepts in Music Theory **Credits: (2)**

Additional Courses Required

- MUSC 1150 - Class Piano I **Credits: (2)**
- MUSC 1160 - Class Piano II **Credits: (2)**
- MUSC 2871 - String Methods **Credits: (2)**
- MUSC 3822 - Instrumental Conducting I **Credits: (2)**
- MUSC 3851 - Stringed Instrument Pedagogy I **Credits: (2)**
- MUSC 3852 - Stringed Instrument Pedagogy II **Credits: (2)**
- MUSC 4771 - Stringed Instrument Literature I **Credits: (2)**
- MUSC 4772 - Stringed Instrument Literature II **Credits: (2)**
- MUSC 4991 - Senior Recital **Credits: (0)**
- MUSC 3701 - Music Entrepreneurship and You **Credits: (3)**
- MUSC 4860 INT - Internship in Music **Credits: (1-3)**
- MUSC 1755 - Instrumental Chamber Ensemble **Credits: (1)** (to be repeated twice for credit) OR
- MUSC 3755 - Instrumental Chamber Ensemble **Credits: (1)** (to be repeated twice for credit)

Applied Lessons (7 classes required)

Select lessons in the appropriate stringed instrument. Courses may be repeated for credit.

- MUSC 1681 - Private Instruction **Credits: (1)**
- MUSC 2681 - Private Instruction **Credits: (1)**
- MUSC 3681 - Private Instruction **Credits: (1)**
- MUSC 4681 - Private Instruction **Credits: (1)**

Weber State Symphony Orchestra (8 classes required)

Courses may be repeated for credit.

- MUSC 1760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 3760 - Weber State Symphony Orchestra **Credits: (1-2)**

Music (BM), Vocal Pedagogy Emphasis

Music (BM)

- **Program Prerequisite:** Audition required for admission to program.
- **Minor:** Not required.
- **Grade Requirement:** A grade of "C" or better in courses required for these majors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.

- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 52 credit hours is required within the major for the Bachelor of Music in Performance and a minimum of 58 credit hours is required within the major for the Bachelor of Music in Keyboard Pedagogy, Stringed Instrument Pedagogy, or Vocal Pedagogy. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); 18-28 of these are required within the major.
- **Program Code: Music (3122BM)** with one of the following emphases: **Keyboard Performance** (3097), **Vocal Performance** (3098), **Instrumental Performance** (3099), **Keyboard Pedagogy** (3100), **Stringed Instrument Pedagogy** (3101), **Vocal Pedagogy** (3102)
- **CIPC: Music** (500903), **Keyboard Performance** (500903), **Vocal Performance** (500903), **Instrumental Performance** (500903), **Keyboard Pedagogy** (500912), **Stringed Instrument Pedagogy** (500912), **Vocal Pedagogy** (500912)

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to School of Performing Arts.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). All students in these Bachelor of Music programs must audition with the appropriate area head prior to admission to the program.

General Education

Refer to Degree Requirements for Bachelor of Music requirements.

Program Learning Outcomes

- Employ writing and research skills to examine and communicate ideas about music.
- Demonstrate competency as performers through the preparation of repertoire and technical studies.
- Synthesize skills of performance, aural analysis, score analysis, technology, musicology, improvisation and composition.

School of Music Policies and Procedures

Refer to the School of Music Policies and Procedures in this catalog.

School of Music Required Core Courses (29 credit hours)

- MUSC 1006 - Concert Attendance I **Credits: (0)** Students must take this course twice.
- MUSC 2006 - Concert Attendance II **Credits: (0)** Students must take this course twice.
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2120 - Music Theory IV **Credits: (2)**

- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- MUSC 2140 - Sight Singing & Aural Skills IV **Credits: (2)**
- MUSC 3205 - Music History I: Music before 1800 **Credits: (3)**
- MUSC 3206 - Music History II: Music after 1800 **Credits: (3)**
- MUSC 3208 - World Music **Credits: (3)**
- MUSC 3840 - Advanced Concepts in Music Theory **Credits: (2)**

Additional Courses Required (50-54 credits)

- THEA 1030 - Voice and Movement for the Actor **Credits: (3)**
- MUSC 1150 - Class Piano I **Credits: (2)**
- MUSC 1160 - Class Piano II **Credits: (2)**
- MUSC 2150 - Class Piano III **Credits: (2)**
- MUSC 3701 - Music Entrepreneurship and You **Credits: (3)**
- MUSC 2321 - The Principles of Collaborative Piano I **Credits: (1)**
- MUSC 2331 - The Principles of Collaborative Piano II **Credits: (1)**
- MUSC 3402 - Vocal Literature I **Credits: (2)**
- MUSC 3412 - Vocal Literature II **Credits: (2)**
- MUSC 3872 - Choral Conducting I **Credits: (2)**
- MUSC 3991 - Junior Recital **Credits: (0)**
- MUSC 4402 - Vocal Pedagogy I **Credits: (2)**
- MUSC 4412 - Vocal Pedagogy II **Credits: (2)**
- MUSC 4860 INT - Internship in Music **Credits: (1-3)** (to be repeated twice for credit)
- MUSC 4991 - Senior Recital **Credits: (0)**

Applied Lessons (8 credit hours)

Minimum of 8 classes required. Courses may be repeated for credit.

- MUSC 1681 - Private Instruction **Credits: (1)**
- MUSC 2681 - Private Instruction **Credits: (1)**
- MUSC 3681 - Private Instruction **Credits: (1)**
- MUSC 4681 - Private Instruction **Credits: (1)**

Large Ensemble (16 credit hours)

Minimum of 8 classes required. Courses may be repeated for credit.

- MUSC 1740 - Weber State Concert Choir **Credits: (1)**
- MUSC 3740 - Weber State Concert Choir **Credits: (1)**
- MUSC 1750 - Symphonic Band **Credits: (1-2)**
- MUSC 3750 - Symphonic Band **Credits: (1-2)**
- MUSC 1760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 3760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 2910 - Opera Production **Credits: (2)**
- MUSC 4910 - Opera Production **Credits: (2)**

Foreign Language

See Foreign Language Requirements in the Music Area procedures and policies.

Music (BM), Vocal Performance Emphasis

Music (BM)

- **Program Prerequisite:** Audition required for admission to program.
- **Minor:** Not required.
- **Grade Requirement:** A grade of "C" or better in courses required for these majors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 52 credit hours is required within the major for the Bachelor of Music in Performance and a minimum of 58 credit hours is required within the major for the Bachelor of Music in Keyboard Pedagogy, Stringed Instrument Pedagogy, or Vocal Pedagogy. A total of 40 upper-division credit hours is required (courses numbered 3000 and above); 18-28 of these are required within the major.
- **Program Code: Music (3122BM)** with one of the following emphases: **Keyboard Performance** (3097), **Vocal Performance** (3098), **Instrumental Performance** (3099), **Keyboard Pedagogy** (3100), **Stringed Instrument Pedagogy** (3101), **Vocal Pedagogy** (3102)
- **CIPC: Music** (500903), **Keyboard Performance** (500903), **Vocal Performance** (500903), **Instrumental Performance** (500903), **Keyboard Pedagogy** (500912), **Stringed Instrument Pedagogy** (500912), **Vocal Pedagogy** (500912)

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to School of Performing Arts.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). All students in these Bachelor of Music programs must audition with the appropriate area head prior to admission to the program.

General Education

Refer to Degree Requirements for Bachelor of Music requirements.

Program Learning Outcomes

- Employ writing and research skills to examine and communicate ideas about music.
- Demonstrate competency as performers through the preparation of repertoire and technical studies.
- Synthesize skills of performance, aural analysis, score analysis, technology, musicology, improvisation and composition.

School of Music Policies and Procedures

Refer to the School of Music Policies and Procedures in this catalog.

School of Music Required Core Courses (29 credit hours)

- MUSC 1006 - Concert Attendance I **Credits: (0)** Students must take this course twice.
- MUSC 2006 - Concert Attendance II **Credits: (0)** Students must take this course twice.
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2120 - Music Theory IV **Credits: (2)**
- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- MUSC 2140 - Sight Singing & Aural Skills IV **Credits: (2)**
- MUSC 3205 - Music History I: Music before 1800 **Credits: (3)**
- MUSC 3206 - Music History II: Music after 1800 **Credits: (3)**
- MUSC 3208 - World Music **Credits: (3)**
- MUSC 3840 - Advanced Concepts in Music Theory **Credits: (2)**

Additional Courses Required (51 credits)

- MUSC 1150 - Class Piano I **Credits: (2)**
- MUSC 1160 - Class Piano II **Credits: (2)**
- MUSC 2150 - Class Piano III **Credits: (2)**
- MUSC 3701 - Music Entrepreneurship and You **Credits: (3)**
- DANC 1010 CA/CC - Introduction to Dance **Credits: (3)**
- THEA 1030 - Voice and Movement for the Actor **Credits: (3)**
- THEA 1043 CA - Introduction to American Musical Theatre **Credits: (3)**
- MUSC 2321 - The Principles of Collaborative Piano I **Credits: (1)**
- MUSC 3402 - Vocal Literature I **Credits: (2)**
- MUSC 3412 - Vocal Literature II **Credits: (2)**
- MUSC 3991 - Junior Recital **Credits: (0)**
- MUSC 4402 - Vocal Pedagogy I **Credits: (2)**
- MUSC 4412 - Vocal Pedagogy II **Credits: (2)**
- MUSC 4860 INT - Internship in Music **Credits: (1-3)**
- MUSC 4991 - Senior Recital **Credits: (0)**

Applied Lessons (8 credit hours)

Minimum of 8 classes required in appropriate area. Courses may be repeated for credit.

- MUSC 1681 - Private Instruction **Credits: (1)**
- MUSC 2681 - Private Instruction **Credits: (1)**
- MUSC 3681 - Private Instruction **Credits: (1)**
- MUSC 4681 - Private Instruction **Credits: (1)**

Large Ensemble (16 credit hours)

- MUSC 2910 - Opera Production **Credits: (2)**
- MUSC 4910 - Opera Production **Credits: (2)**
Choose 6 courses from the following (courses may be repeated for credit):
- MUSC 1740 - Weber State Concert Choir **Credits: (1)**
- MUSC 3740 - Weber State Concert Choir **Credits: (1)**
- MUSC 1750 - Symphonic Band **Credits: (1-2)**
- MUSC 3750 - Symphonic Band **Credits: (1-2)**
- MUSC 1760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 3760 - Weber State Symphony Orchestra **Credits: (1-2)**

Foreign Language

See Foreign Language Requirements in the Music Area procedures and policies.

Bachelor of Music Education

Music Education Teaching (BME)

- **Program Prerequisites:** Audition required for admission to program. Must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 123 credit hours is required for either the Choral or Instrumental Emphasis; a minimum of 64 credit hours is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 23-28 of these are required within the major.
- **Program Code:** Music Education Teaching (3093BME) with Choral (3094) or Instrumental (3095)
- **CIPC:** Music Education Teaching (131312) Choral (131312), Instrumental (131312)

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to School of Performing Arts.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education

Refer to Degree Requirements for Bachelor of Music requirements. LIBS 1704 will fulfill the Computer Literacy general education requirement. PSY 1010 is recommended.

Program Learning Outcomes

- Employ writing and research skills to examine and communicate ideas about music.
- Demonstrate competency as performers through the preparation of repertoire and technical studies.
- Synthesize skills of performance, aural analysis, score analysis, technology, musicology, improvisation and composition.

School of Music Policies and Procedures

Refer to the Department of Performing Arts Policies and Procedures in this catalog.

School of Music Required Core Courses (29 credit hours)

- MUSC 1006 - Concert Attendance I **Credits: (0)** Students must take this course twice.
- MUSC 2006 - Concert Attendance II **Credits: (0)** Students must take this course twice.
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2120 - Music Theory IV **Credits: (2)**
- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- MUSC 2140 - Sight Singing & Aural Skills IV **Credits: (2)**
- MUSC 3205 - Music History I: Music before 1800 **Credits: (3)**
- MUSC 3206 - Music History II: Music after 1800 **Credits: (3)**
- MUSC 3208 - World Music **Credits: (3)**
- MUSC 3840 - Advanced Concepts in Music Theory **Credits: (2)**

Areas of Emphasis

Select one of the following areas of emphasis:

- Music Education Teaching (BME), Choral Emphasis
- Music Education Teaching (BME), Instrumental Emphasis

Music Education Teaching (BME), Choral Emphasis

- **Program Prerequisites:** Audition required for admission to program. Must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A total of 123 credit hours is required for either the Choral or Instrumental Emphasis; a minimum of 64 credit hours is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 23-28 of these are required within the major.
- **Program Code:** Music Education Teaching (3093BME) with Choral (3094)
- **CIPC:** 131312

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to School of Performing Arts.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education

Refer to Degree Requirements for Bachelor of Music requirements. LIBS 1704 will fulfill the Computer Literacy general education requirement. PSY 1010 is recommended.

Program Learning Outcomes

- Employ writing and research skills to examine and communicate ideas about music.
- Demonstrate competency as performers through the preparation of repertoire and technical studies.
- Synthesize skills of performance, aural analysis, score analysis, technology, musicology, improvisation and composition.

School of Music Policies and Procedures

Refer to the Department of Performing Arts Policies and Procedures in this catalog.

School of Music Required Core Courses (29 credit hours)

- MUSC 1006 - Concert Attendance I **Credits: (0)** Students must take this course twice.
- MUSC 2006 - Concert Attendance II **Credits: (0)** Students must take this course twice.
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2120 - Music Theory IV **Credits: (2)**
- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- MUSC 2140 - Sight Singing & Aural Skills IV **Credits: (2)**
- MUSC 3205 - Music History I: Music before 1800 **Credits: (3)**
- MUSC 3206 - Music History II: Music after 1800 **Credits: (3)**
- MUSC 3208 - World Music **Credits: (3)**
- MUSC 3840 - Advanced Concepts in Music Theory **Credits: (2)**

Required Courses for BME

- MUSC 1150 - Class Piano I **Credits: (2)**
- MUSC 1160 - Class Piano II **Credits: (2)**
- MUSC 2150 - Class Piano III **Credits: (2)**
- MUSC 2321 - The Principles of Collaborative Piano I **Credits: (1)**
- MUSC 3924 - Music Teaching and Learning in the Elementary School **Credits: (3)**
- MUSC 3991 - Junior Recital **Credits: (0)**
- MUSC 4822 - Secondary Music Methods **Credits: (3)**
- MUSC 4860 INT - Internship in Music **Credits: (1-3)** (must be taken twice for credit)

Applied Lessons

Select classes in the appropriate area. Minimum of 6 classes required, for a total of 6 credits. Courses may be repeated for credit.

- MUSC 1681 - Private Instruction **Credits: (1)**
- MUSC 2681 - Private Instruction **Credits: (1)**
- MUSC 3681 - Private Instruction **Credits: (1)**
- MUSC 4681 - Private Instruction **Credits: (1)**

Large Ensemble

Select classes in the appropriate area. Minimum of 6 classes required, for a total of 6 credits. Courses may be repeated for credit.

- MUSC 1740 - Weber State Concert Choir **Credits: (1)**
- MUSC 3740 - Weber State Concert Choir **Credits: (1)**
- MUSC 1750 - Symphonic Band **Credits: (1-2)**
- MUSC 3750 - Symphonic Band **Credits: (1-2)**
- MUSC 1760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 3760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 1763 - Guitar Ensemble **Credits: (1)**
- MUSC 3763 - Guitar Ensemble **Credits: (1)**

Course Requirements for Licensure

Minimum of 33 credits required.

COMM 1020, COMM 2110, and CHF 1500 also fulfill University General Education requirements.

- EDUC 1010 CEL - Exploring Teaching **Credits: (3)**
- CHF 1500 SS/CC - Human Development **Credits: (3)** or
- PSY 3140 - Adolescent Psychology **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- EDUC 3220 - Foundations of Diversity **Credits: (2)**
- EDUC 3265 - The Exceptional Student **Credits: (2)**

- EDUC 3315 - Media Integration in the Secondary School Setting **Credits: (2)**
- EDUC 3900 - Preparing, Teaching, and Assessing Instruction **Credits: (2)**
- EDUC 3910 INT - Secondary Education Practicum **Credits: (2)**
- EDUC 3935 - Reading and Writing Across the Secondary Curriculum **Credits: (2)**
- EDUC 4940A INT - Student Teaching in Secondary Education **Credits: (8)**
- EDUC 4950 - Integrated Secondary Student Teaching Seminar **Credits: (4)**

Foreign Language

Three credits of Foreign Language courses. See Foreign Language Requirements in the Music Area procedures and policies.

Choral Emphasis Required Courses

- MUSC 2821 - Percussion Methods **Credits: (2)**
- MUSC 2841 - Brass Methods **Credits: (2)**
- MUSC 2851 - Woodwind Methods **Credits: (2)**
- MUSC 2871 - String Methods **Credits: (2)**
- MUSC 3122 - Choral Arranging **Credits: (2)**
- MUSC 3872 - Choral Conducting I **Credits: (2)**
- MUSC 4402 - Vocal Pedagogy I **Credits: (2)**

Music Education Teaching (BME), Instrumental Emphasis

- **Program Prerequisites:** Audition required for admission to program. Must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A total of 123 credit hours is required for either the Choral or Instrumental Emphasis; a minimum of 64 credit hours is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 23-28 of these are required within the major.
- **Program Code:** Music Education Teaching (3093BME) with Instrumental (3095)
- **CIPC:**131312

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to School of Performing Arts.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information). Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education

Refer to Degree Requirements for Bachelor of Music requirements. LIBS 1704 will fulfill the Computer Literacy general education requirement. PSY 1010 is recommended.

Program Learning Outcomes

- Employ writing and research skills to examine and communicate ideas about music.
- Demonstrate competency as performers through the preparation of repertoire and technical studies.
- Synthesize skills of performance, aural analysis, score analysis, technology, musicology, improvisation and composition.

School of Music Policies and Procedures

Refer to the Department of Performing Arts Policies and Procedures in this catalog.

School of Music Required Core Courses (29 credit hours)

- MUSC 1006 - Concert Attendance I **Credits: (0)** Students must take this course twice.
- MUSC 2006 - Concert Attendance II **Credits: (0)** Students must take this course twice.
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 2110 - Music Theory III **Credits: (2)**
- MUSC 2120 - Music Theory IV **Credits: (2)**
- MUSC 2130 - Sight Singing & Aural Skills III **Credits: (2)**
- MUSC 2140 - Sight Singing & Aural Skills IV **Credits: (2)**
- MUSC 3205 - Music History I: Music before 1800 **Credits: (3)**
- MUSC 3206 - Music History II: Music after 1800 **Credits: (3)**
- MUSC 3208 - World Music **Credits: (3)**
- MUSC 3840 - Advanced Concepts in Music Theory **Credits: (2)**

Required Courses for BME

- MUSC 1150 - Class Piano I **Credits: (2)**
- MUSC 1160 - Class Piano II **Credits: (2)**
- MUSC 2150 - Class Piano III **Credits: (2)**
- MUSC 2321 - The Principles of Collaborative Piano I **Credits: (1)**
- MUSC 3924 - Music Teaching and Learning in the Elementary School **Credits: (3)**
- MUSC 3991 - Junior Recital **Credits: (0)**
- MUSC 4822 - Secondary Music Methods **Credits: (3)**
- MUSC 4860 INT - Internship in Music **Credits: (1-3)** (must be taken twice for credit)

Applied Lessons

Select classes in the appropriate area. Minimum of 6 classes required, for a total of 6 credits. Courses may be repeated for credit.

- MUSC 1681 - Private Instruction **Credits: (1)**
- MUSC 2681 - Private Instruction **Credits: (1)**
- MUSC 3681 - Private Instruction **Credits: (1)**
- MUSC 4681 - Private Instruction **Credits: (1)**

Large Ensemble

Select classes in the appropriate area. Minimum of 6 classes required, for a total of 6 credits. Courses may be repeated for credit.

- MUSC 1740 - Weber State Concert Choir **Credits: (1)**
- MUSC 3740 - Weber State Concert Choir **Credits: (1)**
- MUSC 1750 - Symphonic Band **Credits: (1-2)**
- MUSC 3750 - Symphonic Band **Credits: (1-2)**
- MUSC 1760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 3760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 1763 - Guitar Ensemble **Credits: (1)**
- MUSC 3763 - Guitar Ensemble **Credits: (1)**

Course Requirements for Licensure

Minimum of 33 credits required.

COMM 1020, COMM 2110, and CHF 1500 also fulfill University General Education requirements.

- EDUC 1010 CEL - Exploring Teaching **Credits: (3)**
- CHF 1500 SS/CC - Human Development **Credits: (3)** or
- PSY 3140 - Adolescent Psychology **Credits: (3)**
- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** or
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)**
- EDUC 3220 - Foundations of Diversity **Credits: (2)**
- EDUC 3265 - The Exceptional Student **Credits: (2)**
- EDUC 3315 - Media Integration in the Secondary School Setting **Credits: (2)**
- EDUC 3900 - Preparing, Teaching, and Assessing Instruction **Credits: (2)**
- EDUC 3910 INT - Secondary Education Practicum **Credits: (2)**
- EDUC 3935 - Reading and Writing Across the Secondary Curriculum **Credits: (2)**
- EDUC 4940A INT - Student Teaching in Secondary Education **Credits: (8)**
- EDUC 4950 - Integrated Secondary Student Teaching Seminar **Credits: (4)**

Instrumental Emphasis Required Courses

- MUSC 2821 - Percussion Methods **Credits: (2)**
- MUSC 2841 - Brass Methods **Credits: (2)**
- MUSC 2851 - Woodwind Methods **Credits: (2)**
- MUSC 2871 - String Methods **Credits: (2)**
- MUSC 2881 - Vocal Workshop **Credits: (2)**
- MUSC 3112 - Orchestration **Credits: (2)**
- MUSC 3804 - Jazz Pedagogy **Credits: (2)**
- MUSC 3822 - Instrumental Conducting I **Credits: (2)**

Bachelor of Science

Dance Education (BS)

Dance Education Major K-12

The objective of this program is to help guide and prepare students for teaching dance in public school settings (grades K-12), private studios and non-profit organizations.

- **Program Prerequisites:** Students must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable) and an overall GPA of at least 2.75.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation; a minimum of 56 of these are within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).
- **Program Code:** 3058BA or 3058BS
- **CIPC:** 131324

Based within the disciplinary core of the Dance program, the BA and BS Dance Education K-12 degree offerings help to guide and prepare students for teaching dance in public school settings (grades K-12), private studios, and/or non-profit environments. In addition to the core dance requirements, secondary licensure requirements are mandatory for all teaching degrees leading to eligibility for Utah State Board of Education licensure.

Advisement

Students must consult with the Dance Program advisor at least once each term. Email Joseph Blake or Amanda Sowerby for more information or to schedule an appointment. Students seeking secondary certification are encouraged to consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269). (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study. Teaching majors must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

General Education

Refer to General Requirements of this catalog for Bachelor of Science or Bachelor of Arts requirements. See also specific requirements for the BS or BA listed under the major course requirements.

Program Learning Outcomes

- Technique/Performance - Students will apply dance technique and kinesiology principles to improve as dancers and performers.
- Theory/Criticism - Students will apply and communicate principles of dance theory and criticism in many settings.
- Creative Process - Students will engage in the evolving nature of the creative process in many settings.
- Meaning/Self-discovery - Students will discover, express, and gain ownership of their own point of view about dance, to speak the language of dance.

Course Requirements for BS or BA Degree in Dance Education

Required Dance Forms (minimum of 18 credit hours)

- DANC 1100 - Ballet I **Credits: (2)**
- DANC 1200 - Contemporary/Modern I **Credits: (2)**
- DANC 1450 - Special Topic: World Dance Experiences I **Credits: (2)**
- DANC 1520 - Dance in World Cultures **Credits: (2)**
- DANC 1580 - Rhythm Tap I **Credits: (2)**
- DANC 2490 - Contemporary/Modern II **Credits: (2)**
- DANC 2500 - Jazz II **Credits: (2)**
- DANC 3490 - Contemporary/Modern III **Credits: (2)**
- DANC 3560 - African Dance and Culture II **Credits: (2)**

Creative Process and Performance (9 credit hours)

- DANC 2410 - Improvisation **Credits: (2)**
- DANC 3500 - Choreographic Process **Credits: (3)**
- DANC 3520 INT - Choreography Practicum **Credits: (3)**
- DANC 4910 INT - Rehearsal and Performance **Credits: (1)**

Dance Studies (10 credit hours)

- DANC 1010 CA/CC - Introduction to Dance **Credits: (3)**
- DANC 2300 - Dance Kinesiology **Credits: (3)**
- DANC 2250 - Alignment and Conditioning for Dance/Pilates **Credits: (1)**
- DANC 3015 - Dance History **Credits: (3)**

Teaching Methods (10 credit hours)

- DANC 3320 INT - Secondary Dance Pedagogy **Credits: (3)**
- EDUC 3430 - Creative Processes in the Elementary School **Credits: (3)**
- DANC 3640 INT - Elementary Dance Pedagogy **Credits: (3)**
- DANC 3860 INT - Field Experience **Credits: (1-3)**

Dance and Production (7 credit hours)

- DANC 1310 - Music for Dance **Credits: (2)**
- DANC 2610 - Dance and Digital Technology **Credits: (2)**

Choose one from the following below:

- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- FILM 2200 CA - Fundamentals of Film **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- MUSC 3701 - Music Entrepreneurship and You **Credits: (3)**

Health and Science Courses Required to fulfill the BS in Dance Education (12 credit hours)

- ZOOL 1020 LS - Human Biology **Credits: (3)**
- NUTR 1020 LS SUS - Science and Application of Human Nutrition **Credits: (3)**
- ESS 3510 - Exercise Physiology **Credits: (3)**
- ZOOL 3570 - Foundations of Science Education **Credits: (3)**

Emphasis Option for Bachelor of Interdisciplinary Studies

Music (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Code: 3037**
- **CIPC: 500901**

Students declaring an emphasis in music as one of their three BIS concentrations must abide by all guidelines and stipulations detailed in the BIS student handbook.

Courses taken in fulfillment of the music area emphasis must total a minimum of 18 credit hours and will be determined in consultation with the music BIS advisor and approved by the department chair (or dean, if the advisor and chair are the same person). These courses should directly and demonstratively contribute to the goals set forth by the student in his/her approved BIS application.

Required Courses

- MUSC 1010 CA - Introduction to Music **Credits: (3)**
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**

Select three of the following:

- MUSC 1025 CA - History of Country Music **Credits: (3)**
- MUSC 1030 CA - Introduction to Jazz **Credits: (3)**
- MUSC 1033 CA - Introduction to American Music **Credits: (3)**
- MUSC 1035 CA - History of Rock and Roll **Credits: (3)**
- MUSC 1040 CA - Music of World Cultures **Credits: (3)**
- MUSC 1043 HU - Music, the Arts & Civilizations **Credits: (3)**
- MUSC 1063 CA - Music in Religion **Credits: (3)**

Note:

Please note that according to the BIS student handbook, courses taken in completion of the university General Education requirements will not count toward a BIS emphasis. In other words, "double-dipping" is not allowed.

Theatre Arts (BIS)

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students.

- **Program Code: 3046**
- **CIPC: 500501**

The Theatre Area participates in the BIS degree program. For a Theatre emphasis, students should take a minimum of 18 credit hours as approved by their Theatre Arts Advisor. BIS students must meet with a Theatre Arts Advisor to design their Theatre component.

Minor

Dance Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

A dance minor is available for students not wishing to specialize but who have an interest in dance and want a concentration of study in the area to complement an affiliated program of study. Coursework is individualized, with selections to be made from the following areas.

- **Grade Requirements:** A GPA of 2.25 or better in courses used toward the minor.
- **Advisement:** Students should meet annually, if not more often, with the faculty advisor for the course and program advisement. Email Joseph Blake (josephblake@weber.edu) for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List).
- **Credit Hour Requirements:** Minimum of 18 credit hours, with no fewer than 3 nor more than 9 in any one of the following three areas listed.
- **Program Code:** 3045
- **CIPC:** 500301

Course Requirements for Minor

Select 18 credit hours from the following three areas, with no fewer than 3 or more than 9 credit hours in any one of the three areas listed. Additional coursework to total 18 credit hours may be chosen, with advisor's written approval, from remaining dance electives or in approved related areas.

Courses Required (18 credit hours)

Select 18 credit hours from each of the following, with no fewer than 3 nor more than 9 in any one of the three areas listed. Additional coursework to total 18 credit hours may be chosen, with advisor's written approval, from remaining dance electives or in approved related areas.

Area 1, Technique

Select the appropriate level from the following

Any course may be repeated once

- DANC 1100 - Ballet I **Credits: (2) 2**
- DANC 1200 - Contemporary/Modern I **Credits: (2) 2**
- DANC 1450 - Special Topic: World Dance Experiences I **Credits: (2) 2**
- DANC 1500 - Jazz I **Credits: (2) 2**
- DANC 1520 - Dance in World Cultures **Credits: (2) 2**
- DANC 1560 - African Dance and Culture I **Credits: (2) 2**
- DANC 1580 - Rhythm Tap I **Credits: (2) 2**
- DANC 2470 - Ballet II **Credits: (2) 2**
- DANC 2490 - Contemporary/Modern II **Credits: (2) 2**
- DANC 2500 - Jazz II **Credits: (2) 2**
- DANC 3470 - Ballet III **Credits: (2) 2**
- DANC 3490 - Contemporary/Modern III **Credits: (2) 2**

Area 2, Creative Work

- DANC 2410 - Improvisation **Credits: (2) 2**
- DANC 2610 - Dance and Digital Technology **Credits: (2) 2**
- DANC 3500 - Choreographic Process **Credits: (3)**
- DANC 3910 INT/CEL - Moving Company: Rehearsal & Development **Credits: (3) CEL**
- DANC 3911 INT/CEL - Moving Company: Performance **Credits: (3) CEL**
- DANC 4610 - Dance and Digital Technology **Credits: (2) 2**
- DANC 4620 - Dance and Digital Technology Seminar **Credits: (1) 1**
- DANC 4910 INT - Rehearsal and Performance **Credits: (1) 1**
- DANC 4890 INT - Cooperative Work Experience **Credits: (1-6) CEL (1-6)**

Area 3, Theoretical Aspects

- DANC 3015 - Dance History **Credits: (3) 3**
- DANC 2300 - Dance Kinesiology **Credits: (3) 3**
- DANC 2350 - Dance for Aging Populations **Credits: (2) 2**
- DANC 1010 CA/CC - Introduction to Dance **Credits: (3) 3**

Minor in Music Performance

The Minor in Music Performance is a course of study for students who desire more intensive performance opportunities while experiencing music courses related to interpretation.

- **Program Prerequisite:** Audition required for admission to the program.
- **Grade Requirements:** A grade of C (2.00) or better in courses used toward the minor.
- **Credit Hour Requirements:** Minimum of 23 credit hours.
- **Program Code:** 3079
- **CIPC:** 500901

Advisement

Music minors should meet with an advisor prior to registration. For current advisor listing please refer to School of Music Advisors.

Course Requirements for Minor in Music Performance

Music Courses Required

- MUSC 1006 - Concert Attendance I **Credits: (0)** (must complete two terms)
- MUSC 2006 - Concert Attendance II **Credits: (0)** (must complete two terms)
- MUSC 1110 - Music Theory I **Credits: (2)**
- MUSC 1120 - Music Theory II **Credits: (2)**
- MUSC 1130 - Sight-Singing & Aural Skills I **Credits: (2)**
- MUSC 1140 - Sight-Singing & Aural Skills II **Credits: (2)**
- MUSC 1150 - Class Piano I **Credits: (2)**
- MUSC 1160 - Class Piano II **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 3991 - Junior Recital **Credits: (0)**

Applied Music Requirement

4 credit hours minimum or until completion of the Junior Recital

- MUSC 1681 - Private Instruction **Credits: (1)**
- MUSC 2681 - Private Instruction **Credits: (1)**
- MUSC 3681 - Private Instruction **Credits: (1)**
- MUSC 4681 - Private Instruction **Credits: (1)**

Major Ensemble Requirement

4 credit hours minimum or until completion of the music minor requirements

- MUSC 1740 - Weber State Concert Choir **Credits: (1)**
- MUSC 3740 - Weber State Concert Choir **Credits: (1)**
- MUSC 1750 - Symphonic Band **Credits: (1-2)**

- MUSC 3750 - Symphonic Band **Credits: (1-2)**
- MUSC 1760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 3760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 1763 - Guitar Ensemble **Credits: (1)**
- MUSC 3763 - Guitar Ensemble **Credits: (1)**

One of the following Elective courses:

- MUSC 1010 CA - Introduction to Music **Credits: (3)**
- MUSC 1025 CA - History of Country Music **Credits: (3)**
- MUSC 1030 CA - Introduction to Jazz **Credits: (3)**
- MUSC 1033 CA - Introduction to American Music **Credits: (3)**
- MUSC 1035 CA - History of Rock and Roll **Credits: (3)**
- MUSC 1040 CA - Music of World Cultures **Credits: (3)**
- MUSC 1043 HU - Music, the Arts & Civilizations **Credits: (3)**
- MUSC 1063 CA - Music in Religion **Credits: (3)**

Music Studies Minor

The Minor in Music Studies is a course of study for students who wish to experience a broad survey of music courses while also continuing to be engaged in making music. For more information on program requirement, please contact the Department of Performing Arts.

- **Program Prerequisite:** Audition required for admission to the program.
- **Grade Requirements:** A grade of C (2.00) or better in courses used toward the minor.
- **Credit Hour Requirements:** Minimum of 23 credit hours.
- **Program Code:** 3083
- **CIPC:** 500903

Courses Required (23 credit hours minimum)

Required Core Courses

- MUSC 1010 CA - Introduction to Music **Credits: (3)**
- MUSC 1100 - Fundamentals of Music **Credits: (2)**
- MUSC 1901 - Music: The Successful Musician **Credits: (1)**
- MUSC 1006 - Concert Attendance I **Credits: (0)** (must complete two terms)
- MUSC 2006 - Concert Attendance II **Credits: (0)** (must complete two terms)

4 credits of Applied Lessons (courses may be repeated for credit)

- MUSC 1681 - Private Instruction **Credits: (1)**
- MUSC 2681 - Private Instruction **Credits: (1)**
- MUSC 3681 - Private Instruction **Credits: (1)**
- MUSC 4681 - Private Instruction **Credits: (1)**

4 credits of Large Ensemble (courses may be repeated for credit)

- MUSC 1740 - Weber State Concert Choir **Credits: (1)**

- MUSC 3740 - Weber State Concert Choir **Credits: (1)**
- MUSC 1750 - Symphonic Band **Credits: (1-2)**
- MUSC 3750 - Symphonic Band **Credits: (1-2)**
- MUSC 1760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 3760 - Weber State Symphony Orchestra **Credits: (1-2)**
- MUSC 1763 - Guitar Ensemble **Credits: (1)**
- MUSC 3763 - Guitar Ensemble **Credits: (1)**

Electives (9 credits)

Choose three courses from the following list:

- MUSC 1030 CA - Introduction to Jazz **Credits: (3)**
- MUSC 1033 CA - Introduction to American Music **Credits: (3)**
- MUSC 1035 CA - History of Rock and Roll **Credits: (3)**
- MUSC 1040 CA - Music of World Cultures **Credits: (3)**
- MUSC 1043 HU - Music, the Arts & Civilizations **Credits: (3)**
- MUSC 1063 CA - Music in Religion **Credits: (3)**
- MUSC 1025 CA - History of Country Music **Credits: (3)**

Sound Production/Recording Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

Sound Production/Recording is the art and science of capturing and editing music, sound, and dialog. This course of study will prepare the student to succeed as a music producer, recording technician, post-production designer, or other similar fields. The program emphasizes hands-on learning on state-of-the-art equipment.

- **Program Prerequisite:** Successful interview with the program advisor
- **Grade Requirements:** A grade of C (2.00) or better in courses used toward the minor
- **Credit Hour Requirements:** Minimum of 26 credit hours
- **Program Code:** 3076
- **CIPC:** 100203

Advisement

Sound Production/Recording minors should meet with the program advisor at least once an academic year.

Course Requirements for Sound Production/Recording Minor

Required Courses (21 credit hours)

- MUSC 4820 - Pro Tools 101 **Credits: (2)**
- MUSC 4823 - Pro Tools 110 **Credits: (2)**
- MUSC 1820 - The Art and Science of Recording I **Credits: (3)**
- MUSC 1821 - The Art and Science of Recording II **Credits: (3)**
- MUSC 1720 - Analog Audio **Credits: (3)**

- MUSC 1721 - Live Sound in the 21st Century **Credits: (3)**
- MUSC 4995 INT - Capstone Project **Credits: (3)**
- MUSC 1722 - History of Recording **Credits: (2)**

Electives (5 credit hours minimum)

Select a minimum of 5 credit hours from the following

- MUSC 1911 - Introduction to Music Technology **Credits: (1)**
- MUSC 1723 - Field Recording/Sound for Picture **Credits: (2)**
- MUSC 1724 - Studio Construction **Credits: (1)**
- MUSC 1725 - Alternative Digital Audio Workstations **Credits: (2)**
- MUSC 1726 - Creative Lab **Credits: (1)**
 - *Creative Lab may be repeated but only counts toward elective fulfillment once*

Theatre Arts Minor

- **Grade Requirements:** A grade of "C" or better in courses used toward the minor.
- **Credit Hour Requirements:** A minimum of 21 credit hours in Theatre Arts classes.
- **Program Code:** 3046
- **CIPC:** 500501

Program Learning Outcomes:

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Course Requirements for Minor

Theatre Courses Required (21 credit hours)

- THEA 1013 CA - Introduction to Theatre **Credits: (3)**
- THEA 1713 - Script Analysis **Credits: (3)**
- THEA 1033 CA - Introduction to Acting **Credits: (3)** or
- THEA 1220 - Acting I **Credits: (3)**

Select two of the following technical theatre classes (be advised that some of these classes are pre-requisites for UD classes, plan accordingly)

- THEA 1223 - Stage Makeup **Credits: (3)**
- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**
- THEA 2203 - Costume Technology **Credits: (3)**
- THEA 2403 - Stage Management **Credits: (3)**
- THEA 2515 - Rendering and Modeling **Credits: (3)**
- THEA 2574 - Drafting for Theatre **Credits: (3)**
- THEA 2580 - Creative Computing for Theatre Design **Credits: (3)**
- THEA 2581 - Adobe Suite for Theatre Design **Credits: (3)**
- THEA 2821 HU - Period Styles in Design **Credits: (3)**

Select one of the following theatre history classes (3 credit hours)

- THEA 3303 - History and Literature of Theatre I **Credits: (3)**
- THEA 3313 - History and Literature of Theatre II **Credits: (3)**
- THEA 3343 - History & Literature of Musical Theatre **Credits: (3)**

Complete 3 credit hours of upper division Theatre Arts course work. (3 credit hours)

Teaching Minor

Dance Teaching Minor

A dance teaching minor is available for students seeking a concentration of study in dance teaching to complement an affiliated program. Students wishing the minor program must register with the Dance Program advisor.

- **Grade Requirements:** A GPA of 2.25 or better in courses used toward the minor.
- **Credit Hour Requirements:** Minimum of 27 credit hours.
- **Advisement:** Students should meet annually, if not more often, with the faculty advisor for course and program advisement. Email Amanda Sowerby (asowerby@weber.edu) for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List).
- **Program Code:** 3048
- **CIPC:** 131324

Students who select the Dance Teaching Minor and are seeking teacher certification for the state of Utah must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education in this catalog).

Course Requirements for Minor

Dance Teaching Courses Required (27) credit hours

- DANC 1100 - Ballet I **Credits: (2)** (2)
- DANC 1200 - Contemporary/Modern I **Credits: (2)** (2)

- DANC 1500 - Jazz I **Credits: (2)** (2)
- DANC 1520 - Dance in World Cultures **Credits: (2)** (2)
- DANC 1560 - African Dance and Culture I **Credits: (2)** (2)
- DANC 2350 - Dance for Aging Populations **Credits: (2)** (2)
- DANC 2410 - Improvisation **Credits: (2)** (2)
- DANC 3015 - Dance History **Credits: (3)** (3)
- DANC 3320 INT - Secondary Dance Pedagogy **Credits: (3)** (3)
- DANC 3500 - Choreographic Process **Credits: (3)** (3)
- DANC 3640 INT - Elementary Dance Pedagogy **Credits: (3)** (3)
- DANC 4910 INT - Rehearsal and Performance **Credits: (1)** (1)

Theatre Arts Teaching Minor

- **Grade Requirements:** A grade of "C" or better in courses used toward the minor.
- **Credit Hour Requirements:** A minimum of 27 credit hours in Theatre Arts classes.
- **Program Code:** 3047
- **CIPC:** 131324

Students who select the Theatre Arts Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education in this catalog).

Program Learning Outcomes:

Scholarship

Students will analyze and articulate the social, historical, and cultural context of theatrical methods and technologies through research, writing, and discussion, connecting past and present influences on contemporary performance.

Professionalism

Students will demonstrate practical knowledge of production, including individual and collaborative skills essential to staging a theatrical event. They will integrate design, performance, and technical elements, and do so with responsibility, integrity, and accountability.

Artistry

Students will develop and apply skills in creating, analyzing, and evaluating theatrical works, while demonstrating proficiency in at least one specialization within theatre (design, directing, dramaturgy, management, performance, playwriting, teaching, criticism or technology).

Course Requirements for Teaching Minor

Required Courses (27 credit hours)

- THEA 1030 - Voice and Movement for the Actor **Credits: (3)**
- THEA 1220 - Acting I **Credits: (3)**
- THEA 1713 - Script Analysis **Credits: (3)**
- THEA 2330 - Dramaturgy and Criticism **Credits: (3)**
- THEA 2713 INT - Teaching Theatre in the Secondary School **Credits: (3)**
- THEA 3103 INT - Directing I **Credits: (3)**
- THEA 3505 - Playwriting **Credits: (3)**

Select one of the following technical theatre classes (3 credit hours)

- THEA 1223 - Stage Makeup **Credits: (3)**
- THEA 1513 - Stagecraft **Credits: (3)**
- THEA 2022 - Costume Fundamentals **Credits: (3)**
- THEA 2450 - Lighting Fundamentals **Credits: (3)**

Select one of the following theatre history classes (3 credit hours)

- THEA 3303 - History and Literature of Theatre I **Credits: (3)**
- THEA 3313 - History and Literature of Theatre II **Credits: (3)**

Department of Visual Art and Design

Department Chair: Paul Crow

Location: Ethel Wattis Kimball Visual Arts Center

Telephone Contact: Cynthia Kurien 801-626-6455

Professors: Matthew Choberka, Paul Crow, K Stevenson, Joshua Winegar, Stephen Wolochowicz; **Associate**

Professors: Dianna Huxhold, Jason Manley; **Assistant Professors:** Jude Agboada, Micah Bauer, Maria del Mar Gonzalez, Trishelle Jeffery, Thi Nguyen; **Instructors:** Ivy Brenneman, Levi Jackson, Andrew Rice

Our world is partially understood through smell, taste, sound, and touch. But perhaps most of all we make sense of our environment through what we see. The art, architecture, mass media and even the furniture in our spaces bear distinct messages that influence our decisions and enrich life.

Creative processes are exciting. Students of art and design contribute new expression to the vitality of our visual environment and learn to interpret what is seen through trained observation. Innovative thinking is absolutely necessary for success and must be balanced against research and critical judgment. Emphasis is placed on writing and the critical evaluation of artistic products. Students gain experience at preparing exhibits and portfolios for eventual professional activity.

Studies in art and art history offer windows of understanding to other cultures, both past and present. This is one of our primary concerns in preparing citizens for productive relations in an increasingly multicultural society.

Seventy-eight different courses are offered by the Department of Visual Arts. These span traditional areas such as art history, art education, ceramics, drawing, small metals/jewelry, painting, photography, printmaking, sculpture, and visual communication. The department is continually expanding into emerging modes of expression involving digital video, digital photography, animation, interactive design, and sound. Classes are enhanced by public lectures, seminars, workshops and special sessions by critics, historians, and visiting artists.

Weber State University supports three Bachelor's degrees in the visual arts with specializations in most of the areas mentioned above. The Bachelor of Arts and Bachelor of Science degrees provide a broad liberal arts background, a solid base for many careers or further study. The Bachelor of Fine Arts degree is more professionally focused with high concentrations of studio art and art history. The BFA is for students who wish to move directly into professional work in art or design, or those who intend to pursue graduate study in the visual arts. Senior exhibitions are required for most Bachelor of Fine Arts majors.

The Elizabeth Dee Shaw Gallery exhibits art that exemplifies the ideas and values of the curriculum. This serves our students and the public interest as well. Exhibitions involving regional, national, and internationally recognized artists serve a vital role in the cultural life of the community. The Gallery organizes at least six exhibitions each year. All are free and open to the public.

Transfer of Credits

Transfer students must present an official transcript and a portfolio to petition course substitutions for visual arts program requirements. A minimum number of departmental residency hours is required for completion of degree programs: 19 credit hours for the BFA, 12 hours for BS and BA programs, 6 hours for minors.

The University requires students seeking a second baccalaureate degree to complete a full year in residence and a minimum of 30 total credit hours.

Studio Fees

Studio fees are required in most visual arts classes. Check the current course schedule for exact amounts.

Asian Studies Minor

The Department of Visual Arts participates in the Asian Studies Minor Program. Students who wish to enroll in this program should indicate their desire to do so with the program coordinator who will help them work out a proper combination of courses to fit their particular needs. (See the Interdisciplinary Programs section of this catalog.)

Associate of Arts

Art (AA)

An Associate of Arts with an Art major will indicate that a student has completed all WSU AA degree requirements and the Studio Foundations curriculum required for the Bachelor of Arts in Art. Students who have completed the AA degree may continue with intermediate and advanced coursework for the BA, and are eligible to apply for admission to the Bachelor of Fine Arts degree program (Graphic Design, Photography, Art Education, 2-dimensional Media, or 3-dimensional Media).

Grade Requirements: A grade of "C" or better in all courses (a grade of "C-" is not acceptable).

- **Program Code:** 3075AA
- **CIPC:** 500701

Advisement

Art majors are encouraged to meet with a departmental advisor at least annually for course and program advisement. Call 801-626-6762 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree Requirements of this catalog for Associate of Arts requirements.

Studio Foundation Courses

All Art pre-majors are required to take the five Studio Foundations courses:

- ART 1040 - Orientation to Visual Studies **Credits: (3)**
- ART 1110 CA - Drawing I **Credits: (3)**
- ART 1120 - Design Concepts **Credits: (3)**
- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)**
- ART 1135 - Approaches to Materials, Space and Time **Credits: (3)**

Studio Electives

In addition, choose two studio elective courses at the 2000-level, for which the Studio Foundations courses serve as prerequisites. Suggested courses include:

- ART 2200 - Introduction to Printmaking **Credits: (3)**
- ART 2250 - Foundations of Photography: Black & White/Analog **Credits: (3)**
- ART 2310 - Ceramics I **Credits: (3)**
- ART 2350 - Small Metals/Jewelry I **Credits: (3)**
- ART 2430 - Introduction to Graphic Design **Credits: (3)**
- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)**
- ART 2600 - Painting I **Credits: (3)**
- ART 2700 - Sculpture I **Credits: (3)**
- ART 2750 - Foundations of Video Art **Credits: (3)**

Bachelor of Arts

Art (BA)

- **Program Prerequisite:** Not required.
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses required for all majors and minors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation. Of this total, 48 credit hours in Visual Arts are required. A total of 40 upper division credit hours is required by the university for graduation (courses numbered 3000 and above from any department).
- **Program Code:** 3001BA
- **CIPC:** 500701

Advisement

All Art majors and minors should interview with the department chair/advisor early in their course of study. Call the Department of Visual Arts at 801-626-6455 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information) with the department secretary. There are no special admission or application requirements.

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. Either one of the following Foundation courses will also fulfill 3 credit hours of the General Education requirement in the Creative Arts category: ARTH 1090 and ARTH 1100.

Program Learning Outcomes

- Technical Proficiency - Produce technically proficient visual work.
- Conceptual, Ethical, Critical - Utilize conceptual frameworks, ethical reasoning, and critical thinking skills in the making of visual media.
- Learn, Adapt, Apply - Demonstrate the ability to learn, adapt, and apply new techniques, tools, processes, and ideas.
- Assess, Analyze, Synthesize - Assess, analyze, and synthesize historical and contemporary information regarding visual art and design.
- Writing and Oral Communication - Communicate effectively and ethically about visual media through written or oral means.
- Recognize and Identify - Recognize and identify historically influential styles, movements, periods, theories, and practitioners of art and design in a global context.
- Contemporary Professional Practices - Implement contemporary professional practices in the field.
- Cooperation With Peers - Demonstrate the ability to work cooperatively, ethically, and effectively with peers.
- Profession, Practice, Community - Explain visual art and design as a profession, practice, and global community.

Foundation Courses (15 credit hours)

The following are required courses for Art BA majors and should be completed by the end of sophomore year.

- ART 1040 - Orientation to Visual Studies **Credits: (3)**
- ART 1110 CA - Drawing I **Credits: (3)**
- ART 1120 - Design Concepts **Credits: (3)**
- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)**
- ART 1135 - Approaches to Materials, Space and Time **Credits: (3)**

Lower Division Art History Courses (8 credit hours)

Choose two of the following courses

- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 **Credits: (4)**
- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4)**
- ARTH 2050 GLB - Visual Art in a Global Context **Credits: (4)**

Upper Division Art History Requirement (4 credit hours)

Art BA majors are required to take one upper division (3000/4000-level) Art History (ARTH) course.

Required Studio Distribution (9 credit hours)

Select one of the following:

- ART 2200 - Introduction to Printmaking **Credits: (3)**
- ART 2600 - Painting I **Credits: (3)**

Select one of the following:

- ART 2310 - Ceramics I **Credits: (3)**
- ART 2700 - Sculpture I **Credits: (3)**
- ART 2850 - Furniture Design **Credits: (3)**

Select one of the following:

- ART 2250 - Foundations of Photography: Black & White/Analog **Credits: (3)**
- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)**
- ART 2750 - Foundations of Video Art **Credits: (3)**
- ART 3430 - Typography 1 **Credits: (3)**

Studio Electives (12 credit hours)

Select 12 credit hours of studio art coursework.

Language Courses Required to fulfill the BA

General Art majors must complete *Option 1*: Foreign Language (12 credit hours of a foreign language, refer to the Department of World Languages & Cultures section of this catalog for additional information on obtaining foreign language credit)

OR Option 2 - Foreign Language and Language Arts (6 credit hours of a foreign language and 6 credit hours of language arts). With this option students **MUST** take ENGL 3080 Critical Approaches to Literature **AND** one of the following: ART 1040, ARTH 3451, ART 3085, ARTH CA 1090, ARTH CA/GLB 1100, ARTH 2040, ARTH 3030, ARTH 3040, ARTH 3045, ARTH 3050, ARTH 3060, ARTH 3070, ARTH 3080, ARTH 3100, ARTH 3451, ARTH 3950. This language arts requirement is in addition to other discipline specific courses required for the BA. No double dipping.

Art Education (BA)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

Art Education majors are encouraged to consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269) and in the Visual Arts Department (call 801-626-7273).

- **Program Prerequisite:** Not required.
- **Minor:** Required.
- **Grade Requirements:** A grade of "C" or better in courses required for all majors and minors (a grade of "C-" is not acceptable).

- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. Of this total, 48 credit hours in Visual Arts are required. A total of 40 upper division credit hours is required by the university for graduation (courses numbered 3000 and above from any department).
- **Program Code:** 3062BA
- **CIPC:** 131302

Students who select the Art Education Major must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department).

Advisement

All Art Education majors should interview with the department chair/advisor early in their course of study. Call the Department of Visual Arts at 801-626-6455 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

Admission Requirements

All Art Education majors must first declare a Major (program of study - see Student Access and Success, Services and Information) with the department secretary and must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education

Refer to Degree Requirements for either Bachelor of Science or Bachelor of Arts requirements. See also specific requirements for the BS or BA listed under the major course requirements. The following Foundation courses will also fulfill general education requirements in the creative arts category: ARTH 1090 and ARTH 1100.

Program Learning Outcomes

- Technical Proficiency - Produce technically proficient visual work.
- Conceptual, Ethical, Critical - Utilize conceptual frameworks, ethical reasoning, and critical thinking skills in the making of visual media.
- Learn, Adapt, Apply - Demonstrate the ability to learn, adapt, and apply new techniques, tools, processes, and ideas.
- Assess, Analyze, Synthesize - Assess, analyze, and synthesize historical and contemporary information regarding visual art and design.
- Writing and Oral Communication - Communicate effectively and ethically about visual media through written or oral means.
- Recognize and Identify - Recognize and identify historically influential styles, movements, periods, theories, and practitioners of art and design in a global context.
- Contemporary Professional Practices - Implement contemporary professional practices in the field.
- Cooperation With Peers - Demonstrate the ability to work cooperatively, ethically, and effectively with peers.
- Profession, Practice, Community - Explain visual art and design as a profession, practice, and global community.

Foundation Courses (15 credit hours)

The following are required courses for Art Education BA majors and should be completed by the end of sophomore year.

- ART 1040 - Orientation to Visual Studies **Credits: (3)**

- ART 1110 CA - Drawing I **Credits: (3)**
- ART 1120 - Design Concepts **Credits: (3)**
- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)**
- ART 1135 - Approaches to Materials, Space and Time **Credits: (3)**

Lower Division Art History Courses (8 credit hours)

Choose two of the following:

- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 **Credits: (4)**
- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4)**
- ARTH 2050 GLB - Visual Art in a Global Context **Credits: (4)**

Art Education Upper Division Art History Requirement (4 credit hours)

Choose one of the following:

- ARTH 3050 - Contemporary Art **Credits: (4)**
- ARTH 3040 - Global Modernisms **Credits: (4)**

Studio Distribution (9 credit hours)

Select one of the following

- ART 2200 - Introduction to Printmaking **Credits: (3)**
- ART 2600 - Painting I **Credits: (3)**

Select one of the following

- ART 2310 - Ceramics I **Credits: (3)**
- ART 2700 - Sculpture I **Credits: (3)**
- ART 2850 - Furniture Design **Credits: (3)**

Select one of the following

- ART 2250 - Foundations of Photography: Black & White/Analog **Credits: (3)**
- ART 2750 - Foundations of Video Art **Credits: (3)**
- ART 3430 - Typography 1 **Credits: (3)**

Required Courses (6 credit hours)

- ART 3515 - Art Methods and Resources for Secondary Teachers I [Art Methods I] **Credits: (3)**
- ART 3520 - Art Methods and Resources for Secondary Teachers II [Art Methods II] **Credits: (3)**

Studio Electives (6 credit hours)

Select six credit hours of studio art coursework.

Language Courses Required to fulfill the BA

Refer to Degree and General Education Requirements in this catalog and complete Option 1 - Foreign Language listed under Requirements for Bachelor's Degrees, or Option 2 - 6 credit hours of Foreign Language, plus ENGL 3080 and ARTH 3050.

Bachelor of Fine Arts

Art (BFA)

The Bachelor of Fine Arts (BFA) degree is the professional studio-focused undergraduate degree in visual art and graphic design. The degree does not require a Minor, instead focusing on additional studio, art history, and capstone course requirements, making the BFA the preferred preparation for graduate study, and for students planning on careers as independent studio artists and designers. Select from the areas of emphasis listed below for detailed information on BFA admissions and additional program requirements.

Areas of Emphasis

Select one of the following areas of emphasis:

Four-year degree:

Art (BFA), 2D Media Emphasis (drawing, painting, printmaking)

Art (BFA), 3D Media Emphasis (ceramics, sculpture)

Art (BFA), Photo/Video Emphasis

Art (BFA), Graphic Design Emphasis (graphic design in print/interactive media)

Five-year degree:

Art (BFA), Art Education Emphasis

Art (BFA), 2D Media Emphasis

- **Program Prerequisite:** Completion of Foundation courses with minimum grade requirements followed by mandatory advising (refer to the BFA Admission Requirements below).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for all majors and minors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. Of this total, 75 credit hours are required for the BFA degree. A total of 40 upper division credit hours is required by the university for graduation (courses numbered 3000 and above).
- **Program Code:** 3118BFA with 3113 (Two Dimensional Media)
- **CIPC:** 500702 with 500706 (Two Dimensional Media)

Advisement

All Art majors and minors should interview with the department chair/advisor early in their course of study. Call the Department of Visual Arts at 801-626-6455 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

BFA Admission Requirements

All Art majors must first declare a Major in General Art (program of study - see Enrollment Services and Information) with the department secretary. Once the five Foundation courses have been completed with a minimum grade of B- in each, students schedule a mandatory advising meeting with the department chair to declare their BFA major in one of the five studio areas of emphasis. After admittance, students plan their studio elective classes in consultation with the department chair and a faculty advisor from the chosen emphasis area.

Students who select the Art Education emphasis must satisfy the Teacher Education admission and licensure requirements (see Teacher Education department).

General Education

Refer to Degree Requirements for Bachelor of Fine Arts requirements. The following Foundation/elective courses will also fulfill general education requirements in the creative arts category: ARTH 1090 and ARTH 1100.

Program Learning Outcomes

- Technical Proficiency - Produce technically proficient visual work.
- Conceptual, Ethical, Critical - Utilize conceptual frameworks, ethical reasoning, and critical thinking skills in the making of visual media.
- Learn, Adapt, Apply - Demonstrate the ability to learn, adapt, and apply new techniques, tools, processes, and ideas.
- Assess, Analyze, Synthesize - Assess, analyze, and synthesize historical and contemporary information regarding visual art and design.
- Writing and Oral Communication - Communicate effectively and ethically about visual media through written or oral means.
- Recognize and Identify - Recognize and identify historically influential styles, movements, periods, theories, and practitioners of art and design in a global context.
- Contemporary Professional Practices - Implement contemporary professional practices in the field.
- Cooperation With Peers - Demonstrate the ability to work cooperatively, ethically, and effectively with peers.
- Profession, Practice, Community - Explain visual art and design as a profession, practice, and global community.

Course Requirements for the BFA

Foundation (15 credit hours)

The following are required for all BFA majors and should be completed by the end of the sophomore year.

Studio Foundation courses are offered Fall and Spring semesters. Look for an "F" or a "Sp" at the end of Art History and advanced studio course titles to see when they are usually offered. An "e" or an "o" indicates that the course is offered only in even or odd years. Course offering schedules may change. Consult the current course schedule for the latest information. The 1000 level courses should be taken during the freshman year.

- ART 1040 - Orientation to Visual Studies **Credits: (3) F, Sp**

- ART 1110 CA - Drawing I **Credits: (3)** *F, Sp*
- ART 1120 - Design Concepts **Credits: (3)** *F, Sp*
- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)** *F*
- ART 1135 - Approaches to Materials, Space and Time **Credits: (3)** *Sp*

Studio Distribution (9 credit hours)

Photo/Video students must take ART 2430.

- ART 2200 - Introduction to Printmaking **Credits: (3)** or
- ART 2600 - Painting I **Credits: (3)**
- ART 2310 - Ceramics I **Credits: (3)** or
- ART 2700 - Sculpture I **Credits: (3)** or
- ART 2850 - Furniture Design **Credits: (3)**
- ART 2430 - Introduction to Graphic Design **Credits: (3)** or
- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)** or
- ART 2750 - Foundations of Video Art **Credits: (3)**

Art History Lower Division (8 credit hours)

Choose two of the following courses.

- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 **Credits: (4)** *F*
- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4)** *Sp*
- ARTH 2050 GLB - Visual Art in a Global Context **Credits: (4)** *Sp*

Art History Upper Division (8 credit hours)

Choose two upper division (3000/4000-level) Art History (ARTH) courses.

Note: Art Education majors must select either ARTH 3040 or ARTH 3050.

Note: Graphic Design majors must select ARTH 3451.

BFA Capstone

Graphic Design emphasis (6 credit hours) must take ART 3410 and ART 4410

2D, 3D, Art Education, Photo/Video emphasis (9 credit hours) must take ART 3085, ART 3995, and ART 4990.

- ART 3085 - Critical Issues in Art **Credits: (3)**
- ART 3995 - BFA Seminar **Credits: (3)**
- ART 4990 - BFA Thesis **Credits: (3)**
- ART 3410 - Design Seminar for Juniors **Credits: (3)**
- ART 4410 - Design Seminar **Credits: (3)**

Studio Focus Courses

Choose 26 credit hours in consultation with your faculty adviser.

Recommended Courses

- ART 3120 - Figure Drawing **Credits: (3)**
- ART 3200 - Intermediate Printmaking **Credits: (3)**
- ART 3210 - Relief Printmaking **Credits: (3)**
- ART 3215 - Etching Printmaking **Credits: (3)**
- ART 3600 - Painting II **Credits: (3)**
- ART 4110 - Advanced Drawing **Credits: (3)**
- ART 4120 - Advanced Figure Drawing **Credits: (3)**
- ART 4200 - Advanced Printmaking **Credits: (3)**
- ART 4600 - Painting III **Credits: (3)**

Notes:

Visual arts courses that are not being used to fulfill the major requirements (studio distribution, art-history) may fulfill electives credits.

Note:

All undergraduate degrees include a requirement of a minimum 40 credits of Upper Division (3000- and 4000-level) coursework. When choosing Studio Focus electives, it is strongly recommended that students meet with an academic advisor to make sure they are on track to meet this requirement.

Art (BFA), 3D Media Emphasis

- **Program Prerequisite:** Completion of Foundation courses with minimum grade requirements followed by mandatory advising (refer to the BFA Admission Requirements below).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for all majors and minors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. Of this total, 75 credit hours are required for the BFA degree. A total of 40 upper division credit hours is required by the university for graduation (courses numbered 3000 and above).
- **Program Code:** 3118BFA with 3114 (Three Dimensional Media)
- **CIPC:** 500702 with 500706 (Three Dimensional Media)

Advisement

All Art majors and minors should interview with the department chair/advisor early in their course of study. Call the Department of Visual Arts at 801-626-6455 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

BFA Admission Requirements

All Art majors must first declare a Major in General Art (program of study - see Enrollment Services and Information) with the department secretary. Once the five Foundation courses have been completed with a minimum

grade of B- in each, students schedule a mandatory advising meeting with the department chair to declare their BFA major in one of the five studio areas of emphasis. After admittance, students plan their studio elective classes in consultation with the department chair and a faculty advisor from the chosen emphasis area.

Students who select the Art Education emphasis must satisfy the Teacher Education admission and licensure requirements (see Teacher Education department).

General Education

Refer to Degree Requirements for Bachelor of Fine Arts requirements. The following Foundation/elective courses will also fulfill general education requirements in the creative arts category: ARTH 1090 and ARTH 1100.

Program Learning Outcomes

- Technical Proficiency - Produce technically proficient visual work.
- Conceptual, Ethical, Critical - Utilize conceptual frameworks, ethical reasoning, and critical thinking skills in the making of visual media.
- Learn, Adapt, Apply - Demonstrate the ability to learn, adapt, and apply new techniques, tools, processes, and ideas.
- Assess, Analyze, Synthesize - Assess, analyze, and synthesize historical and contemporary information regarding visual art and design.
- Writing and Oral Communication - Communicate effectively and ethically about visual media through written or oral means.
- Recognize and Identify - Recognize and identify historically influential styles, movements, periods, theories, and practitioners of art and design in a global context.
- Contemporary Professional Practices - Implement contemporary professional practices in the field.
- Cooperation With Peers - Demonstrate the ability to work cooperatively, ethically, and effectively with peers.
- Profession, Practice, Community - Explain visual art and design as a profession, practice, and global community.

Course Requirements for the BFA

Foundation (15 credit hours)

The following are required for all BFA majors and should be completed by the end of the sophomore year.

Studio Foundation courses are offered Fall and Spring semesters. Look for an "F" or a "Sp" at the end of Art History and advanced studio course titles to see when they are usually offered. An "e" or an "o" indicates that the course is offered only in even or odd years. Course offering schedules may change. Consult the current course schedule for the latest information. The 1000 level courses should be taken during the freshman year.

- ART 1040 - Orientation to Visual Studies **Credits: (3)** F, Sp
- ART 1110 CA - Drawing I **Credits: (3)** F, Sp
- ART 1120 - Design Concepts **Credits: (3)** F, Sp
- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)** F
- ART 1135 - Approaches to Materials, Space and Time **Credits: (3)** Sp

Studio Distribution (9 credit hours)

Photo/Video students must take ART 2430.

- ART 2200 - Introduction to Printmaking **Credits: (3)** or
- ART 2600 - Painting I **Credits: (3)**
- ART 2310 - Ceramics I **Credits: (3)** or
- ART 2700 - Sculpture I **Credits: (3)** or
- ART 2850 - Furniture Design **Credits: (3)**
- ART 2430 - Introduction to Graphic Design **Credits: (3)** or
- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)** or
- ART 2750 - Foundations of Video Art **Credits: (3)**

Art History Lower Division (8 credit hours)

Choose two of the following courses.

- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 **Credits: (4) F**
- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4) Sp**
- ARTH 2050 GLB - Visual Art in a Global Context **Credits: (4) Sp**

Art History Upper Division (8 credit hours)

Choose two upper division (3000/4000-level) Art History (ARTH) courses.

Note: Art Education majors must select either ARTH 3040 or ARTH 3050.

Note: Graphic Design majors must select ARTH 3451.

BFA Capstone

Graphic Design emphasis (6 credit hours) must take ART 3410 and ART 4410

2D, 3D, Art Education, Photo/Video emphasis (9 credit hours) must take ART 3085, ART 3995, and ART 4990.

- ART 3085 - Critical Issues in Art **Credits: (3)**
- ART 3995 - BFA Seminar **Credits: (3)**
- ART 4990 - BFA Thesis **Credits: (3)**
- ART 3410 - Design Seminar for Juniors **Credits: (3)**
- ART 4410 - Design Seminar **Credits: (3)**

Studio Focus Courses:

Choose 26 credit hours in consultation with your faculty adviser.

Recommended Courses

- ART 2310 - Ceramics I **Credits: (3)**
- ART 2700 - Sculpture I **Credits: (3)**
- ART 2850 - Furniture Design **Credits: (3)**
- ART 3310 - Ceramics II **Credits: (3)**

- ART 3320 - Ceramic Processes **Credits: (3)**
- ART 3700 - Sculpture II **Credits: (3)**
- ART 3720 - Public Art **Credits: (3)**
- ART 4310 - Ceramics III: Intermediate **Credits: (3)**
- ART 4320 - Ceramics IV: Advanced **Credits: (3)**
- ART 4700 - Sculpture III **Credits: (3)**

Notes:

Visual arts courses that are not being used to fulfill the major requirements (studio distribution, art-history) may fulfill electives credits.

Note:

All undergraduate degrees include a requirement of a minimum 40 credits of Upper Division (3000- and 4000-level) coursework. When choosing Studio Focus electives, it is strongly recommended that students meet with an academic advisor to make sure they are on track to meet this requirement.

Art (BFA), Art Education Emphasis

- **Program Prerequisite:** Completion of Foundation courses with minimum grade requirements followed by mandatory advising (refer to the BFA Admission Requirements below).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for all majors and minors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. Of this total, 75 credit hours are required for the BFA degree. A total of 40 upper division credit hours is required by the university for graduation (courses numbered 3000 and above).
- **Program Code:** 3118BFA with 3117 (Art Education)
- **CIPC:** 500702 with 131302 (Art Education)

Advisement

All Art majors and minors should interview with the department chair/advisor early in their course of study. Call the Department of Visual Arts at 801-626-6455 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

BFA Admission Requirements

All Art majors must first declare a Major in General Art (program of study - see Enrollment Services and Information) with the department secretary. Once the five Foundation courses have been completed with a minimum grade of B- in each, students schedule a mandatory advising meeting with the department chair to declare their BFA major in one of the five studio areas of emphasis. After admittance, students plan their studio elective classes in consultation with the department chair and a faculty advisor from the chosen emphasis area.

Students who select the Art Education emphasis must satisfy the Teacher Education admission and licensure requirements (see Teacher Education department).

General Education

Refer to Degree Requirements for Bachelor of Fine Arts requirements. The following Foundation/elective courses will also fulfill general education requirements in the creative arts category: ARTH 1090 and ARTH 1100.

Program Learning Outcomes

- Technical Proficiency - Produce technically proficient visual work.
- Conceptual, Ethical, Critical - Utilize conceptual frameworks, ethical reasoning, and critical thinking skills in the making of visual media.
- Learn, Adapt, Apply - Demonstrate the ability to learn, adapt, and apply new techniques, tools, processes, and ideas.
- Assess, Analyze, Synthesize - Assess, analyze, and synthesize historical and contemporary information regarding visual art and design.
- Writing and Oral Communication - Communicate effectively and ethically about visual media through written or oral means.
- Recognize and Identify - Recognize and identify historically influential styles, movements, periods, theories, and practitioners of art and design in a global context.
- Contemporary Professional Practices - Implement contemporary professional practices in the field.
- Cooperation With Peers - Demonstrate the ability to work cooperatively, ethically, and effectively with peers.
- Profession, Practice, Community - Explain visual art and design as a profession, practice, and global community.

Course Requirements for the BFA

Foundation (15 credit hours)

The following are required for all BFA majors and should be completed by the end of the sophomore year.

Studio Foundation courses are offered Fall and Spring semesters. Look for an "F" or a "Sp" at the end of Art History and advanced studio course titles to see when they are usually offered. An "e" or an "o" indicates that the course is offered only in even or odd years. Course offering schedules may change. Consult the current course schedule for the latest information. The 1000 level courses should be taken during the freshman year.

- ART 1040 - Orientation to Visual Studies **Credits: (3)** *F, Sp*
- ART 1110 CA - Drawing I **Credits: (3)** *F, Sp*
- ART 1120 - Design Concepts **Credits: (3)** *F, Sp*
- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)** *F*
- ART 1135 - Approaches to Materials, Space and Time **Credits: (3)** *Sp*

Studio Distribution (9 credit hours)

Photo/Video students must take ART 2430.

- ART 2200 - Introduction to Printmaking **Credits: (3)** or
- ART 2600 - Painting I **Credits: (3)**
- ART 2310 - Ceramics I **Credits: (3)** or
- ART 2700 - Sculpture I **Credits: (3)** or
- ART 2850 - Furniture Design **Credits: (3)**

- ART 2430 - Introduction to Graphic Design **Credits: (3)** or
- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)** or
- ART 2750 - Foundations of Video Art **Credits: (3)**

Art History Lower Division (8 credit hours)

Choose two of the following courses.

- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 **Credits: (4)** *F*
- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4)** *Sp*
- ARTH 2050 GLB - Visual Art in a Global Context **Credits: (4)** *Sp*

Art History Upper Division (8 credit hours)

Choose two upper division (3000/4000-level) Art History (ARTH) courses.

Note: Art Education majors must select either ARTH 3040 or ARTH 3050.

Note: Graphic Design majors must select ARTH 3451.

BFA Capstone

Graphic Design emphasis (6 credit hours) must take ART 3410 and ART 4410

2D, 3D, Art Education, Photo/Video emphasis (9 credit hours) must take ART 3085, ART 3995, and ART 4990.

- ART 3085 - Critical Issues in Art **Credits: (3)**
- ART 3995 - BFA Seminar **Credits: (3)**
- ART 4990 - BFA Thesis **Credits: (3)**
- ART 3410 - Design Seminar for Juniors **Credits: (3)**
- ART 4410 - Design Seminar **Credits: (3)**

Required Studio Distribution (9 credit hours)

- ART 2200 - Introduction to Printmaking **Credits: (3)** or
- ART 2600 - Painting I **Credits: (3)**
- ART 2310 - Ceramics I **Credits: (3)** or
- ART 2700 - Sculpture I **Credits: (3)** or
- ART 2850 - Furniture Design **Credits: (3)**
- ART 2430 - Introduction to Graphic Design **Credits: (3)** or
- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)** or
- ART 2750 - Foundations of Video Art **Credits: (3)**

Studio Focus Courses:

Required (6 credits)

- ART 3515 - Art Methods and Resources for Secondary Teachers I [Art Methods I] **Credits: (3)** (see note under emphasis section)
- ART 3520 - Art Methods and Resources for Secondary Teachers II [Art Methods II] **Credits: (3)**

Note: Prerequisites for Art Methods I (ART 3515) include ARTH 1100 CA/GLB and either ARTH 3040 or ARTH 3050.

Electives (20 credits)

Choose 20 credit hours in consultation with your faculty adviser. Courses will depend on area of emphasis.

Note:

All undergraduate degrees include a requirement of a minimum 40 credits of Upper Division (3000- and 4000-level) coursework. When choosing Studio Focus electives, it is strongly recommended that students meet with an academic advisor to make sure they are on track to meet this requirement.

Art (BFA), Graphic Design Emphasis

- **Program Prerequisite:** Completion of Foundation courses with minimum grade requirements followed by mandatory advising (refer to the BFA Admission Requirements below).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for all majors and minors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. Of this total, 75 credit hours are required for the BFA degree. A total of 40 upper division credit hours is required by the university for graduation (courses numbered 3000 and above).
- **Program Code:** 3118BFA with 3116 (Graphic Design)
- **CIPC:** 500702 with 500409 (Graphic Design)

Advisement

All Art majors and minors should interview with the department chair/advisor early in their course of study. Call the Department of Visual Arts at 801-626-6455 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

BFA Admission Requirements

All Art majors must first declare a Major in General Art (program of study - see Enrollment Services and Information) with the department secretary. Once the five Foundation courses have been completed with a minimum grade of B- in each, students schedule a mandatory advising meeting with the department chair to declare their BFA major in one of the five studio areas of emphasis. After admittance, students plan their studio elective classes in consultation with the department chair and a faculty advisor from the chosen emphasis area.

Students who select the Art Education emphasis must satisfy the Teacher Education admission and licensure requirements (see Teacher Education department).

General Education

Refer to Degree Requirements for Bachelor of Fine Arts requirements. The following Foundation/elective courses will also fulfill general education requirements in the creative arts category: ARTH 1090 and ARTH 1100.

Program Learning Outcomes

- Technical Proficiency - Produce technically proficient visual work.
- Conceptual, Ethical, Critical - Utilize conceptual frameworks, ethical reasoning, and critical thinking skills in the making of visual media.
- Learn, Adapt, Apply - Demonstrate the ability to learn, adapt, and apply new techniques, tools, processes, and ideas.
- Assess, Analyze, Synthesize - Assess, analyze, and synthesize historical and contemporary information regarding visual art and design.
- Writing and Oral Communication - Communicate effectively and ethically about visual media through written or oral means.
- Recognize and Identify - Recognize and identify historically influential styles, movements, periods, theories, and practitioners of art and design in a global context.
- Contemporary Professional Practices - Implement contemporary professional practices in the field.
- Cooperation With Peers - Demonstrate the ability to work cooperatively, ethically, and effectively with peers.
- Profession, Practice, Community - Explain visual art and design as a profession, practice, and global community.

Course Requirements for the BFA

Foundation (15 credit hours)

The following are required for all BFA majors and should be completed by the end of the sophomore year.

Studio Foundation courses are offered Fall and Spring semesters. Look for an "F" or a "Sp" at the end of Art History and advanced studio course titles to see when they are usually offered. An "e" or an "o" indicates that the course is offered only in even or odd years. Course offering schedules may change. Consult the current course schedule for the latest information. The 1000 level courses should be taken during the freshman year.

- ART 1040 - Orientation to Visual Studies **Credits: (3)** *F, Sp*
- ART 1110 CA - Drawing I **Credits: (3)** *F, Sp*
- ART 1120 - Design Concepts **Credits: (3)** *F, Sp*
- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)** *F*
- ART 1135 - Approaches to Materials, Space and Time **Credits: (3)** *Sp*

Studio Distribution (9 credit hours)

Photo/Video students must take ART 2430.

- ART 2200 - Introduction to Printmaking **Credits: (3)** or
- ART 2600 - Painting I **Credits: (3)**

- ART 2310 - Ceramics I **Credits: (3)** or
- ART 2700 - Sculpture I **Credits: (3)** or
- ART 2850 - Furniture Design **Credits: (3)**

- ART 2430 - Introduction to Graphic Design **Credits: (3)** or
- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)** or
- ART 2750 - Foundations of Video Art **Credits: (3)**

Art History Lower Division (8 credit hours)

Choose two of the following courses.

- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 **Credits: (4)** *F*
- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4)** *Sp*
- ARTH 2050 GLB - Visual Art in a Global Context **Credits: (4)** *Sp*

Art History Upper Division (8 credit hours)

Choose two upper division (3000/4000-level) Art History (ARTH) courses.

Note: Art Education majors must select either ARTH 3040 or ARTH 3050.

Note: Graphic Design majors must select ARTH 3451.

BFA Capstone

Graphic Design emphasis (6 credit hours) must take ART 3410 and ART 4410

2D, 3D, Art Education, Photo/Video emphasis (9 credit hours) must take ART 3085, ART 3995, and ART 4990.

- ART 3085 - Critical Issues in Art **Credits: (3)**
- ART 3995 - BFA Seminar **Credits: (3)**
- ART 4990 - BFA Thesis **Credits: (3)**
- ART 3410 - Design Seminar for Juniors **Credits: (3)**
- ART 4410 - Design Seminar **Credits: (3)**

Studio Focus Courses (45 credit hours)

Required Courses (25 credit hours)

- ART 2430 - Introduction to Graphic Design **Credits: (3)**
- ART 2435 - Graphic Design Practice **Credits: (3)**
- ART 3410 - Design Seminar for Juniors **Credits: (3)**
- ART 3430 - Typography 1 **Credits: (3)**
- ART 3435 - Typography 2 **Credits: (3)**
- ART 3445 - Interaction Design 1 **Credits: (3)**
- ART 4400 - Advanced Graphic Design **Credits: (3)**
- ARTH 3451 - Design History and Theory **Credits: (4)**

Elective Courses (20 credit hours)

- ART 2200 - Introduction to Printmaking **Credits: (3)**

- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)**
- ART 3200 - Intermediate Printmaking **Credits: (3)**
- ART 3460 - Illustration **Credits: (3)**
- ART 3465 - Motion Design **Credits: (3)**
- ART 4200 - Advanced Printmaking **Credits: (3)**
- ART 4400 - Advanced Graphic Design **Credits: (3)**
- ART 4415 - Design Production **Credits: (3)**
- ART 4420 - Advanced Digital Media **Credits: (3)**
- ART 4440 - Interaction Design 2 **Credits: (3)**
- ART 4460 - Advanced Illustration **Credits: (3)**
- ART 4890 INT - Cooperative Work Experience **Credits: (1-2)** (by arrangement only for (1) credit)
- ART 4500 - Special Topics in Graphic Design **Credits: (3)**

Note:

All undergraduate degrees include a requirement of a minimum 40 credits of Upper Division (3000- and 4000-level) coursework. When choosing Studio Focus electives, it is strongly recommended that students meet with an academic advisor to make sure they are on track to meet this requirement.

Art (BFA), Photo/Video Emphasis

- **Program Prerequisite:** Completion of Foundation courses with minimum grade requirements followed by mandatory advisement (refer to the BFA Admission Requirements below).
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for all majors and minors (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours is required for graduation. Of this total, 75 credit hours are required for the BFA degree. A total of 40 upper division credit hours is required by the university for graduation (courses numbered 3000 and above).
- **Program Code:** 3118BFA with 3115 (Photo/Video)
- **CIPC:** 500702 with 500605 (Photo/Video)

Advisement

All Art majors and minors should interview with the department chair/advisor early in their course of study. Call the Department of Visual Arts at 801-626-6455 for more information or to schedule an appointment. (Also refer to the Department Advisor Referral List.)

BFA Admission Requirements

All Art majors must first declare a Major in General Art (program of study - see Enrollment Services and Information) with the department secretary. Once the five Foundation courses have been completed with a minimum grade of B- in each, students schedule a mandatory advising meeting with the department chair to declare their BFA major in one of the five studio areas of emphasis. After admittance, students plan their studio elective classes in consultation with the department chair and a faculty advisor from the chosen emphasis area.

Students who select the Art Education emphasis must satisfy the Teacher Education admission and licensure requirements (see Teacher Education department).

General Education

Refer to Degree Requirements for Bachelor of Fine Arts requirements. The following Foundation/elective courses will also fulfill general education requirements in the creative arts category: ARTH 1090 and ARTH 1100.

Program Learning Outcomes

- Technical Proficiency - Produce technically proficient visual work.
- Conceptual, Ethical, Critical - Utilize conceptual frameworks, ethical reasoning, and critical thinking skills in the making of visual media.
- Learn, Adapt, Apply - Demonstrate the ability to learn, adapt, and apply new techniques, tools, processes, and ideas.
- Assess, Analyze, Synthesize - Assess, analyze, and synthesize historical and contemporary information regarding visual art and design.
- Writing and Oral Communication - Communicate effectively and ethically about visual media through written or oral means.
- Recognize and Identify - Recognize and identify historically influential styles, movements, periods, theories, and practitioners of art and design in a global context.
- Contemporary Professional Practices - Implement contemporary professional practices in the field.
- Cooperation With Peers - Demonstrate the ability to work cooperatively, ethically, and effectively with peers.
- Profession, Practice, Community - Explain visual art and design as a profession, practice, and global community.

Course Requirements for the BFA

Foundation (15 credit hours)

The following are required for all BFA majors and should be completed by the end of the sophomore year.

Studio Foundation courses are offered Fall and Spring semesters. Look for an "F" or a "Sp" at the end of Art History and advanced studio course titles to see when they are usually offered. An "e" or an "o" indicates that the course is offered only in even or odd years. Course offering schedules may change. Consult the current course schedule for the latest information. The 1000 level courses should be taken during the freshman year.

- ART 1040 - Orientation to Visual Studies **Credits: (3)** *F, Sp*
- ART 1110 CA - Drawing I **Credits: (3)** *F, Sp*
- ART 1120 - Design Concepts **Credits: (3)** *F, Sp*
- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)** *F*
- ART 1135 - Approaches to Materials, Space and Time **Credits: (3)** *Sp*

Studio Distribution (9 credit hours)

Photo/Video students must take ART 2430.

- ART 2200 - Introduction to Printmaking **Credits: (3)** or
- ART 2600 - Painting I **Credits: (3)**
- ART 2310 - Ceramics I **Credits: (3)** or
- ART 2700 - Sculpture I **Credits: (3)** or

- ART 2850 - Furniture Design **Credits: (3)**
- ART 2430 - Introduction to Graphic Design **Credits: (3)** or
- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)** or
- ART 2750 - Foundations of Video Art **Credits: (3)**

Art History Lower Division (8 credit hours)

Choose two of the following courses.

- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 **Credits: (4) F**
- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4) Sp**
- ARTH 2050 GLB - Visual Art in a Global Context **Credits: (4) Sp**

Art History Upper Division (8 credit hours)

Choose two upper division (3000/4000-level) Art History (ARTH) courses.

Note: Art Education majors must select either ARTH 3040 or ARTH 3050.

Note: Graphic Design majors must select ARTH 3451.

BFA Capstone

Graphic Design emphasis (6 credit hours) must take ART 3410 and ART 4410

2D, 3D, Art Education, Photo/Video emphasis (9 credit hours) must take ART 3085, ART 3995, and ART 4990.

- ART 3085 - Critical Issues in Art **Credits: (3)**
- ART 3995 - BFA Seminar **Credits: (3)**
- ART 4990 - BFA Thesis **Credits: (3)**
- ART 3410 - Design Seminar for Juniors **Credits: (3)**
- ART 4410 - Design Seminar **Credits: (3)**

Studio Focus Courses:

Required (12 credit hours)

- ART 2250 - Foundations of Photography: Black & White/Analog **Credits: (3)**
- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)**
- ART 2750 - Foundations of Video Art **Credits: (3)**
- ART 3150 - Intermediate Photography: Seminar **Credits: (3)**

Electives (minimum of 14 credit hours)

Choose 14 credit hours in consultation with your faculty adviser. Other courses may be considered.

- ART 3500 - Advanced Time-Based Media/Video Art **Credits: (3)**
- ART 3550 - Advanced Photography: View Camera **Credits: (3)**

- ART 4550 - Advanced Photography: Lighting for Photo & Video **Credits: (3)**
- ART 4660 - Advanced Photography: Special Topics **Credits: (3)**
- ART 4750 - Advanced Photography: Experimental Strategies **Credits: (3)**
- ART 4910 INT - Advanced Photography: Internship **Credits: (1-3)**
- ARTH 3950 - Photography: History, Theory and Criticism **Credits: (4)**

Note:

All undergraduate degrees include a requirement of a minimum 40 credits of Upper Division (3000- and 4000-level) coursework. When choosing Studio Focus electives, it is strongly recommended that students meet with an academic advisor to make sure they are on track to meet this requirement.

Minor

Art History Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 23 credit hours.
- **Program Code:** 3011
- **CIPC:** 500703

Course Requirements for Minor

Required Courses (15 credit hours)

- ART 1040 - Orientation to Visual Studies **Credits: (3)**
- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 **Credits: (4)**
- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4)**
- ARTH 2050 GLB - Visual Art in a Global Context **Credits: (4)**

Elective Course (8 credit hours)

Select two upper division art history (ARTH) courses for elective credit.

Note:

Courses which satisfy major requirements cannot also satisfy minor requirements. Substitutions must be made for the Art Major student minoring in Art History. Consult with the Department of Visual Arts Chair.

Art Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 24 credit hours.
- **Program Code:** 3003
- **CIPC:** 500701

Course Requirements for Minor

Required Courses (15 credit hours)

- ART 1040 - Orientation to Visual Studies **Credits: (3)**
- ART 1110 CA - Drawing I **Credits: (3)**
- ART 1120 - Design Concepts **Credits: (3)**
- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)**
- ART 1135 - Approaches to Materials, Space and Time **Credits: (3)**

Electives Courses (9 credit hours)

Choose nine credit hours of art courses in consultation with the Department of Visual Arts Chair.

Note:

General Art, Art Education and BFA majors cannot declare an Art minor. Art History, Art Education, and Photography are the only departmental minor options for the art major. Courses which satisfy major requirements cannot also satisfy minor requirements. Substitutions must be made. Consult with the Department of Visual Arts Chair.

Design for Digital Media Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 24 credit hours.
- **Program Code:** 3064
- **CIPC:** 090702

Course Requirements for Minor

Core Courses Required (12 credit hours)

- ART 1110 CA - Drawing I **Credits: (3)**
- ART 1120 - Design Concepts **Credits: (3)**

- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)**
- ART 2430 - Introduction to Graphic Design **Credits: (3)**

Track Courses Required (12 credit hours)

Complete the courses for one of the following tracks

Web Design Track

- ART 2435 - Graphic Design Practice **Credits: (3)**
- ART 3430 - Typography 1 **Credits: (3)**
- ART 3445 - Interaction Design 1 **Credits: (3)**
- ART 4440 - Interaction Design 2 **Credits: (3)**

Gaming Track

- ART 3460 - Illustration **Credits: (3)**
- ART 4420 - Advanced Digital Media **Credits: (3)**
- ART 4440 - Interaction Design 2 **Credits: (3)**
- ART 4460 - Advanced Illustration **Credits: (3)**

Photography Minor/BIS

The BIS program has been suspended pending formal discontinuance and is no longer accepting new students. The minor program is still accepting students.

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 24 credit hours.
- **Program Code:** 3007
- **CIPC:** 500605

Course Requirements for Minor

Required Courses (12 credit hours)

- ART 1040 - Orientation to Visual Studies **Credits: (3)**
- ART 2250 - Foundations of Photography: Black & White/Analog **Credits: (3)**
- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)**
- ART 3150 - Intermediate Photography: Seminar **Credits: (3)**

Electives (12 credit hours minimum)

Select a minimum of 12 credit hours from the following

- ART 2750 - Foundations of Video Art **Credits: (3)**
- ART 3550 - Advanced Photography: View Camera **Credits: (3)**

- ART 4550 - Advanced Photography: Lighting for Photo & Video **Credits: (3)**
- ART 4660 - Advanced Photography: Special Topics **Credits: (3)**
- ART 4750 - Advanced Photography: Experimental Strategies **Credits: (3)**
- ARTH 3950 - Photography: History, Theory and Criticism **Credits: (4)**

Note:

Courses which satisfy major requirements cannot also satisfy minor requirements. Substitutions must be made for the Art Major student minoring in Photography. Consult with the Department of Visual Arts Chair.

Teaching Minor

Art Education Minor

- **Grade Requirements:** A grade of "C" or better in all courses used toward the minor (a grade of "C-" is not acceptable).
- **Credit Hour Requirements:** A minimum of 24 credit hours.
- **Program Code:** 3062
- **CIPC:** 131302

Students who select the Art Education Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Course Requirements for Minor

Required Courses (18 credit hours)

- ART 1010 CA - Introduction to the Visual Arts **Credits: (3)**
- ART 1110 CA - Drawing I **Credits: (3)**
- ART 1120 - Design Concepts **Credits: (3)**
- ART 1130 - Approaches to Surface, Shape and Form **Credits: (3)**
- ART 3515 - Art Methods and Resources for Secondary Teachers I [Art Methods I] **Credits: (3)**
- ART 3520 - Art Methods and Resources for Secondary Teachers II [Art Methods II] **Credits: (3)**

Elective Course (6 credit hours)

Select two courses from the following

- ART 2200 - Introduction to Printmaking **Credits: (3)**
- ART 2250 - Foundations of Photography: Black & White/Analog **Credits: (3)**
- ART 2310 - Ceramics I **Credits: (3)**
- ART 2350 - Small Metals/Jewelry I **Credits: (3)**
- ART 2600 - Painting I **Credits: (3)**
- ART 2700 - Sculpture I **Credits: (3)**
- ART 3430 - Typography 1 **Credits: (3)**
- ART 2430 - Introduction to Graphic Design **Credits: (3)**
- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 **Credits: (4)**

- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4)**
- ARTH 2040 - Art and Architecture of Asia **Credits: (4)**

Note:

Courses which satisfy major requirements cannot also satisfy minor requirements. Substitutions must be made for the Art Major student minoring in Art Education. Consult with the Department of Visual Arts Chair.

Master of Arts in English Program

English Department Chair: Hal Crimmel

Program Director: David Hartwig, 801-626-7461

Location: Elizabeth Hall, Room 443

Telephone Contact: Miranda McPherson, 801-626-7179

The Master of Arts in English program offers traditional graduate students and working adults advanced preparation in the study of English language and literature.

The curriculum is composed of 2 and 3 credit hour classes that fall into the following broad categories:

- American Literature
- British Literature
- Teacher Education
- World Literature
- Linguistics

Post Baccalaureate Certificate

Rhetoric and Writing Studies Post Baccalaureate Certificate

This certificate will provide students with advanced training in Rhetoric and Writing Studies with an emphasis on the teaching of college-level composition.

- **Grade Requirements:** Students must receive a grade of B- or better in every course.
- **Credit Hour Requirements:** The program of study consists of 12 credit hours. This includes 9 credit hours of required courses and a minimum of 3 credit hours of electives.
- **Program Code:** 3090PBC
- **CIPC:** 231304

Gainful Employment Disclosure

Admission Requirements

Admission to the MENG program requires a bachelor's degree in English. Students with less English preparation may petition for conditional admission which may require that they take additional classes at the 5000-level for full matriculation.

Applicants must complete an online application. Criteria for acceptance into the program include:

- Undergraduate degree in English with a minimum GPA of 3.25 in the major (preferred)
- Submission of writing sample (4-8 pages)
- Transcripts from all institutions of higher education attended
- Three letters of recommendation from educational or professional references
- Interview with the program director or option coordinator

Additional Requirements for International Students

All international students and any applicants educated outside the United States must demonstrate proficiency in English. Those whose native language is not English must submit an official score from the Test of English as a Foreign Language (TOEFL) of 108 overall, or an IELTS score of 7.5 OR provide equivalent demonstration of language proficiency as established through the Weber State International Student and Scholar Center. The score may not be more than two years old.

Students with bachelor's degrees from institutions outside the United States will be required to submit professional transcript evaluations.

Program Learning Outcomes

Students will demonstrate...

1. The ability to identify and apply the ways rhetoric and writing studies creates knowledge, solves problems, and/or generates meaningful pedagogies.
2. Informed research practices related to the major ideas and movements of rhetoric and writing studies.
3. An understanding of how differences in language and everyday lived realities are intellectually generative and fundamental to contemporary ethical practices.

Required Courses

- MENG 6130 - Theories of Rhetoric and Writing Studies **Credits: (3)**
- MENG 6140 - Foundations of Professional and Technical Writing **Credits: (3)**
- MENG 6822 - Teaching College Writing **Credits: (2)**
- MENG 6823 - Teaching Practicum **Credits: (1)**

Elective Courses

Choose one (1) of the following courses.

- MENG 6110 - Writing for Teachers **Credits: (3)**
- MENG 6330 - Literary and Rhetorical Stylistics **Credits: (3)**
- MENG 6730 - Prose Forms and Crafts **Credits: (3)**
- MENG 6150 - Grant Writing **Credits: (3)**
- MENG 6230 - Wasatch Range Writing Project Summer Institute **Credits: (1-6)**
- MENG 6231 - Wasatch Range Writing Project Advanced Institute **Credits: (1-6)**

Master of Arts

Master of Arts in English (MA)

Areas of Emphasis

Select one of the following areas of emphasis:

- Master of Arts in English (MA), Creative Writing Emphasis
- Master of Arts in English (MA), Literature Emphasis
- Master of Arts in English (MA), English Education Emphasis
- Master of Arts in English (MA), English Studies Emphasis

Master of Arts in English (MA), Creative Writing Emphasis

- **Program Code:** 3056MENG with an emphasis in Creative Writing (3110), Literature (3111), English Education (3119) or English Studies (3125)
- **CIPC:** Master of English (230101), Creative Writing (231302), Literature (231401), English Education (131305) or English Studies (230101)

Admission Requirements

Admission to the MENG program requires a bachelor's degree in English. Students with less English preparation may petition for conditional admission which may require that they take additional classes at the 5000-level for full matriculation.

Applicants must complete an online application. Criteria for acceptance into the program include:

- Undergraduate degree in English with a minimum GPA of 3.25 in the major (preferred)
- Submission of writing sample (6-8 pages)
- Transcripts from all institutions of higher education attended
- Three letters of recommendation from educational or professional references
- Interview with the program director or option coordinator

Additional Requirements for International Students

All international students and any applicants educated outside the United States must demonstrate proficiency in English. Those whose native language is not English must submit an official score from the Test of English as a Foreign Language (TOEFL) of 108 overall, or an IELTS score of 7.5 OR provide equivalent demonstration of language proficiency as established through the Weber State International Student and Scholar Center. The score may not be more than two years old.

Students with bachelor's degrees from institutions outside the United States will be required to submit professional transcript evaluations.

Transfer Credits

- Transfer credit must be approved by the program director and cannot exceed 11 credit hours. Transfer classes must be at appropriate levels and fulfill the objectives of the Master of Arts in English degree at WSU. No courses for which credit was used to fulfill requirements of another degree may be used toward the Master of Arts in English degree.

Obsolete Credits

- Credit earned more than ten (10) years earlier than the proposed date of graduation will not be accepted for the MA degree unless approved by the program director.

Graduation Requirements

- Credit hour requirements are determined within the option. A minimum of 24 credit hours at the 6000-level and a minimum of 33 total credit hours are required in the program. Students must complete all requirements in one of the emphasis options.
- Grades of B- or better in all courses counting toward the degree.
- Students with a BS degree must show foreign language competency either by completing six hours of a foreign language class with a grade of C (or better) or by passing a prescribed foreign language reading test.
- Students not completing a thesis will be required to submit a portfolio of their work to the program for assessment purposes.

Time for Degree Completion

- MENG students must receive approval from the program director to register for more than nine (9) credit hours in a semester.
- MENG students have a maximum of six calendar years to complete their degree requirements, starting from the first semester during which the student has registered for and begun taking classes. Students who exceed this time limit may submit a letter of appeal to the program director to request an extension.
- Students who fail to enroll in program classes for three consecutive semesters (not including summers) must apply for readmission to the program.
- In order to ensure timely progress through the program, students are encouraged to consult with an advisor at least once a year.

Program Learning Outcomes

- Students will demonstrate...
 1. The ability to gather, analyze, and communicate information and insights critically.
 2. The ability to closely read and analyze texts within historical contexts and critical frameworks.
 3. A developed and honed voice, as evident in polished creative works.
 4. An awareness of their own aesthetic practices in the continuum of literary traditions and genres.
 5. Sophisticated revision and editing tactics

Master of Arts in English (MA)

Course Requirements for Master of Arts in English

All MENG students will be required to complete the Core Requirements as part of their degree. In addition to the Core, a student needs to complete one of the emphasis areas.

Core Requirements

Core Research Methods

Required in the first full semester (Fall/Spring) of enrollment.

- MENG 6010 - Introduction to Graduate Studies **Credits: (3)**

Core Literary Studies

Select one course from the following:

(Note: These courses may be repeated for credit with different content).

- MENG 6510 - Seminar in Eminent Writers: **Credits: (2-3)**
- MENG 6240 - Seminar in American Literature **Credits: (3)**
- MENG 6250 - Seminar in British Literature **Credits: (3)**
- MENG 6260 - Seminar in World Literature **Credits: (3)**

Creative Writing Emphasis Requirements

Forms and Crafts

Select one course from the following options (3 credit hours):

- MENG 6730 - Prose Forms and Crafts **Credits: (3)**
- MENG 6731 - Verse Forms and Craft **Credits: (3)**

Creative Writing Workshops

Select two courses from the following repeatable seminars (6 credit hours):

- MENG 6740 - Creative Nonfiction Writing **Credits: (3)**
- MENG 6750 - Fiction Writing **Credits: (3)**
- MENG 6760 - Poetry Writing **Credits: (3)**
- MENG 6770 - Screenwriting **Credits: (3)**

Thesis Option (3-6 credit hours)

Students interested in pursuing further study after the MA are encouraged to complete a thesis. The semester before the thesis, students are required to submit a detailed proposal with approval from a faculty thesis committee. This proposal must demonstrate an original contribution to the field that approaches publication quality. Thesis proposals must indicate workload consistent with a 3-6 credit hour graduate course.

- MENG 6950 - Creative Writing Thesis: Fiction, Nonfiction, Poetry **Credits: (1-6)**

Electives

Elective courses must be taken to fulfill the remaining credit hours to achieve the minimum 33 credit hours required to graduate. This will be 15 credits for students who choose the Thesis Option, and 18 credits for students who opt not to complete a thesis. Any MENG course will count as an elective, and graduate-level courses from other programs may be counted upon consultation with the program director.

Master of Arts in English (MA), English Education Emphasis

- **Program Code:** 3056MENG with an emphasis in Creative Writing (3110), Literature (3111), English Education (3119) or English Studies (3125)
- **CIPC:** Master of English (230101), Creative Writing (231302), Literature (231401), English Education (131305) or English Studies (230101)

Admission Requirements

Admission to the MA program requires a bachelor's degree in English. Students with less English preparation may petition for conditional admission which may require that they take additional classes at the 5000-level for full matriculation. Applicants must complete an online application. Criteria for acceptance into the program include: Undergraduate degree in English with a minimum GPA of 3.25 in the major (preferred) Submission of writing sample (6-8 pages) Transcripts from all institutions of higher education attended Three letters of recommendation from educational or professional references Interview with the program director or option coordinator

Additional Requirements for International Students

All international students and any applicants educated outside the United States must demonstrate proficiency in English. Those whose native language is not English must submit an official score from the Test of English as a Foreign Language (TOEFL) of 108 overall, or an IELTS score of 7.5 OR provide equivalent demonstration of language proficiency as established through the Weber State International Student and Scholar Center. The score may not be more than two years old.

Students with bachelor's degrees from institutions outside the United States will be required to submit professional transcript evaluations.

Transfer Credits

Transfer credit must be approved by the program director and cannot exceed 11 credit hours. Transfer classes must be at appropriate levels and fulfill the objectives of the Master of Arts in English degree at WSU. No courses for which credit was used to fulfill requirements of another degree may be used toward the Master of Arts in English degree.

Obsolete Credits

Credit earned more than ten (10) years earlier than the proposed date of graduation will not be accepted for the MA degree unless approved by the program director.

Graduation Requirements

Credit hour requirements are determined within the option. A minimum of 24 credit hours at the 6000-level and a minimum of 33 total credit hours are required in the program. Students must complete all requirements in one of the options. Grades of B- or better in all courses counting toward the degree. Students with a BS degree must show foreign language competency either by completing six hours of a foreign language class with a grade of C (or better) or by passing a prescribed foreign language reading test. Students not completing a thesis will be required to submit a portfolio of their work to the program for assessment purposes.

Time for Degree Completion

MENG students must receive approval from the program director to register for more than nine (9) credit hours in a semester. MENG students have a maximum of six calendar years to complete their degree requirements, starting from the first semester during which the student has registered for and begun taking classes. Students who exceed this time limit may submit a letter of appeal to the program director to request an extension. Students who fail to enroll in program classes for three consecutive semesters (not including summers) must apply for readmission to the

program. In order to ensure timely progress through the program, students are encouraged to consult with an advisor at least once a year.

Program Learning Outcomes

Students will demonstrate...

1. The ability to gather, analyze, and communicate information and insights critically.
2. The ability to closely read and analyze texts within historical contexts and critical frameworks.
3. The ability to apply theory and research to pragmatic and practical pedagogical processes.
4. A commitment to equitable pedagogical practices articulated through a research-based rationale consistent with Utah State Core Standards, the ELA Endorsement Competencies, and the Utah Effective Teaching Standards.

Course Requirements for Master of Arts in English

All MENG students will be required to complete the Core Requirements as part of their degree. In addition to the Core, a student needs to complete one of the emphasis areas.

Core Requirements

Core Research Methods

Required in the first full semester (Fall/Spring) of enrollment.

- MENG 6010 - Introduction to Graduate Studies **Credits: (3)**

Core Literary Studies

Select one course from the following: (Note: These courses may be repeated for credit with different content).

- MENG 6510 - Seminar in Eminent Writers: **Credits: (2-3)**
- MENG 6240 - Seminar in American Literature **Credits: (3)**
- MENG 6250 - Seminar in British Literature **Credits: (3)**
- MENG 6260 - Seminar in World Literature **Credits: (3)**

English Education Emphasis Requirements

Creating Texts

Select one course from the following:

- MENG 6230 - Wasatch Range Writing Project Summer Institute **Credits: (1-6)**
- MENG 6231 - Wasatch Range Writing Project Advanced Institute **Credits: (1-6)**
- MENG 6822 - Teaching College Writing **Credits: (2)**
- MENG 6823 - Teaching Practicum **Credits: (1)**
- MENG 6110 - Writing for Teachers **Credits: (3)**

Adolescent Literacy Development

- MENG 6120 - Young Adult Literature **Credits: (3)**

Language and Sociolinguistics

Select one course from the following:

- MENG 6310 - Language and Sociolinguistics for Teachers **Credits: (3)**
- MENG 6210 - Teaching Literature, Literacy, and Language in the Secondary Schools **Credits: (3)**

Selecting and Teaching Texts, Speaking and Listening

- MENG 6100 - Literary Curriculum Design **Credits: (3)**

Thesis Option (3-6 credit hours)

Students interested in pursuing further study after the MA are encouraged to complete a thesis. The semester before the thesis, students are required to submit a detailed proposal with approval from a faculty thesis committee. This proposal must demonstrate an original contribution to the field that approaches publication quality. Thesis proposals must indicate workload consistent with a 3-6 credit hour graduate course.

- MENG 6940 - Masters Project **Credits: (2-6)**

Electives

Elective courses must be taken to fulfill the remaining credit hours to achieve the minimum 33 credit hours required to graduate. Students pursuing the Thesis Option will take an additional 15 credits, and students choosing the not to pursue a thesis will take an additional 18 credits. Any MENG course will count as an elective, and graduate-level courses from other programs may be counted upon consultation with the program director.

Students pursuing the English Education emphasis who are seeking ELA Endorsement and do NOT have undergraduate credits which will fulfill USBE competency standards must take the following elective courses... MENG 6240/50 - Seminar in American/British Literature OR MENG 6260 - Seminar in World Literature (this must NOT be the same course that fulfilled the Core Literature Seminar requirement). An additional writing course that was NOT taken to fulfill the Creating Texts requirement (this could be a course from that list, or it could be any of our Creative Writing workshops: MENG 6730 - Creative Nonfiction Writing, MENG 6740 - Fiction Writing, MENG 6750 - Poetry Writing, MENG 6770 - Screenwriting). Students pursuing the English Education emphasis who are seeking ELA Endorsement should consider the following preferred elective for teaching multi-language learners... MENG 6410 - Strategies and Methodology of Teaching ESL/Bilingual Students

Students pursuing the English Education emphasis who are seeking teaching licensure from the State of Utah should enroll in the Post-Baccalaureate Certificate of Teaching through the Moyes College of Education. You will need to apply for that program separately from the MA program, but the courses taken in that program will count as electives toward your degree.

Master of Arts in English (MA), English Studies Emphasis

- **Program Code:** 3056MENG with an emphasis in Creative Writing (3110), Literature (3111), English Education (3119) or English Studies (3125)
- **CIPC:** Master of English (230101), Creative Writing (231302), Literature (231401), English Education (131305) or English Studies (230101)

Admission Requirements

Admission to the MENG program requires a bachelor's degree in English. Students with less English preparation may petition for conditional admission which may require that they take additional classes at the 5000-level for full matriculation.

Applicants must complete an online application. Criteria for acceptance into the program include:

- Undergraduate degree in English with a minimum GPA of 3.25 in the major (preferred)
- Submission of writing sample (6-8 pages)
- Transcripts from all institutions of higher education attended
- Three letters of recommendation from educational or professional references
- Interview with the program director or option coordinator

Additional Requirements for International Students

All international students and any applicants educated outside the United States must demonstrate proficiency in English. Those whose native language is not English must submit an official score from the Test of English as a Foreign Language (TOEFL) of 108 overall, or an IELTS score of 7.5 OR provide equivalent demonstration of language proficiency as established through the Weber State International Student and Scholar Center. The score may not be more than two years old.

Transfer Credits

- Transfer credit must be approved by the program director and cannot exceed 11 credit hours. Transfer classes must be at appropriate levels and fulfill the objectives of the Master of Arts in English degree at WSU. No courses for which credit was used to fulfill requirements of another degree may be used toward the Master of Arts in English degree.

Obsolete Credits

- Credit earned more than ten (10) years earlier than the proposed date of graduation will not be accepted for the MA degree unless approved by the program director.

Graduation Requirements

- Credit hour requirements are determined within the option. A minimum of 24 credit hours at the 6000-level and a minimum of 33 total credit hours are required in the program. Students must complete all requirements in one of the options.
- Grades of B- or better in all courses counting toward the degree.
- Students with a BS degree must show foreign language competency either by completing six hours of a foreign language class with a grade of C (or better) or by passing a prescribed foreign language reading test.
- Students not completing a thesis will be required to submit a portfolio of their work to the program for assessment purposes.

Time for Degree Completion

- MENG students must receive approval from the program director to register for more than nine (9) credit hours in a semester.

- MENG students have a maximum of six calendar years to complete their degree requirements, starting from the first semester during which the student has registered for and begun taking classes. Students who exceed this time limit may submit a letter of appeal to the program director to request an extension.
- Students who fail to enroll in program classes for three consecutive semesters (not including summers) must apply for readmission to the program.
- In order to ensure timely progress through the program, students are encouraged to consult with an advisor at least once a year.

Program Learning Outcomes

- Students will demonstrate the ability to...
- Gather, analyze, and communicate information and insights critically.
- Closely read and analyze texts within historical contexts and critical frameworks.
- Apply current scholarship and practice in their own writings.
- Employ discipline-specific terminology and conventions in their written, oral, and/or multimodal presentations.

Course Requirements for Master of Arts in English

All MENG students will be required to complete the Core Requirements as part of their degree. In addition to the Core, a student needs to complete one of the emphasis areas.

Core Requirements (6 credits)

Core Research Methods

Required in the first full semester (Summer) of enrollment.

- MENG 6010 - Introduction to Graduate Studies **Credits: (3)**

Core Literary Studies

Select one course from the following:

(Note: These courses may be repeated for credit with different content).

- MENG 6510 - Seminar in Eminent Writers: **Credits: (2-3)**
- MENG 6240 - Seminar in American Literature **Credits: (3)**
- MENG 6250 - Seminar in British Literature **Credits: (3)**
- MENG 6260 - Seminar in World Literature **Credits: (3)**

English Studies Emphasis Requirements

Seminars in Literature (3 credits)

Select one (1) course from the following list (3 credit hours):

(Note: Students who take one of these courses to fulfill the Core Literary Studies requirement must select a different course to fulfill this requirement).

- MENG 6240 - Seminar in American Literature **Credits: (3)**
- MENG 6250 - Seminar in British Literature **Credits: (3)**
- MENG 6260 - Seminar in World Literature **Credits: (3)**
- MENG 6510 - Seminar in Eminent Writers: **Credits: (2-3)**
- MENG 6710 - Variable Topics **Credits: (2-3)**

Rhetoric and Writing Studies (3 credits)

Select one (1) course from the following list (3 credit hours):

- MENG 6130 - Theories of Rhetoric and Writing Studies **Credits: (3)**
- MENG 6140 - Foundations of Professional and Technical Writing **Credits: (3)**
- MENG 6150 - Grant Writing **Credits: (3)**
- MENG 6330 - Literary and Rhetorical Stylistics **Credits: (3)**

Teaching English (3 credits)

Select one (1) course from the following list (3 credit hours):

- MENG 6120 - Young Adult Literature **Credits: (3)**
- MENG 6410 - Strategies and Methodology of Teaching ESL/Bilingual **Credits: (3)**
- MENG 6450 - ESL/Bilingual Assessment: Theory, Methods, and Practices **Credits: (3)**

Creative Writing (3 Credits)

Select one (1) course from the following list (3 credit hours):

- MENG 6730 - Prose Forms and Crafts **Credits: (3)**
- MENG 6750 - Fiction Writing **Credits: (3)**

Thesis/Capstone Project (3 credits)

Students on this emphasis must complete a thesis or professional project using one of the following courses (3 credit hours):

- MENG 6940 - Masters Project **Credits: (2-6)**
- MENG 6950 - Creative Writing Thesis: Fiction, Nonfiction, Poetry **Credits: (1-6)**
- MENG 6960 - Thesis **Credits: (1-6)**

Electives (12 credits)

Elective courses may be taken to fulfill the minimum 33 credit hours required to graduate. Electives can include any 6000-level course, in MENG or another discipline, and courses can be taken a second time for credit as long as they have a different area of focus.

Master of Arts in English (MA), Literature Emphasis

- **Program Code:** 3056MENG with an emphasis in Creative Writing (3110), Literature (3111), English Education (3119) or English Studies (3125)
- **CIPC:** Master of English (230101), Creative Writing (231302), Literature (231401), English Education (131305) or English Studies (230101)

Admission Requirements

Admission to the MENG program requires a bachelor's degree in English. Students with less English preparation may petition for conditional admission which may require that they take additional classes at the 5000-level for full matriculation.

Applicants must complete an online application. Criteria for acceptance into the program include:

- Undergraduate degree in English with a minimum GPA of 3.25 in the major (preferred)
- Submission of writing sample (6-8 pages)
- Transcripts from all institutions of higher education attended
- Three letters of recommendation from educational or professional references
- Interview with the program director or option coordinator

Additional Requirements for International Students

All international students and any applicants educated outside the United States must demonstrate proficiency in English. Those whose native language is not English must submit an official score from the Test of English as a Foreign Language (TOEFL) of 108 overall, or an IELTS score of 7.5 OR provide equivalent demonstration of language proficiency as established through the Weber State International Student and Scholar Center. The score may not be more than two years old.

Students with bachelor's degrees from institutions outside the United States will be required to submit professional transcript evaluations.

Transfer Credits

- Transfer credit must be approved by the program director and cannot exceed 11 credit hours. Transfer classes must be at appropriate levels and fulfill the objectives of the Master of Arts in English degree at WSU. No courses for which credit was used to fulfill requirements of another degree may be used toward the Master of Arts in English degree.

Obsolete Credits

- Credit earned more than ten (10) years earlier than the proposed date of graduation will not be accepted for the MA degree unless approved by the program director.

Graduation Requirements

- Credit hour requirements are determined within the option. A minimum of 24 credit hours at the 6000-level and a minimum of 33 total credit hours are required in the program. Students must complete all requirements in one of the options.
- Grades of B- or better in all courses counting toward the degree.
- Students with a BS degree must show foreign language competency either by completing six hours of a foreign language class with a grade of C (or better) or by passing a prescribed foreign language reading test.

- Students not completing a thesis will be required to submit a portfolio of their work to the program for assessment purposes.

Time for Degree Completion

- MENG students must receive approval from the program director to register for more than nine (9) credit hours in a semester.
- MENG students have a maximum of six calendar years to complete their degree requirements, starting from the first semester during which the student has registered for and begun taking classes. Students who exceed this time limit may submit a letter of appeal to the program director to request an extension.
- Students who fail to enroll in program classes for three consecutive semesters (not including summers) must apply for readmission to the program.
- In order to ensure timely progress through the program, students are encouraged to consult with an advisor at least once a year.

Program Learning Outcomes

- Students will demonstrate the ability to...
- 1. Gather, analyze, and communicate information and insights critically.
- 2. Closely read and analyze texts within historical contexts and critical frameworks.
- 3. Apply current scholarship, practices, and/or theoretical perspectives in their own writings.
- 4. Use discipline-specific terminology and conventions in their written, oral, and/or multimodal presentations.

Master of Arts in English (MA)

Course Requirements for Master of Arts in English

All MENG students will be required to complete the Core Requirements as part of their degree. In addition to the Core, a student needs to complete one of the emphasis areas.

Core Requirements

Core Research Methods

Required in the first full semester (Fall/Spring) of enrollment.

- MENG 6010 - Introduction to Graduate Studies **Credits: (3)**

Core Literary Studies

Select one course from the following:

(Note: These courses may be repeated for credit with different content).

- MENG 6510 - Seminar in Eminent Writers: **Credits: (2-3)**
- MENG 6240 - Seminar in American Literature **Credits: (3)**
- MENG 6250 - Seminar in British Literature **Credits: (3)**
- MENG 6260 - Seminar in World Literature **Credits: (3)**

Literature Emphasis Requirements

Literature Theory and Criticism

- MENG 6030 - Studies in Literary Theory and Criticism **Credits: (3)**

Seminars in Literature

Complete three courses from the following repeatable seminars (9 credit hours):

(Note: Students who take one of these courses to fulfill the Core Literary Studies requirement will also fulfill the requirement in this area).

- MENG 6240 - Seminar in American Literature **Credits: (3)**
- MENG 6250 - Seminar in British Literature **Credits: (3)**
- MENG 6260 - Seminar in World Literature **Credits: (3)**

Thesis Option (3-6)

Students interested in pursuing further study after the MA are encouraged to complete a thesis. The semester before the thesis, students are required to submit a detailed proposal with approval from a faculty thesis committee. This proposal must demonstrate an original contribution to the field that approaches publication quality. Thesis proposals must indicate workload consistent with a 3-6 credit hour graduate course.

- MENG 6960 - Thesis **Credits: (1-6)**

Electives

Elective courses must be taken to fulfill the remaining credit hours to achieve the minimum 33 credit hours required to graduate. Students pursuing the Thesis Option will typically have an additional 12 credits to complete, and students pursuing the non-thesis option will typically have an additional 15 credits to complete, though any student who uses a 62XX literature seminar to fulfill the Core Literature requirement will have an additional 3 elective credits to complete. Any MENG course will count as an elective, and graduate-level courses from other programs may be counted upon consultation with the program director.

Master of Professional Communication Program

Program Director: Dr. Sarah Steimel, 801-626-6535

Telephone Contact: Jennifer Greenlee 801-626-7499

E-mail Contact: mpc@weber.edu

Location: Elizabeth Hall, north end of third floor

Department Chair: Dr. Anne Bialowas

The Master of Professional Communication (MPC) degree emphasizes advanced communication knowledge and skills necessary to produce effective leaders, managers, and organizational members in for-profit, government or non-profit organizations. Students develop a plan of study tailored to their personal career goals through a combination of required and elective courses within the field of communication and in related fields such as business, education, and health professions. Courses in the two-year program blend classroom instruction with online educational tools to accommodate the educational needs of working professionals.

Master of Professional Communication

Master of Professional Communication (MPC)

- **Program Code:** 3066MPC
- **CIPC:** 090101

Admission Requirements

Applicants for admission into the WSU Master of Professional Communication program must possess a bachelor's degree from an accredited institution or be in the final stage of completing the degree and have a minimum GPA of 3.0. Applicants must have completed a bachelor's degree before beginning the Master of Professional Communication. Each applicant is evaluated holistically based on program admission requirements. Ideal applicants will present a strong overall academic record, positive letters of recommendation, and/or a record of professional accomplishment. An ideal class will consist of students with a wide variety of backgrounds.

Applicants must complete an online application, including the following submissions:

- Two essay question responses
- Current resume
- Official transcripts from every institution of higher education attended (transcript must show that the bachelor's degree has been completed).
- Three letters of academic and/or professional recommendation

Additional Admission Requirements for International Students

Applicants who are not United States (U.S.) citizens or have not received permanent residency from the U.S. Immigration and Naturalization Service are considered International Students.

All international students must demonstrate proficiency in English. However, U.S. citizenship or permanent residency does not automatically exempt students from taking an English proficiency test if their first language is not English. Students whose bachelor's degree (or higher) was awarded from an institution whose primary language of instruction was English may be exempt from taking an English Language proficiency test. In order to fulfill this requirement, students must submit an official score, not more than two years old, from one of the following tests:

- TOEFL (internet-based) 75 with a minimum of a 17 in each category
- IELTS: 6.5 overall with a minimum score of 6.0 on each section.
- DUOLINGO English Test: 105 or above

All international students must also provide an official course-by-course transcript evaluation using a University-approved foreign credentials evaluation service. This must be done for all college degrees and coursework completed outside the United States. The official transcripts and evaluation must be sent by the evaluation service and must be sent to the program prior to registration.

Transfer Credit

Related graduate-level courses from other universities may be accepted with permission of the MPC program director.

Transfer classes must be at an appropriate level and fulfill the objectives of the MPC and cannot exceed 12 hours. No courses for which credit was used to fulfill requirements of another graduate degree may be used toward the MPC degree.

Graduation Requirements

- **Grade Requirements:** For classes to count toward the MPC degree, courses must be completed with a grade of a B- or higher. Students must also maintain an overall GPA of at least 3.0.
- 33 credit hours, at least 30 at the 6000-level.
- Complete all Course Requirements.

Time for Degree Completion

MPC students have a maximum of six (6) calendar years to complete their degree requirements, starting from the first semester during which the student has registered and begun taking classes. Students who exceed this requirement may submit a letter of appeal to the MPC director to request that this requirement be waived.

In order to ensure timely progress through the program, students are encouraged to consult with the MPC director at least once per year. Students must receive approval from the program director to register for more than nine (9) credit hours in a semester.

Students on the thesis/project track who, for any reason, do not finish their thesis or project or program of courses within the two-year framework suggested in this program must be registered for at least one (1) graduate credit during the semester of the final thesis defense or the last semester of coursework required on the student's program of study.

Program Learning Outcomes

- Write and edit at a level commensurate with a communication leader or manager in applied communication contexts.
- Present information orally and in visual form at a level commensurate with a communication leader or manager in an applied communication context.
- Demonstrate critical thinking in applied communication contexts.
- Conduct academic or applied research in communication contexts, report findings clearly and accurately, and interpret the meaning of research data.
- Demonstrate knowledge in one or more cognate areas - strategic organizational leadership, interpersonal communication and team building, new media.

Course Requirements for MPC

Foundational Courses (9 credit hours)

- MPC 6010 - Introduction to Graduate Study and Communication Theory **Credits: (3)**
- MPC 6150 - Writing for Professional Communicators **Credits: (3)**
- MPC 6210 - Presentational Speaking in the Workplace **Credits: (3)**

Research Methods Requirement (3 credit hours)

Choose one of the two research courses in consultation with the MPC program director.

- MPC 6700 - Qualitative Communication Research & Analysis **Credits: (3)**
- MPC 6710 - Communication Survey Design and Analysis **Credits: (3)**

Core Courses (12 credit hours)

Choose four of the six courses in consultation with the MPC program director.

- MPC 6100 - Team Building and Facilitation **Credits: (3)**
- MPC 6300 - New Media in Professional Communication **Credits: (3)**
- MPC 6350 - Visual Communication in the Workplace **Credits: (3)**
- MPC 6400 - Leadership Communication **Credits: (3)**
- MPC 6450 - Advanced Organizational Communication **Credits: (3)**
- MPC 6600 - Strategic Communication **Credits: (3)**

Electives (9 credit hours)

Students may choose the thesis track, project track, OR the coursework track.

Thesis

- MPC 6900 - Thesis/Project I **Credits: (3)**
- MPC 6950 - Thesis/Project II **Credits: (3)**
- 3 credit hours of master's level electives, chosen in consultation with the MPC program director.

Project Track

- MPC 6900 - Thesis/Project I **Credits: (3)**
- 6 credit hours of master's level electives, chosen in consultation with the MPC program director.

Coursework Track

Choose nine credit hours of electives in consultation with the MPC program director and submit a portfolio as evidence of this work.

Exit Portfolio Requirement: The program requires all Coursework students to complete and submit a portfolio featuring their work from their three elective courses and a synthesis paper to complete this requirement.

- At least 6 credit hours must come from elective courses at the 6000 level.
- No more than 3 credit hours of dual designated MPC courses at the 5000 level.

Elective Master's-level Courses

6000-level Electives

- MPC 6250 - Interviewing **Credits: (3)**
- MPC 6500 - Topics in Professional Communication **Credits: (3)**
- MPC 6620 - Conflict Resolution and Mediation **Credits: (3)**
- MPC 6840 - Data Visualization & Storytelling **Credits: (3)**

Note: Students may also choose 6000-level courses from the list of core required courses above to count as electives.

Elective Interdisciplinary Courses

Students may select no more than two courses (or credit hours, whichever is reached first) from the following WSU master's program courses (with the permission of the appropriate MPC graduate program advisor and/or fulfillment of prerequisite courses). Interdisciplinary electives must be approved by the MPC program director.

- MBA 6140 - Marketing Management **Credits: (3)**
- MBA 6170 - Corporate Communications **Credits: (3)**
- MBA 6530 - E-Business **Credits: (3)**
- MBA 6540 - Negotiations **Credits: (3)**
- EDUC 6110 - Introduction to Classroom Management **Credits: (3)**
- MED 6120 - Advanced Classroom Management **Credits: (3)**
- MENG 6730 - Prose Forms and Crafts **Credits: (3)**
- MENG 6740 - Creative Nonfiction Writing **Credits: (3)**
- MBA 6110 - Fundamentals of Ethical Leadership **Credits: (3)**
- MBA 6120 - Organizational Behavior **Credits: (3)**
- MBA 6440 - Strategic Leadership **Credits: (3)**
- MBA 6450 - Leadership Through People Skills **Credits: (3)**
- MBA 6580 - Project Management **Credits: (3)**
- MBA 6850 - Business Development and Entrepreneurship **Credits: (3)**
- MED 6220 - Current Problems in Education **Credits: (3)**
- MED 6230 - Instructional Technology for Teachers **Credits: (3)**
- MED 6380 - Values Education **Credits: (3)**

Dual-Designation or "Swing" Courses

The following dual designation courses are designed to fill gaps in the undergraduate preparation of students who wish to command the broadest understanding of professional communication. While the courses are accessible to students who have not taken the corresponding undergraduate courses, the graduate courses differ from undergraduate counterparts in demanding greater depth and breadth in all major aspects of each course such as reading, writing, presentation, projects, etc. Of the 9 elective credit hours in the Master of Professional Communication degree, only 3 may be 5000-level courses and must be approved by the MPC program director before registration.

- MPC 5080G - Intercultural Communication **Credits: (3)**
- MPC 5090G - Gender and Communication **Credits: (3)**
- MPC 5220G - Editing **Credits: (3)**
- MPC 5400G - Public Relations Media and Campaigns **Credits: (3)**
- MPC 5500G - Topics in Communication **Credits: (1-3)**
- MPC 5650G - Communication Law **Credits: (3)**
- MPC 5820G - Persuasive Communication **Credits: (3)**
- MPC 5850G - Advertising **Credits: (3)**

Telitha E. Lindquist College of Arts & Humanities Interdisciplinary Programs

Associate of Arts

Workplace Communication and Writing (AA)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

By pursuing coursework in English and Communication, students may earn an Associate of Arts or Associate of Science degree in Workplace Communication and Writing. Students anticipating continuing on for a bachelor's degree in English are advised to pursue the Associate of Arts degree.

- **Program Prerequisite:** Not required.
- **Grade Requirements:** A 2.0 or better in all courses required for this degree in addition to an overall GPA of 2.00 (C) or higher.
- **Credit Hour Requirements:** A total of 61 credit hours is required for graduation; a minimum of 24 of these must be from the programs detailed below.
- **Program Code:** 3078AA
- **CIPC:** 090101

Advisement

Students are encouraged to meet with the academic advisor for the College of Arts and Humanities at least annually for course and program advisement. Call 801-626-6631 or email cahadvisor@weber.edu for more information or to schedule an appointment.

Admission Requirements

There are no special admission or application requirements for this program.

General Education

Refer to Degree Requirements for Associate of Arts requirements and for Associate of Science Requirements. See Foreign Language Courses Required below to fulfill the Associate of Arts degree.

Consult with a college advisor for detailed General Education guidelines.

General Studies Requirement

- Humanities HU (3 credits): Students must take:
 - COMM 1020 HU - Principles of Public Speaking or
 - COMM 2110 HU CEL - Interpersonal and Small Group Communication
- Humanities HU or Creative Arts CA (3 credits): Students must take one ENGL class from the following list:
 - ENGL 2200 HU/CC - Introduction to Literature
 - ENGL 2220 HU/CC - Introduction to Fiction
 - ENGL 2230 HU/CC - Introduction to Drama
 - ENGL 2240 HU/CC - Introduction to Poetry
 - ENGL 2250 CA/CC - CW: Introduction to Creative Writing
 - ENGL 2260 CA/CC - CW: Introduction to Writing Short Fiction
 - ENGL 2270 CA/CC - CW: Introduction to Writing Poetry
 - ENGL 2710 HU/CC - Perspectives on Women's Literature
 - ENGL 2750 HU - Topics and Ideas in the Humanities

Required Courses: 24 credit hours from the following core areas:

Writing: 2 courses

New Technology & Digital Media: 1 course

Working in Organizations: 1 course

Workplace Skills: 1 course

Professionalizing Experience: 1 course

Foreign Language: 2 courses

Writing (Select TWO / for a total of 6 credits: one from Communication, one from English)

- COMM 1130 - Media Writing **Credits: (3)** OR
- COMM 1140 - Writing for Workplace Communication **Credits: (3)** OR
- WSU 2350 QL/HU - Perspectives in Quantitative Literacy and Humanities **Credits: (3-5)** (Writing with Numbers)
- ENGL 2100 - Technical Writing **Credits: (3)** Or
- ENGL 2120 - Introduction to Writing and Document Design **Credits: (3)**

New Technology and Digital Media (Select ONE / for a total of 3 credits)

- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- ENGL 2130 - Media and Technology in Texts **Credits: (3)**

Working in Organizations (Select ONE / for a total of 3 credits)

- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- ENGL 2150 - Gender and Culture in Workplace Writing **Credits: (3)**

Workplace Skills (Select ONE / for a total of 3 credits)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** OR
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)** (whichever not counted toward General Studies requirement)
- COMM 1270 - Analysis of Argument **Credits: (3)**
- COMM 1500 - Introduction to Mass Communication **Credits: (3)** OR

- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 1560 - Audio Production and Performance **Credits: (3)**
- ENGL 2140 - Introduction to Professional and Technical Editing **Credits: (3)**
- ENGL 2160 - Introduction to Web-Based Technical Writing **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**

Professionalizing Experience (Select ONE / for a total of 3 credits)

- COMM 2890 - Cooperative Work Experience for The Signpost **Credits: (1-3)**
- COMM 2730 - Digital Radio Production and Broadcast **Credits: (1-3)**
- ENGL 2890 - Cooperative Work Experience **Credits: (1-6)**
- ENGL 2999 INT - Capstone in Workplace Communication and Writing **Credits: (3)**
- COMM 2999 - Capstone in Workplace Communication and Writing **Credits: (3)**

Foreign Language: (TWO courses / total of 6 credits)

Complete two semesters of one of the following languages: French, German, Spanish, American Sign Language, Chinese, or Japanese.

Program Learning Outcomes

Writing: Students will demonstrate writing and editing skills appropriate for the workforce.

New Technologies and Digital Media: Students will demonstrate the principles and practices of new technologies and digital media.

Working in Organizations: Students will demonstrate knowledge of how organizations work.

Workplace Skills: Students will demonstrate the ability to effectively communicate their understanding of workplace skills in written, oral or visual format.

Internships: Students will apply workplace skills in a capstone class.

Associate of Science

Workplace Communication and Writing (AS)

This program has been suspended pending formal discontinuance and is no longer accepting new students.

By pursuing coursework in English and Communication, students may earn an Associate of Arts or Associate of Science degree in Workplace Communication and Writing. Students anticipating continuing on for a bachelor's degree in English are advised to pursue the Associate of Arts degree.

- **Program Prerequisite:** Not required.
- **Grade Requirements:** A 2.0 or better in all courses required for this degree in addition to an overall GPA of 2.00 (C) or higher.

- **Credit Hour Requirements:** A total of 61 credit hours is required for graduation; a minimum of 24 of these must be from the program detailed below.
- **Program Code:** 3078AS
- **CIPC:** 090101

Advisement

Students are encouraged to meet with the academic advisor for the College of Arts and Humanities at least annually for course and program advisement. Call 801-626-6631 or email cahadvisor@weber.edu for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information).

General Education

Refer to Degree Requirements of this catalog for Associate of Science and Associate of Arts requirements.

General Studies Requirement

- Humanities HU (3 credits): Students must take:
 - COMM 1020 HU - Principles of Public Speaking or
 - COMM 2110 HU CEL - Interpersonal and Small Group Communication
- Humanities HU or Creative Arts CA (3 credits): Students must take one ENGL class from the following list:
 - ENGL 2200 HU/CC - Introduction to Literature
 - ENGL 2220 HU/CC - Introduction to Fiction
 - ENGL 2230 HU/CC - Introduction to Drama ENGL 2230 HU/CC - Introduction to Drama
 - ENGL 2240 HU/CC - Introduction to Poetry
 - ENGL 2250 CA/CC - CW: Introduction to Creative Writing
 - ENGL 2260 CA/CC - CW: Introduction to Writing Short Fiction
 - ENGL 2270 CA/CC - CW: Introduction to Writing Poetry
 - ENGL 2510 HU/EDI - Masterpieces of Literature
 - ENGL 2710 HU/CC - Perspectives on Women's Literature
 - ENGL 2750 HU - Topics and Ideas in the Humanities

Required Courses: 24 credit hours from the following core areas:

Writing: 2 courses

New Technology and Digital Media: 1 course

Working in Organizations: 2 courses

Workplace Skills: 2 courses

Professionalizing Experience: 1 course

Writing (Select TWO / for a total of 6 credits: one from Communication, one from English)

- COMM 1130 - Media Writing **Credits: (3)**

- COMM 1140 - Writing for Workplace Communication **Credits: (3)**
- WSU 2350 QL/HU - Perspectives in Quantitative Literacy and Humanities **Credits: (3-5)** (Writing with Numbers)
- ENGL 2100 - Technical Writing **Credits: (3)** Or
- ENGL 2120 - Introduction to Writing and Document Design **Credits: (3)**

New Technology and Digital Media (Select ONE / for a total of 3 credits)

- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- ENGL 2130 - Media and Technology in Texts **Credits: (3)**

Working in Organizations (Select TWO / for a total of 6 credits)

- COMM 2550 - Communication in Professional Settings **Credits: (3)**
- ENGL 2150 - Gender and Culture in Workplace Writing **Credits: (3)**

Workplace Skills (Select TWO / for a total of 6 credits)

- COMM 1020 HU - Principles of Public Speaking **Credits: (3)** OR
- COMM 2110 HU CEL - Interpersonal and Small Group Communication **Credits: (3)** (whichever not counted toward General Studies requirement)
- COMM 1270 - Analysis of Argument **Credits: (3)**
- COMM 1500 - Introduction to Mass Communication **Credits: (3)** OR
- COMM 2010 HU - Mass Media and Society **Credits: (3)**
- COMM 1560 - Audio Production and Performance **Credits: (3)**
- ENGL 2140 - Introduction to Professional and Technical Editing **Credits: (3)**
- ENGL 2160 - Introduction to Web-Based Technical Writing **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**

Professionalizing Experience (Select ONE / for a total of 3 credits)

- COMM 2890 - Cooperative Work Experience for The Signpost **Credits: (1-3)**
- COMM 2730 - Digital Radio Production and Broadcast **Credits: (1-3)**
- ENGL 2890 - Cooperative Work Experience **Credits: (1-6)**
- ENGL 2999 INT - Capstone in Workplace Communication and Writing **Credits: (3)**
- COMM 2999 - Capstone in Workplace Communication and Writing **Credits: (3)**

Program Learning Outcomes

Writing: Students will demonstrate writing and editing skills appropriate for the workforce.

New Technologies and Digital Media: Students will demonstrate the principles and practices of new technologies and digital media.

Working in Organizations: Students will demonstrate knowledge of how organizations work.

Workplace Skills: Students will demonstrate the ability to effectively communicate their understanding of workplace skills in written, oral or visual format.

Professionalizing Experience: Students will apply workplace skills in a capstone class.

Institutional Certificate

Environmental Science Filmmaking Certificate of Proficiency

The 18-credit hour certificate in Environmental Science Filmmaking provides opportunities for students interested in combining their love of science with a love of storytelling. Students will receive a background in science and in filmmaking that enables them to produce their own films.

- **Program Prerequisite:** None required. However, some of the individual course options have a prerequisite or corequisite, as shown below.
- **Grade Requirements:** A grade of 2.0 or better in all courses used toward the certificate.
- **Credit Hour Requirements:** 18 credit hours, apportioned as directed below.
- **Program:** 3121CP
- **CIPC:** 500601

Learning Outcomes

1. Introduce students to environmental issues from the perspective of science and introduce research principles.
2. Introduce students to the principles and practices of environmental filmmaking.
3. Produce students who can make films about environmental issues as told from the perspective of science.
4. Produce students with marketable skills sought by employers.

Filmmaking Courses (9 credits)

- FILM 2200 CA - Fundamentals of Film **Credits: (3)**
- FILM 2280 - Introduction to Film Production **Credits: (3)**
- FILM 2820 - Special Topics in Film Studies **Credits: (3)**

Science Courses (9 credits)

Students must take a minimum of 3 classes and a minimum of 9 credits. Courses taken for major and minor programs of study may also count toward the certificate.

- BTNY 1203 LS - Plant Biology **Credits: (3)**
- BTNY 1403 LS SUS - Principles of Environmental Science **Credits: (4)**

- BTNY 2413 - Introduction to Natural Resource Management **Credits: (3)**
- GEO 1060 PS - Environmental Geosciences **Credits: (3)**
- GEO 1110 PS - Dynamic Earth: Physical Geology **Credits: (3)**
- GEO 1115 - Physical Geology Lab **Credits: (1)**
- MICR 1353 LS - Microbes Rule the World - Power of Disease **Credits: (3)**
- MICR 2054 LS - Principles of Microbiology **Credits: (4)**
- MICR 3502 SUS - Environmental Health **Credits: (2)**
- PHYS 1040 PS - Elementary Astronomy **Credits: (3)**
- ZOOL 1020 LS - Human Biology **Credits: (3)**

Bachelor of Arts

Film Studies (BA)

- **Program Prerequisite:** Not required.
- **Minor:** Not required.
- **Grade Requirements:** A grade of "C" or better in courses required for the major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation.
- **Credit Hour Requirements:** A total of 120 credit hours are required for graduation. Of this total, 51 credit hours in the program are required. A total of 40 upper division credit hours is required by the university for graduation (courses numbered 3000 and above from any department).
- **Program Code:** 3085BA
- **CIPC:** 500602

Advisement

All Film Studies majors should meet with the program's director and an advisor in the College of Arts & Humanities advisors early in their course of study. Andrea Baltazar (Last initial A-M) can be reached at andreabaltazar@weber.edu or Benjamin Kruger-Robbins (Last initial N-Z) can be reached at bkrugerrobbins1@weber.edu or film@weber.edu. Students can also reach out to the Lindquist College Arts & Humanities Advising.

Admission Requirements

Declare your program of study (see Student Access and Success, Services and Information) with the college advisor. There are no special admission or application requirements.

General Education

Refer to Degree Requirements for Bachelor of Arts requirements. The following Film Studies courses will also fulfill 3 credit hours each of the General Education requirement in the Creative Arts (CA) and Humanities (HU) categories: FILM 2200 CA, THEA 1023 CA, THEA 1033 CA, COMM 2010 HU, COMM 2250 HU, ENGL 2210, ENGL 2230 HU/CC, and ENGL 2280 CA.

Language Courses Required to fulfill the BA

Film Studies majors must complete *Option 1*: Foreign Language (12 credit hours of a foreign language, refer to the Department of World Languages & Cultures section of this catalog for additional information on obtaining foreign language credit)

OR Option 2 - Foreign Language and Language Arts (6 credit hours of a foreign language and 6 credit hours of language arts). With this option students will fulfill the 6 credits of language arts by taking (ENGL 2295 - CW: Introduction to Screenwriting or COMM 3740 - Writing for Screen) and (ENGL 3290 - CW: Advanced Screenwriting or COMM 4740 - Advanced Writing for Screen). These language arts courses will **also** count toward major requirements (see below).

Program Learning Outcomes

Students are expected to be proficient in each of these areas upon graduation from the Film Studies Program:

- Create: Students will apply their technical and theoretical skills in producing films and creative works.
- Analyze: Students will apply interpretive methodologies to explore the social, ideological, and ethical values presented in media works.
- Collaborate: Students will work constructively to solve problems and collaborate in diverse teams to create impactful films.

Major Course Requirements for Film Studies BA Degree

Lower Division Required Core Courses (6 Credit Hours)

Students are required to take the required lower division courses listed.

- FILM 2200 CA - Fundamentals of Film **Credits: (3)**
or
- THEA 1023 CA - Introduction to Film **Credits: (3)**
or
- ENGL 2210 - Introduction to Film Theory and Criticism **Credits: (3)**
- FILM 2280 - Introduction to Film Production **Credits: (3)**
or
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
or
- ART 2750 - Foundations of Video Art **Credits: (3)**

Upper Division Required Core Courses (12 Credit Hours)

Students are required to take the required upper division courses listed.

- FILM 3200 - History of Film **Credits: (3)**
- FILM 3500 - Advanced Film Theory and Criticism **Credits: (3)**
- COMM 3751 - Narrative Filmmaking **Credits: (3)**
or
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)**
- FILM 4700 - Film Studies Capstone **Credits: (3)**

Film and Media Studies Courses (9 Credit Hours)

Choose 9 credit hours from the list of film and media studies courses below.

- FILM 2820 - Special Topics in Film Studies **Credits: (3)**
Can take up to 3 times; only 3 credits can count for Film & Media courses block
- FILM 3780 - Survey of Documentary Cinema **Credits: (3)**
- FILM 3820 - Advanced Special Topics-Variable **Credits: (3)**
Can take up to 3 times; only 3 credits can count for Film & Media courses block
- ARTH 3055 - Advanced Special Topics in Art History **Credits: (4)**
- ENGL 3353 - Genres in Cultural and Media Studies **Credits: (3)**
- MUSC 1015 - Movie Music **Credits: (3)**
- WLC 3580 - Global Cinema **Credits: (3)**
- WLC 4580 - Special Topics in World Cinema **Credits: (3)**

Production Courses (9 Credit Hours)

Choose 9 credit hours from the list of production courses below.

- ENGL 2295 - CW: Introduction to Screenwriting **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
or
- ENGL 3380 - CW: Screenwriting Forms and Craft **Credits: (3)**
- ART 3250 - Experimental Filmmaking **Credits: (3)**
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)**
- COMM 4751 - Advanced Narrative Filmmaking **Credits: (3)**
- COMM 4770 - Digital Documentary Filmmaking **Credits: (3)**
- FILM 3010 - Pre- To Post-Production **Credits: (3)**
- FILM 3280 - Directing for Film **Credits: (3)**
- FILM 3310 - Editing and Beyond **Credits: (3)**

Electives (15 Credit Hours)

Students can complete a minor approved by their academic advisor OR choose 15 Elective Credits from the list.

Suggested Minors: Screenwriting Minor, Sound Production& Recording Minor, Photography Minor, WLC Minor, Art History minor, Communication Minor Minor

NOTE: Classes taken to fill Film Major Requirements may not also be used to fill minor requirements

Lower Division Courses:

- ART 1120 - Design Concepts **Credits: (3)**
- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)**
- ART 2750 - Foundations of Video Art **Credits: (3)**
or
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
- ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present **Credits: (4)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2980 - Introduction to Storytelling in Cinematic Virtual Reality **Credits: (3)**

- ENGL 2295 - CW: Introduction to Screenwriting **Credits: (3)**
- FILM 2820 - Special Topics in Film Studies **Credits: (3)**
- MUSC 1015 - Movie Music **Credits: (3)**
- MUSC 1723 - Field Recording/Sound for Picture **Credits: (2)**
- **Upper Division Courses:**
- ART 3250 - Experimental Filmmaking **Credits: (3)**
- ART 3465 - Motion Design **Credits: (3)**
- ART 4550 - Advanced Photography: Lighting for Photo & Video **Credits: (3)**
- ARTH 3040 - Global Modernisms **Credits: (4)**
- ARTH 3050 - Contemporary Art **Credits: (4)**
- ARTH 3055 - Advanced Special Topics in Art History **Credits: (4)**
- COMM 3200 - Live Event Production **Credits: (1-3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- ENGL 3380 - CW: Screenwriting Forms and Craft **Credits: (3)**
- HIST 3120 - American Society through Film **Credits: (3)**
- **or**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3750 - Advanced Cinematography and Editing **Credits: (3)**
- COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76 **Credits: (1-3)**
- COMM 4740 - Advanced Writing for Screen **Credits: (3)**
- COMM 4751 - Advanced Narrative Filmmaking **Credits: (3)**
- COMM 4760 - Media Management and Distribution **Credits: (3)**
- COMM 4770 - Digital Documentary Filmmaking **Credits: (3)**
- ENGL 3290 - CW: Advanced Screenwriting **Credits: (3)**
- ENGL 3353 - Genres in Cultural and Media Studies **Credits: (3)**
- FILM 3010 - Pre- To Post-Production **Credits: (3)**
- FILM 3280 - Directing for Film **Credits: (3)**
- FILM 3820 - Advanced Special Topics-Variable **Credits: (3)**
- FILM 3310 - Editing and Beyond **Credits: (3)**
- COMM 3751 - Narrative Filmmaking **Credits: (3)**
- FILM 3780 - Survey of Documentary Cinema **Credits: (3)**
- FILM 3800 - Independent Study **Credits: (1-3)**
- FILM 3810 - Experimental Course **Credits: (1-6)**
- FILM 3900 - Sundance Film Festival Experience **Credits: (1-3)**
- FILM 4120 - Careers in Film and Entertainment Industry **Credits: (3)**
- FILM 4890 - Film Internship **Credits: (1-3)**
- MUSC 4820 - Pro Tools 101 **Credits: (2)**
- MUSC 4823 - Pro Tools 110 **Credits: (2)**
- THEA 3113 - Acting for the Camera **Credits: (3)**
- THEA 3500 - Sound Design **Credits: (3)**
- WLC 3580 - Global Cinema **Credits: (3)**
- WLC 4580 - Special Topics in World Cinema **Credits: (3)**

Minor

Film Studies Minor

The Film Studies minor is an interdisciplinary program that analyzes film theory, history, practice, and cultural significance. Students will study a broad range of film texts and learn to appreciate a variety of aesthetic and filmmaking techniques. A minor in Film Studies will enable students to analyze, contextualize, and produce films within the broad context of humanistic studies. The Film Studies minor will provide students with a solid background in critical thinking, writing, and filmmaking skills. The film studies minor consists of a minimum of 18 credits distributed among required core courses (9 credits) and a choice of electives (9 credits) and can be integrated with any major or minor.

- **Program Prerequisite:** None required. However, some of the individual course options have a prerequisite or corequisite, as shown below.
- **Grade Requirements:** A grade of 2.0 or better in all courses used toward the minor.
- **Credit Hour Requirements:** 18 credit hours, apportioned as directed below.
- **Program Code:** 3085
- **CIPC:** 500602

Program Learning Outcomes:

- **Create:** Students will apply their technical and theoretical skills in producing films and creative works.
- **Analyze:** Students will apply interpretive methodologies to explore the social, ideological, and ethical values presented in media works.
- **Collaborate:** Students will work constructively to solve problems and collaborate in diverse teams to create impactful films.

Core Required Courses (9 Credit Hours)

Students are required to take these courses.

- FILM 2200 CA - Fundamentals of Film **Credits: (3)**
or
- THEA 1023 CA - Introduction to Film **Credits: (3)**
or
- ENGL 2210 - Introduction to Film Theory and Criticism **Credits: (3)**
- FILM 2280 - Introduction to Film Production **Credits: (3)**
or
- COMM 2250 HU - Essentials of Digital Media **Credits: (3)**
or
- ART 2750 - Foundations of Video Art **Credits: (3)**
- FILM 3200 - History of Film **Credits: (3)**

Elective Courses (9 Credit Hours)

Students will choose elective courses based on their interests in production, writing, directing, or film and media studies. At least two electives must be upper-division courses; no more than two courses from the same prefix/department (e. g., COMM, ENGL, FILM).

NOTE: Classes taken to fill Film Minor Requirements may not also be used to fill major requirements

Lower Division Elective (3 credit hours) - choose from these options

- ART 2450 CA - Foundations of Photography: Color/Digital **Credits: (3)**
- COMM 2200 - Multi-Camera Production and Performance **Credits: (3)**
- COMM 2980 - Introduction to Storytelling in Cinematic Virtual Reality **Credits: (3)**
- ENGL 2295 - CW: Introduction to Screenwriting **Credits: (3)**

- FILM 2820 - Special Topics in Film Studies **Credits: (3)**
- MUSC 1015 - Movie Music **Credits: (3)**
- MUSC 1723 - Field Recording/Sound for Picture **Credits: (2)**
- **Upper Division Electives (6 Credit Hours) - choose from these options**
- ART 3250 - Experimental Filmmaking **Credits: (3)**
- ART 4550 - Advanced Photography: Lighting for Photo & Video **Credits: (3)**
- ARTH 3055 - Advanced Special Topics in Art History **Credits: (4)**
- COMM 3200 - Live Event Production **Credits: (1-3)**
- COMM 3350 - Visual Communication **Credits: (3)**
- COMM 3740 - Writing for Screen **Credits: (3)**
- COMM 3750 - Advanced Cinematography and Editing **Credits: (3)**
- COMM 3751 - Narrative Filmmaking **Credits: (3)**
- COMM 4740 - Advanced Writing for Screen **Credits: (3)**
- COMM 4770 - Digital Documentary Filmmaking **Credits: (3)**
- ENGL 3290 - CW: Advanced Screenwriting **Credits: (3)**
- ENGL 3353 - Genres in Cultural and Media Studies **Credits: (3)**
- ENGL 3380 - CW: Screenwriting Forms and Craft **Credits: (3)**
- FILM 3010 - Pre- To Post-Production **Credits: (3)**
- FILM 3280 - Directing for Film **Credits: (3)**
- FILM 3310 - Editing and Beyond **Credits: (3)**
- FILM 3500 - Advanced Film Theory and Criticism **Credits: (3)**
- FILM 3780 - Survey of Documentary Cinema **Credits: (3)**
- FILM 3820 - Advanced Special Topics-Variable **Credits: (3)**
- FILM 3900 - Sundance Film Festival Experience **Credits: (1-3)**
- FILM 4120 - Careers in Film and Entertainment Industry **Credits: (3)**
- MUSC 4820 - Pro Tools 101 **Credits: (2)**
- MUSC 4823 - Pro Tools 110 **Credits: (2)**
- THEA 3113 - Acting for the Camera **Credits: (3)**
- THEA 3500 - Sound Design **Credits: (3)**
- WLC 3580 - Global Cinema **Credits: (3)**
- WLC 4580 - Special Topics in World Cinema **Credits: (3)**

Course Descriptions

ACTG 1010 - Practical Accounting & Taxes

Credits: (3)

Description: A pragmatic look at financial accounting and federal taxes as they relate to the individual's personal life. Designed for non-accounting majors.

Note: This course is not currently being offered.

ACTG 2010 - Survey of Accounting I

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online, 1st Blk*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$4.00

Course Fee Purpose: Course fees are designed to contribute to the cost of maintaining the Goddard School of Business and Economics Tutoring Lab. The costs of the lab include the cost of computer equipment, furniture and other fixtures, and the wages of the peer tutors. ACTG 2010 students can utilize the Tutoring Lab at no cost during the dates/times accounting tutors are available.

Description: Introduction to accounting information, the basic accounting cycle, and consideration of selected financial statement topics. The course emphasizes the uses and limitations of accounting information in economic decision-making, as well as problem-solving, oral and written communication skills, and computer skills.

ACTG 2020 - Survey of Accounting II

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 2nd Blk, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$4.00

Course Fee Purpose: Course fees are designed to contribute to the cost of maintaining the Goddard School of Business and Economics Tutoring Lab. The costs of the lab include the cost of computer equipment, furniture and other fixtures, and the wages of the peer tutors. ACTG 2020 students can utilize the Tutoring Lab at no cost during the dates/times accounting tutors are available.

Description: Further consideration of selected financial statement topics. Analysis of cost behavior and the uses and limitations of accounting information in planning, controlling, and decision-making processes. Emphasizes skills in problem-solving, oral and written communication, and computer skills.

Pre-requisite(s): ACTG 2010.

ACTG 2891 - Coop Work Experience

Credits: (1-3)

Description: Open to students meeting criteria established from time to time by the department and on file either in the department or the cooperative education office. Provides academic credit for selected on-the job experience. Grade and amount of credit will be determined by the department.

Pre-requisite(s): Instructor Approval.

ACTG 2892 - Coop Work Experience

Credits: (1-3)

Description: Open to students meeting criteria established from time to time by the department and on file either in the department or the cooperative education office. Provides academic credit for selected on-the job experience.

Grade and amount of credit will be determined by the department.

Pre-requisite(s): Instructor Approval.

ACTG 2893 - Coop Work Experience

Credits: (1-3)

Description: Open to students meeting criteria established from time to time by the department and on file either in the department or the cooperative education office. Provides academic credit for selected on-the-job experience.

Grade and amount of credit will be determined by the department.

Pre-requisite(s): Instructor Approval.

ACTG 2921 - Short Courses, Workshops, Institutes, & Special Programs

Credits: (1-3)

Variable Title

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ACTG 2922 - Short Courses, Workshops, Institutes, & Special Programs

Credits: (1-3)

Variable Title

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ACTG 2923 - Short Courses, Workshops, Institutes, & Special Programs

Credits: (1-3)

Variable Title

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ACTG 3110 - Intermediate Financial Accounting I

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introduction to the accounting profession, standard-setting process, and financial accounting concepts. Thorough study of the balance sheet, income statement, and statement of retained earnings. Theory and application of the time value of money. Financial accounting and reporting considerations for selected balance sheet topics.

Pre-requisite(s): ACTG 2010.

ACTG 3120 - Intermediate Financial Accounting II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Thorough study of the statement of cash flows. Financial accounting and reporting considerations for selected balance sheet topics not considered in Intermediate Financial Accounting I.

Pre-requisite(s): BSAD 2899 and ACTG 3110.

ACTG 3130 - Accounting Data Analytics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to increase student's technical and analytical skills and at the same time provide a review of accounting topics so that as professional accountants, students will have the skills to manage data effectively in a variety of accounting positions. Software products like Microsoft Excel, Microsoft SQL, and Tableau will be utilized in this class. Specifically, this course will enhance understanding of AIS data elements and data structures, critical thinking skills, and technical skills through the use of software packages and a variety of accounting topics.

Pre-requisite(s): ACTG 3110.

ACTG 3300 - Cost Accounting

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Cost determination for budgeting, product costing, process costing, cost assignment and allocation, standard costing, and decision making in manufacturing and service organizations.

Pre-requisite(s): BSAD 2899 and ACTG 2020.

ACTG 3400 - Taxation of Individuals

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Basic concepts of gross income, deductions, credits, special computations, and property transactions for individual taxpayers.

ACTG 3500 - International Accounting

Credits: (3)

Description: This course reviews major issues in international accounting, including historical, cultural, and environmental influences that impact various national accounting systems. Harmonization of standards is also examined.

Pre-requisite(s): ACTG 2020.

Note: Course not currently being offered.

ACTG 3750 - Accounting & Information Systems

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Course Fee: \$80.00

Course Fee Purpose: Online software training modules for Microsoft office and other pertinent software for class assignments. Currently provided in Percipio by Skillport.

Description: Analysis, design, and implementation of accounting information systems with special emphasis on an understanding of accounting cycles, internal control concepts, and data flows associated with basic economic entities of the organization.

Pre-requisite(s): BSAD 2899 and ACTG 3110.

ACTG 4130 - Advanced Accounting

Credits: (3)

Description: A study of business combination accounting. The course will also include an introduction to government and fund accounting.

Pre-requisite(s): BSAD 2899 and ACTG 3120.

Note: Course not currently being offered.

ACTG 4140 - Accounting for Global and Complex Entities

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Issues in international accounting not covered in Intermediate Accounting are covered in this course. The course also covers concepts related to accounting for complex entities, consolidated entities and partnerships.

Pre-requisite(s): ACTG 3120 and BSAD 2899.

ACTG 4440 - Taxation of Business Entities

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A study of the income taxation of corporations (including S corporations), limited liability companies, and partnerships.

Pre-requisite(s): BSAD 2899 and ACTG 3400.

ACTG 4510 - Auditing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Generally-accepted auditing standards, professional responsibilities, evidence, internal control, sampling, audit tests, and audit reports.

Pre-requisite(s): BSAD 2899 and (ACTG 3120 or concurrent enrollment in ACTG 3120).

ACTG 4801 - Individual Study

Credits: (1-3)

Description: Individual work or work in small groups by arrangement on special topics.

Pre-requisite(s): Instructor Approval.

ACTG 4802 - Individual Study

Credits: (1-3)

Description: Individual work or work in small groups by arrangement on special topics.

Pre-requisite(s): Instructor Approval.

ACTG 4803 - Individual Study

Credits: (1-3)

Description: Individual work or work in small groups by arrangement on special topics.

Pre-requisite(s): Instructor Approval.

ACTG 4810 - Experimental Course**Credits: (1-6)****Experimental**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ACTG 4850 - Accounting Study Abroad**Credits: (1-3)**

Description: This course is designed for students who wish to explore accounting theory and practice in countries other than the U.S. Students will study international accounting as offered through a partner university (or other university with department chair approval).

Pre-requisite(s): BSAD 2899.

Can be repeated once up to 6 credits.

ACTG 4891 - Accounting Internship**Credits: (1-3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to students meeting criteria established from time to time by the department and on file either in the department or the cooperative education office. Provides academic credit for selected on-the job experience. Grade and amount of credit will be determined by the department.

Pre-requisite(s): Instructor Approval.

ACTG 4892 - Accounting Internship**Credits: (1-3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to students meeting criteria established from time to time by the department and on file either in the department or the cooperative education office. Provides academic credit for selected on-the job experience. Grade and amount of credit will be determined by the department.

Pre-requisite(s): Instructor Approval.

ACTG 4893 INT - Accounting Internship**Credits: (1-3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to students meeting criteria established from time to time by the department and on file either in the department or the cooperative education office. Provides academic credit for selected on-the job experience. Grade and amount of credit will be determined by the department.

Pre-requisite(s): Instructor Approval.

ACTG 4921 - Short Courses, Workshops, Institutes, & Special Programs

Credits: (1-3)

Variable Title

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ACTG 4922 - Short Courses, Workshops, Institutes, & Special Programs

Credits: (1-3)

Variable Title

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ACTG 4923 - Short Courses, Workshops, Institutes, & Special Programs

Credits: (1-3)

Variable Title

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

AERO 1010 - Foundations of USAF I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Development, organization, and doctrine of the United States Air Force, emphasizing Strategic Force Requirements.

AERO 1010L - General Military Leadership Lab I

Credits: (0)

Typically Taught Fall Semester: *Full Sem*

Description: Studies and experience in Air Force standards, customs and courtesies. Introduction to drill and ceremonies. Studies typical organizations and missions of Air Force Bases through field trips.

AERO 1011 - Foundations of USAF II

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Development and organization of United States Air Force Defensive Forces, General Purpose Forces and Tactical Air Forces.

AERO 1011L - General Military Leadership Lab II

Credits: (0)

Typically Taught Spring Semester: *Full Sem*

Description: Studies and experience in Air Force standards, customs and courtesies. Introduction to drill and ceremonies. Studies typical organizations and missions of Air Force Bases through field trips.

AERO 1110 - General Military Leadership Lab I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Studies and experience in Air Force standards, customs and courtesies. Introduction to drill and ceremonies. Studies typical organizations and missions of Air Force Bases through field trips.

AERO 1111 - General Military Leadership Lab II

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Studies and experience in Air Force standards, customs and courtesies. Introduction to drill and ceremonies. Studies typical organizations and missions of Air Force Bases through field trips.

AERO 2010 - Airpower History I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Development of various concepts of air power employment, emphasizing factors that have prompted research and technological change.

AERO 2010L - General Military Leadership Lab III

Credits: (0)

Typically Taught Spring Semester: *Full Sem*

Description: Application of Air Force standards, customs and courtesies. Drill and ceremonies leadership, introduction to reviews and honors. First-hand exposure to various career opportunities within the Air Force and their application on a typical Air Force base.

AERO 2011 - Airpower History II

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Development of various concepts of air power employment, emphasizing factors that have prompted research and technological change.

AERO 2011L - General Military Leadership Lab IV

Credits: (0)

Typically Taught Spring Semester: *Full Sem*

Description: Application of Air Force standards, customs and courtesies. Drill and ceremonies leadership, introduction to reviews and honors. First-hand exposure to various career opportunities within the Air Force and their application on a typical Air Force base. Professional Officer Courses

AERO 2110 - General Military Leadership Lab III

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Application of Air Force standards, customs and courtesies. Drill and ceremonies leadership, introduction to reviews and honors. First-hand exposure to various career opportunities within the Air Force and their application on a typical Air Force base.

AERO 2111 - General Military Leadership Lab IV

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Application of Air Force standards, customs and courtesies. Drill and ceremonies leadership, introduction to reviews and honors. First-hand exposure to various career opportunities within the Air Force and their application on a typical Air Force base.

AERO 2830 - Directed Studies

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual study with a professor from Aerospace Studies (Air Force ROTC). Allows increased responsibility for GMC in an academic setting providing leadership/management skill development opportunities. May be repeated twice with a maximum of 3 credit hours.

AERO 3000 - Field Training

Credits: (1-4)

Typically Taught Fall Semester: *Full Sem*

Description: Four to five weeks of field training conducted at United States Air Force bases as arranged by the Professor of Aerospace Studies. Course prepares AFROTC students for entry into upper division AFROTC classes, the Professional Officer Corps, and for later commissioning into the US Air Force. The course offers a minimum of 269 hours of education and training in the areas of Officership, Air Force Orientation, Leadership, and Physical/Survival Training.

May be repeated 3 times with a maximum of 4 credit hours.

AERO 3010 - Leadership Studies I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Writing, speaking, and listening as communication skills; management concepts; responsibilities and ethics for an Air Force junior officer.

AERO 3010L - POC Leadership Lab I

Credits: (0)

Typically Taught Fall Semester: *Full Sem*

Description: Application of leadership and management skills in leadership positions in a student-run organization. Study of general structure and progression patterns common to selected Air Force officer career fields. Application of personnel performance evaluation techniques.

AERO 3011 - Leadership Studies II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Principles of leadership, problem solving, decision, discipline, and human relations. Emphasis on career planning as an Air Force junior officer.

AERO 3011L - POC Leadership Lab II

Credits: (0)

Typically Taught Spring Semester: *Full Sem*

Description: Application of leadership and management skills in leadership positions in a student-run organization. Study of general structure and progression patterns common to selected Air Force officer career fields. Application of personnel performance evaluation techniques.

AERO 3110 - POC Leadership Lab I

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Application of leadership and management skills in leadership positions in a student-run organization. Study of general structure and progression patterns common to selected Air Force officer career fields. Application of personnel performance evaluation techniques.

AERO 3111 - POC Leadership Lab II

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Application of leadership and management skills in leadership positions in a student-run organization. Study of general structure and progression patterns common to selected Air Force officer career fields. Application of personnel performance evaluation techniques.

AERO 4010 - National Security Affairs I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Examines the need for national security, analyzes the evolution and formulation of American defensive policy, strategy and joint doctrine. Investigates methods of managing conflict and touches on arms control and terrorism.

AERO 4010L - POC Leadership Lab III

Credits: (0)

Typically Taught Spring Semester: *Full Sem*

Description: Application of leadership and management techniques with individuals and groups. Introduction to operations and communications security. Introduction to advanced educational opportunities available to Air Force officers.

AERO 4011 - National Security Affairs II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Examines conflict management, arms control, military law and Air Force issues and policies.

AERO 4011L - POC Leadership Lab III

Credits: (0)

Typically Taught Spring Semester: *Full Sem*

Description: Application of leadership and management techniques with individuals and groups. Introduction to operations and communications security. Introduction to advanced educational opportunities available to Air Force officers.

AERO 4110 - POC Leadership Lab III

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Application of leadership and management techniques with individuals and groups. Introduction to operations and communications security. Introduction to advanced educational opportunities available to Air Force officers.

AERO 4111 - POC Leadership Lab IV

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Application of leadership and management techniques with individuals and groups. Introduction to operations and communications security. Introduction to advanced educational opportunities available to Air Force officers.

AERO 4830 - Directed Studies

Credits: (1-5)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual study with a professor from Aerospace Studies. Provides added leadership/management skill development opportunities to develop more competitive officer candidates. May be repeated 4 times with a maximum of 5 credit hours.

ANTH 1000 SS/CC - Introduction to Anthropology

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 2nd Blk, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Anthropology is the study of humankind, past and present: our origins and the development of cultural behavior and biological attributes. This course examines what it means to be human, describing and explaining human differences and similarities throughout time and across the world.

ANTH 1020 LS/SUS - Biological Anthropology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Explores human origins, evolution, and contemporary biological diversity by examining genetics, the human fossil record, primatology, and human ecology from a biocultural perspective.

ANTH 1040 HU/CC - Language and Culture

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Explores the nature of human language and its role in sociocultural settings. Surveys a world sample of languages from the perspective of anthropological linguistics including language structure, social functions, geographical and historical variation, and cultural values.

ANTH 2010 SS/CC - Peoples and Cultures of the World

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: A survey of cultures around the world, exploring their similarities and differences as observed by anthropologists.

ANTH 2030 SS/CC - Principles of Archaeology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Archaeology attempts to reconstruct prehistoric and early historic human life ways as well as long term cultural and biological evolutionary processes through the scientific study of material remains. This course focuses upon the history of archaeology, the ways in which archaeologists recover and analyze data, and the major theoretical perspectives used to interpret the past.

ANTH 2220 - Introduction to Forensic Anthropology

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course is an introduction to the principles of forensic anthropology, a subdiscipline of biological anthropology concerned with the identification of human skeletal remains in medico-legal contexts. Topics covered include a survey of the history of the field and the techniques used to determine age, sex, and physical characteristics of an individual from skeletonized remains, as well as methods used for positive identification, estimating time since death, and determining cause and manner of death. This course is offered in lower division format (ANTH 2220) and upper division format (ANTH 4220). Students must choose either the upper division course or the lower division course and will not receive credits for taking both courses.

ANTH 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

ANTH 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

ANTH 2950 - Elementary Anthropological Field Trip

Credits: (1-3)

Typically Taught Summer Semester: *1st Blk*

Description: Students will visit areas and events of anthropological interest. The course will include relevant lectures, readings, and exercises designed to maximize and evaluate the learning experience. Pre- and post-trip meetings for student preparation, feedback, and course evaluation will occur. When the course number is used, it will be accompanied by a specific title and authorized credit which will appear on the student's transcript.

Pre-requisite(s): Consent of instructor.

A maximum of three credit hours of ANTH 2950 can be applied toward graduation.

ANTH 2990 - Special Topics in Anthropology

Credits: (1-3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A course allowing examination of selected topics and current issues in Anthropology. When the course number is used, it will be accompanied by a specific title and authorized credit which will appear on the student's transcript. Offerings of same title may not be repeated for credit toward graduation.

May be repeated 6 times with a maximum of 18 credit hours.

ANTH 3100 - North American Archaeology

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A general survey course concerning the archaeology of North America and an interpretation of its prehistory. The course material spans the time of initial human occupation of the continent through the early historic period, and emphasizes the three major cultural stages (Paleo Indian, Archaic, and Formative) which characterize the archaeological record of North America.

ANTH 3150 - Archaeology of the Great Basin

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course introduces students to the archaeological and ethnographic peoples of the Great Basin while exploring how the environment and specific theoretical approaches have shaped how they are understood. A portion of the course also focuses on on-going archaeological debates and current research in the region.

ANTH 3200 - Archaeology of Early Civilizations

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is designed to survey the broad range of early civilizations worldwide as they are known archaeologically, including the variety of ways and places in which they have arisen and the great diversity of peoples who created them. It examines highly complex societies in sub-Saharan and North Africa, native North and South America, East and South Asia, the Middle East, the Aegean and Celtic Europe, discussing in detail the diverse ways of life in these civilizations and how they shaped cultural forms, practices and ideas in the modern life of these regions today.

ANTH 3250 - Human Osteology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is a detailed study of the anatomy of the human skeleton as a dynamic, living system. Consideration is given to the growth, structure, and function of bones, and to bioarchaeological and forensic skills such as the determination of ancestry, age, sex, stature, and pathology from skeletal remains. We will combine theory, its applications, and the limitation of osteological methods with laboratory analysis. Relevant techniques for the reconstruction of past populations and the assessment of human biological variation will be introduced.

ANTH 3300 - Archaeological Field Techniques

Credits: (3-6)

Typically Taught Summer Semester: *2nd Blk*

Description: Intensive field school involving archaeological excavation and/or survey, emphasizing modern field techniques, data recordation and recovery, map interpretation and production, and the proper conduct of problem-oriented archaeology.

Pre-requisite(s): ANTH 2030, one upper division archaeology course such as ANTH 3100, 3200, or 3400, and consent of instructor.

May be repeated up to 12 credit hours.

Note: Archaeology Track, Archaeological Technician Associate's Degree, and Archaeological Technician Certificate students must complete 6 credit hours.

ANTH 3400 CRE - Archaeological Laboratory Techniques

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Emphasizes student analysis and write-up of an artifact assemblage from an archaeological site.

Weekly lectures familiarize students with analyses of prehistoric and historic archaeological materials, as well as the production of text, figures, tables, maps, and bibliographies for technical reports.

Pre-requisite(s): ANTH 2030 or consent of instructor.

Suggested Requisite(s): Students are strongly encouraged to take ANTH 3300 before taking ANTH 3400.

ANTH 3500 - Advanced Cultural Anthropology

Credits: (3)

Description: The nature of culture, its structure and function in the variety of human activities.

Pre-requisite(s): ANTH 1000 or ANTH 2010 or consent of instructor.

ANTH 3600 - Culture Area Studies

Credits: (1-3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Surveys selected societies in ethnographically different cultural areas of the world, such as Africa, Asia, North American Indians, Latin America, the Middle East, the Pacific, or the modern United States. When the number is used, it will be accompanied by a descriptive title and the credit authorized, which will appear on the student transcript. Offerings of same title may not be repeated for credit toward graduation.

Pre-requisite(s): ANTH 1000 or ANTH 2010 or consent of instructor.

May be repeated 6 times with a maximum of 18 credit hours.

ANTH 3900 - Anthropology of Religion

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: How do spiritual, cosmological, and religious experiences shape our relationships with the world, each other, and ourselves? In this course, we will explore this and many other questions about the operation of faith, belief, spirituality and religion in the world from an anthropological perspective. That means, we will be examining religious and spiritual practice as culturally informed social action. Through a diverse range of literature, film, and podcasts, we will engage historical and contemporary theories on what religion may tell us about the project of being human.

ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Explores means by which archaeological inferences are made to decipher the material record of past human behavior. Includes the history of recent archaeological thought from the beginnings of scientific archaeology (ca. 1960's) through the profession of cultural resource management.

Pre-requisite(s): ANTH 2030.

ANTH 4150 - Technical Skills in Anthropology

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces students to visual and spatial data collection, management, and production skills through direct hands-on training and lecture. Topics include field and laboratory-based photography, manipulation and management of digital images, spatial data collection through Global Positioning Systems (GPS) and total stations, and digital map/image creation. While exercises used throughout the course focus on archaeological examples, the technical skills learned can easily be applied to all four subfields of anthropology.

ANTH 4200 - Anthropological Theory

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Historical and theoretical development of the major anthropological schools of thought including 19th century evolutionism, historical particularism, social anthropology, symbolic analysis, neoevolutionism, and cultural ecology.

Pre-requisite(s): ANTH 1000 or consent of instructor.

ANTH 4220 - Introduction to Forensic Anthropology

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online, 1st Block, 1st Block Online, 2nd Block*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This upper division course is an introduction to forensic anthropology, a subdiscipline of physical anthropology concerned with the identification of human skeletal remains in medico-legal contexts. Topics covered in this course include a survey of the history of the field and the techniques used to determine age, sex, and physical characteristics of an individual from skeletonized remains, as well as methods used for positive identification, estimating time since death, and determining cause and manner of death. Special attention will be given to Human Osteology as it is relevant in forensic contexts. This course is offered in lower division format (ANTH 2220) and upper division format (ANTH 4220). Students must choose either the upper division course or the lower division course and will not receive credits for taking both courses.

Suggested Requisite(s): ANTH 3250 - Human Osteology.

ANTH 4300 CRE - Anthropological Research Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Students will learn and apply the scientific methods of inquiry used in anthropological research. Required for majors and recommended for minors.

Pre-requisite(s): ANTH 1000 or a 2000-level course; and SOC 3600, or consent of instructor.

ANTH 4810 - Experimental Course

Credits: (1-6)**Experimental**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ANTH 4830 INT - Readings and/or Projects**Credits: (1-3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual readings and/or projects for anthropology students.

Pre-requisite(s): ANTH 1000, permission of instructor and approval of program coordinator.

Maximum of 6 hours may be applied toward graduation.

ANTH 4890 INT - Internship in Anthropology**Credits: (1-3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Anthropology majors may apply for internship opportunities that provide the student with both practical and research experiences.

Pre-requisite(s): 6 hours of upper-division anthropology courses, Anthropology major status, approval of Program Coordinator.

A student may complete a total up to 6 hours of internships for credit, with a maximum of 3 hours to be applied towards the Anthropology major.

ANTH 4900 CRE - Senior Capstone Seminar**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: This class is a one-semester three credit hour seminar whose main goal is integration of materials within the major (especially what you have learned in Methods and Theory). The Senior Thesis is a culminating experience focused on a theoretical issue, practical research or applied work, a historical period or theme within anthropology. Students will write an academic thesis paper which centers on a topic chosen by the student in consultation with the course instructor and, depending on the anthropological subfield, another faculty member in this department. The project requires approval of the course instructor and may include an applied or fieldwork component. Students will develop a research question, prepare a literature review, collect and analyze data, complete and present a substantial research writing project (the senior thesis) using the skills they have acquired throughout their academic career, drawing particularly upon the required theory and methods classes in crafting their research proposals. Students will be encouraged to engage deeply with a topic they care about as they produce a Senior Thesis based on original scholarship that displays a refined understanding of current literature and enduring analytical perspectives in Anthropology. In addition to the research project, this course also examines anthropology as a career through presentations, readings, and discussions that help students prepare for the process of applying to graduate programs and/or explore career opportunities in which an anthropology degree can be applied.

Pre-requisite(s): ANTH 4300.

ANTH 4920 - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

ANTH 4950 - Advanced Anthropological Field Trip

Credits: (1-3)

Typically Taught Summer Semester: *1st Blk*

Description: Students will visit areas and events of anthropological interest. The course will include relevant lectures, readings, and exercises designed to maximize and evaluate the learning experience. Pre- and post-trip meetings for student preparation, feedback, and course evaluation will occur. When the course number is used, it will be accompanied by a specific title and authorized credit which will appear on the student's transcript.

Pre-requisite(s): ANTH 1000 or ANTH 2030 and consent of instructor.

A maximum of three credit hours of Anthropology 4950 can be applied toward graduation.

ANTH 4990 - Seminar in Anthropology

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An advanced course allowing in-depth study of selected topics and current issues in Anthropology. When the course number is used, it will be accompanied by a specific title with the credit authorized, which will appear on the student's transcript. Offerings of same title may not be repeated for credit toward graduation.

Pre-requisite(s): ANTH 1000 or consent of instructor.

May be repeated 6 times with a maximum of 18 credit hours.

APPE 1010 - Introduction to Applied Politics, Philosophy & Economics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This introductory course introduces core concepts of philosophy, political science, and economics, and applies these concepts and principles to contemporary topics. This course will establish a foundation for students in the Bachelor of Applied Philosophy, Politics, and Economics program.

APPE 4900 - Capstone in Politics, Philosophy and Economics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This capstone course is the culminating academic experience to help students synthesize and apply what they have learned throughout the APPE program. This course involves a capstone project or experience, allowing students to showcase their skills and knowledge. Students will also be expected to present a portfolio demonstrating their competencies.

Pre-requisite(s): APPE 1010.

ARCH 1040 CA - Introduction to Architecture

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$50.00 for FTF sections; \$35 for ONL sections

Course Fee Purpose: Computer equipment, lab aid to assist in learning software, consumable paper.

Description: An introductory course to allow students to learn about the field of architectural design, and other associated careers in conjunction with Building Design & Construction. Students will research and explore the world of architecture around them, and see how they might find a place therein.

ARCH 1350 - Architectural Design Communications I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Computer, paper, lab aid, for the students to use in the classroom. The lab aids are available in person as well as on zoom or the phone.

Description: This will be a course to allow students to explore the field of Residential Design and Architecture. Students will research and present precedents of great residential design. Residential Design concepts will be taught and explored within the projects. Course content will include research-based assignments and presentations, along with studio design and work critiques. Students will create and present ideas and thoughts through the use of analog, digital and oral presentations. Students will begin to understand the difference between simply building houses, and creating a great piece of residential architecture. The class will include architectural readings, interpretation thereof, and the design and production of architectural design and construction documents.

Pre-requisite(s): ARCH 1040.

Pre-requisite/Co-requisite: CM 1310.

ARCH 2000 - Architectural Communications II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$60.00

Course Fee Purpose: Computer, paper, lab aid, Architectural Model products, Maintenance and replacement of lab equipment.

Description: This course will introduce students to the representation of architecture. Students will develop presentation skills by use of digital and analog means. They will gain the ability to show and represent their architectural work by use of drawing interpretation, creation and physical model building. Scale, forces of nature, and accurate representation will be part of this class. The course content will include hands on learning assignments, architectural reproductions, independent designs and presentations. At the end of the semester, students will create architecture with a final assignment where they will display the skills that they have learned during the semester.

Pre-requisite(s): ARCH 1350.

ARCH 2830 - Directed Studies

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Directed readings in Building Design, & Construction.

Pre-requisite(s): Department approval.

Can be taken for 3 credit hours three times for a maximum of 9 credits.

ARCH 3000 SUS - Sustainable Building Design & Codes

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$15.00

Course Fee Purpose: For lab aid wages

Description: An analysis of sustainability in the green built environment including certifications such as LEED, Energy Star, RESNET, and the National Green Building Standard. Course discussions will include: What is Green Building and why does it make sense, Building Science fundamentals, planning for Green from the start, Green Building Economics, and Building performance analysis.

ARCH 3100 - Residential Design Studio

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$60.00

Course Fee Purpose: \$30 fee for computer lab access. \$15 fee for lab aid. \$5 fee to be able to print in any of the labs to 8.5x11 and 11x17 paper. \$15 to offset the costs to operate and maintain the digital fabrication lab equipment. \$10 fee for materials to build architectural models.

Description: This will be a course to allow students to explore the field of Residential Design and Architecture. Students will research and present precedents of great residential design. Residential Design concepts will be explored and employed within the explorations and projects. Course content will include research-based assignments and presentations, along with studio design and work critics. Students will create and present ideas and thoughts through the use of analog, and digital means. Students will begin to understand the difference between just building houses, and creating a great piece of residential architecture. The class will include architectural readings, interpretation thereof, and the design and production of architectural and construction documents.

Pre-requisite(s): ARCH 1040, ARCH 1350, and ARCH 2000.

ARCH 3200 - Commercial Design Studio

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$60.00

Course Fee Purpose: Computer, lab aid, able to print in any of the labs, lab equipment, materials to build your architectural models.

Description: This will be a course to allow students to explore the field of Commercial Design and Architecture. Students will research and present precedents of examples of architecture and methods of construction. Design concepts will be explored and employed within the explorations and projects. Course content will include research-based assignments and presentations, along with studio design and work critiques. Students will create and present ideas and thoughts through the use of analog, digital, and oral presentations. Students will begin to understand the difference between just building commercial square footage, and creating a great piece of architecture. The class will include architectural readings, interpretation thereof, and the design and production of architectural and construction documents.

Pre-requisite(s): ARCH 3100.

ARCH 3500 - Architectural Rendering & Animation Studio

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Computers, paper, lab aid.

Description: This course introduces students to the basic tools and concepts used to create photo realistic renderings and animations for the Architecture industry.

Pre-requisite/Co-requisite: ARCH 1350 or CM 2360 or ID 2080.

ARCH 3660 - Structure for Architects & Construction Managers

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Computer replacement, paper, lab aid.

Description: An introduction to the design implications of steel, reinforced concrete, and wood using a highly visual format and real-world examples to underline the key facets of structural principles that are necessary for collaborating confidently with design and construction team members. Emerging software tools will be used to size, specify, and analyze structural members.

Pre-requisite(s): Math QL.

ARCH 4350 - BIM Management & Coordination

Credits: (3)

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Course Fee: \$50.00

Course Fee Purpose: Computer replacement, paper, lab aid.

Description: An advanced BIM course dealing with BIM project management, MEP modeling, clash detection, 4D scheduling, as well as emerging technology in the Building Design & Construction industry.

Pre-requisite(s): ARCH 2000 or CM 2360.

ARCH 4600 SUS - Senior Project

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is a culminating experience for students from the program. Requires integration of concepts from a variety of coursework to prepare and present a solution to a building design & construction problem. Emphasis placed on integrated project management including preparation of drawings, creation of presentations, project organization, control, and documentation.

This course may be taken twice for credit.

ARCH 4830 - Directed Studies

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed readings in Building Design and Construction. Must have department approval.

Can be taken for 3 credit hours three times for a maximum of 9 credits.

ARCH 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized for the particular offering will appear on the student transcript.

Pre-requisite(s): Consent of instructor.
May be repeated for a total maximum of 6 credit hours.

ART 1010 CA - Introduction to the Visual Arts

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Description: Introduction to all forms of visual art covering processes (such as demonstration of the lost-wax process of metal casting), language, responses (oral and written assignments that utilize art-related terminology), issues (such as patronage, feminism or orientalism), and ways of seeing and understanding works of art. A general education course for the non-art major.

ART 1030 CA - Studio Art for the Non-Art Major

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$57.00

Course Fee Purpose: Studio materials; KA digital lab access, equipment, software, printing; Sculpture Lab fee supporting shop use.

Description: A general education course for non-art majors that primarily includes a series of hands-on art experiences (such as drawing and sculpture). Class discussion draws from the disciplines of art history, art criticism, and aesthetics as guides through visual presentations. For students desiring to broaden their academic background in the area of visual literacy and problem solving.

ART 1040 - Orientation to Visual Studies

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$57.00

Course Fee Purpose: KA 3D studio lab equipment, materials & assistance, KA digital lab access, equipment, software, printing, course/studio lab materials.

Description: Orientation to the visual world including how we perceive and interpret visual messages, the impact of the visual on human relations, political exploitation of the visual and aesthetic issues in the visual arts. Topics are explored through written and creative projects designed to establish a context for expanded study in the visual arts. Includes curriculum planning for art and design majors, introduction to programs and faculty, and professional opportunities.

ART 1110 CA - Drawing I

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$57.00

Course Fee Purpose: KA 3D studio lab equipment, materials & assistance, KA digital lab access, equipment, software, printing, Studio lab materials & equipment.

Description: This is the foundation drawing class for art majors and minors (not a general education class). Perceptual and conceptual development stressed. Variety of materials and procedures investigated.

ART 1120 - Design Concepts

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$57.00

Course Fee Purpose: KA 3D studio lab equipment, materials & assistance, KA digital lab access, equipment, software, printing, Studio lab materials & equipment.

Description: An introduction to visual language, design principles, and compositional approaches in two and three dimensions. Basic approaches to sketching and modeling, improving compositional structures, and using form and color to communicate will be addressed.

ART 1130 - Approaches to Surface, Shape and Form

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$104.00

Course Fee Purpose: KA digital lab access, equipment, software, printing, studio lab clay materials, equipment, maintenance.

Description: An in-depth exploration of diverse approaches to communicating through form and color in two and three dimensions. In the course of the semester, students will complete three workshop-style segments across a range of media to include 3D fabrication, analog 2D composition, and digital color & composition.

ART 1135 - Approaches to Materials, Space and Time

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$104.00

Course Fee Purpose: KA 3D studio lab equipment, materials & assistance, KA digital lab access, equipment, software, printing, studio lab materials, equipment, maintenance.

Description: An in-depth exploration of a range of approaches to communicating through material, spatial and time-based methods. In the course of the semester, students will complete three workshop-style segments across a range of media to include analog experimental media, art & design in space and time & interaction.

ART 2015 - Drawing on the Land

Credits: (3)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Description: Introduction to visual arts media as a productive way to investigate and interpret the natural environment. Appropriate for the art major as well as the non-art major. Participants will build a practice of observation, inquiry, and discovery via drawing and/or other media as designated by faculty. A significant portion of each course will be conducted in the field. Media focus and field location will be announced in advance. Some travel is required. Camping may be required.

This course may be repeated twice with a maximum of 9 credit hours with different titles.

ART 2200 - Introduction to Printmaking

Credits: (3)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$164.00**Course Fee Purpose:** KA Sculpture Lab equipment, materials & assistance, KA digital lab access, equipment, software, printing, studio lab printmaking materials, equipment, maintenance.**Description:** An introduction to all printmaking classes covering the processes of intaglio, screen-printing, relief, lithography, and monotype. Students are provided with the fundamentals of each process and experience with each one.

Note: This class is a prerequisite for all printmaking classes.

ART 2250 - Foundations of Photography: Black & White/Analog**Credits: (3)****Typically Taught Summer Semester:** *1st Blk***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$132.00**Course Fee Purpose:** Studio lab photo materials, photographic and darkroom equipment, maintenance and printing. KA Sculpture Lab equipment, materials & assistance; KA Digital Lab access,**Description:** A highly disciplined craft and concept course to help develop technical and aesthetic skills in black and white photography. Students learn the use of the camera, zone system of exposure, film, and print processing, and gain an aesthetic sense of the medium.**ART 2310 - Ceramics I****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$194.00**Course Fee Purpose:** Studio lab clay materials, glazes, equipment and maintenance. KA Sculpture Lab equipment, materials & assistance; KA Digital Lab access, equipment, software, printing.**Description:** The first course of a two-part introduction to ceramic art. Projects in hand-building and wheel-thrown objects are emphasized. Multiple surfacing and firing techniques will be explored.**ART 2350 - Small Metals/Jewelry I****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$144.00**Course Fee Purpose:** KA digital lab access, equipment, software, printing, studio materials, printing, equipment, maintenance.**Description:** Introduction to tools, materials, and basic techniques of fabrication and casting, with an emphasis on design.**ART 2420A - Bitmap Imaging****Credits: (1)****Description:** Emphasis on the principle of bitmap imaging using industry-standard software. This course builds on studies in basic two-dimensional design and provides the conceptual and technical foundation for more advanced work in color photography, graphic design, illustration, web-based and other digital media. Primary software: Adobe

Photoshop.

Pre-requisite(s): ART 1120 or consent of instructor.

ART 2420B - Vector Drawing

Credits: (1)

Typically Taught Fall Semester: *1st Blk, 2nd Blk*

Typically Taught Spring Semester: *1st Blk, 2nd Blk*

Description: Emphasis on vector drawing as applied to problems in art and design. This course builds on studies in basic two-dimensional design and provides the conceptual and technical foundation for more advanced work in graphic design, animation, 3D modeling, and web design. Primary software: Adobe Illustrator.

Pre-requisite(s): ART 1120 or consent of instructor.

ART 2420C - Digital Page Composition

Credits: (1)

Typically Taught Fall Semester: *1st Blk, 2nd Blk*

Typically Taught Spring Semester: *1st Blk, 2nd Blk*

Description: Emphasis on the principles of layout using industry-standard software tools. This course builds on studies in basic two-dimensional design and provides the conceptual and technical foundation for more advanced work in typography and graphic design. Primary software: Quark Express.

Pre-requisite(s): ART 1120 or consent of instructor.

ART 2420D - Design for the Internet

Credits: (1)

Typically Taught Fall Semester: *1st Blk, 2nd Blk*

Typically Taught Spring Semester: *1st Blk, 2nd Blk*

Description: Emphasis on the principles of web design using industry-standard software. This course builds in studies in basic two-dimensional design and provides the conceptual and technical foundation for more advanced work in digital media and web design. Primary software: Macromedia Dreamweaver.

Pre-requisite(s): ART 1120 or consent of instructor.

ART 2430 - Introduction to Graphic Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$107.00

Course Fee Purpose: Studio materials, printing, KA Sculpture Lab equipment, materials & assistance; KA Digital Lab access, equipment, software; equipment maintenance.

Description: Introduction to the technical foundations of graphic design along with the elements and principles of visual language. Emphasis on the development of software skills, image and symbol development, graphic systems and design process.

Co-Requisite(s): ART 1120.

ART 2435 - Graphic Design Practice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Exploration of core elements and processes in the practice of graphic design. Includes project work in

basic typography, image generation, visual metaphor, word/picture communication, and information design.

Pre-requisite(s): ART 2430.

ART 2450 CA - Foundations of Photography: Color/Digital

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$162.00

Course Fee Purpose: Photographic studio lab cameras and printing equipment and supplies. KA Sculpture Lab equipment, materials & assistance; KA digital lab access, equipment, software.

Description: A highly disciplined craft and concept course to help develop technical and aesthetic skills in color photography. Students will learn and explore the theory, practice, and aesthetics of shooting and printing color photographic materials. Using digital media and new technology as a means for creative expression and investigation in color photography will also be a main concern in this course.

ART 2600 - Painting I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$92.00

Course Fee Purpose: Painting studio lab painting materials and equipment. KA Sculpture Lab equipment, materials & assistance, KA Digital Lab access, equipment, software and printing.

Description: Introduction to painting including the construction and design of paintings, investigations into the character and actions of various paints and techniques (traditional and contemporary) on a variety of surfaces.

ART 2700 - Sculpture I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$132.00

Course Fee Purpose: Sculpture Studio Lab course materials, equipment and maintenance, plus KA Digital Lab access, equipment, software and printing.

Description: An introduction to the essential methods and materials of sculpture including modeling, carving, casting, and construction with emphasis on contemporary activity in sculpture and with projects designed to practice concept development.

ART 2750 - Foundations of Video Art

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$132.00

Course Fee Purpose: Lens-based Studio lab video materials, equipment and maintenance. KA Sculpture Lab equipment, materials & assistance; KA digital lab access, equipment, software, printing.

Description: This course will provide students with an introductory-level investigation of the skills and concepts used in experimental digital video making. Students will learn video recording and editing in an art context and to incorporate video into their own creative practice. Students will also be introduced to historical and contemporary aesthetic and conceptual issues surrounding video as a form of creative expression.

ART 2810 - Experimental Course

Credits: (1-6)

Experimental

Course Fee: \$132.00

Course Fee Purpose: Topic and material-specific studio lab materials and equipment usage and fees. KA 3D studio lab equipment, materials & assistance, KA digital lab access, equipment, software and printing.

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ART 2830 - Directed Readings

Credits: (1-3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$37.00

Course Fee Purpose: KA digital lab access, equipment, software, scanning and printing.

Description: Individually chosen readings on specialized topics supervised by a faculty member.

Pre-requisite(s): Consent of faculty supervisor prior to registration.

May be repeated twice with a maximum of 3 credit hours.

ART 2850 - Furniture Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Furniture Design explores the intersection of Sculpture and Design through furniture and object making. The course addresses emerging and historic approaches to furniture including both functional and sculptural approaches by contemporary artists and designers. Students will develop intermediate to advanced skills in woodworking and metalworking while studying design and sculpture concepts and gaining a broad understanding of materials. Students will be introduced to CNC fabrication technology and CAD software for designing and creating functional furniture and furniture as sculpture.

May be repeated three times with a maximum of nine credit hours.

ART 2890 INT - Cooperative Work Experience

Credits: (1-2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An opportunity for students to receive academic credit for faculty approved on-the-job learning experiences within certain visual arts areas of emphasis. C/NC only.

Pre-requisite(s): Instructor approval (before enrollment) and previous or concurrent enrollment in art classes as specified by each area of emphasis.

May be repeated with a maximum of 6 credit hours.

ART 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ART 3085 - Critical Issues in Art

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces students to the history of ideas in art from the ancient Greeks to the most contemporary currents, with a focus on Modernism and Post-Modernism up to the present. The goal of this course is the creation of a critical and theoretical foundation that will allow student to locate themselves and their work within the context of critical dialogues in the contemporary art world. Class time will involve discussions of assigned readings, with images presented to supplement and inform the ideas under consideration.

Pre-requisite(s): ART 1040 or consent of instructor.

ART 3120 - Figure Drawing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$147.00

Course Fee Purpose: Studio lab materials and model fees. KA Sculpture Studio Lab equipment, materials & assistance; KA Digital Lab access, equipment, software and printing.

Description: Study of the anatomical structure of the human body. The student, by means of drawing from the model, explores literal and experimental interpretation of form.

Pre-requisite(s): ART 1110 and ART 1120; or consent of instructor.

ART 3150 - Intermediate Photography: Seminar

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$162.00

Course Fee Purpose: KA 3D studio lab equipment, materials & assistance, KA digital lab access, equipment, software, printing, studio lab photo materials, equipment, maintenance.

Description: This course is designed to introduce students early to the type of intense investigation and experimentation necessary to define and execute a semester long project in photography. Emphasis will be on development of ideas, fine-tuning technique, and improving ability in critical evaluation and writing. Other topics covered will be an introduction to professional medium-format cameras, and portfolio preparation.

Pre-requisite(s): ART 2250 and ART 2450.

May be repeated twice with a maximum of 6 credit hours.

ART 3200 - Intermediate Printmaking

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$164.00

Course Fee Purpose: Printmaking studio lab materials, equipment, maintenance. KA Sculpture Studio Lab equipment, materials & assistance; KA Digital Lab access, equipment, software and printing.

Description: An intermediate level class with emphasis on screen-printing, relief, and intaglio with further exploration into print processes that include photographic stencils and multicolor printing.

Pre-requisite(s): ART 1120 and ART 2200; or consent of instructor.

ART 3210 - Relief Printmaking

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$164.00

Course Fee Purpose: Printmaking studio lab materials, equipment, maintenance. KA Sculpture Studio Lab equipment, materials & assistance; KA Digital Lab access, equipment, software and printing.

Description: Students will learn the basic printmaking processes and traditional techniques of carving and printing both wood and linoleum relief blocks. Contemporary approaches to relief processes through digital media experimentation will be introduced. Emphasis is on development of the student's own ideas through experimentation, using traditional and non-traditional forms and processes. Safety issues will be addressed. Students will work from an introductory through an intermediate level, with a variety of progressive projects, each resulting in a small edition. The course will be administered through lecture, process demos, in class work time, and peer/individual critiques. Materials fee will cover most studio costs, excluding plates and paper. May be repeated once up to 6 credit hours.

ART 3215 - Etching Printmaking

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$164.00

Course Fee Purpose: Printmaking studio lab materials, equipment and maintenance. KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Students learn basic platemaking and printing techniques used in etching while learning to incorporate their own drawing skills and points of view. Line work, aquatint, and ancillary techniques will be explored. Safety issues will be addressed. Historical and contemporary prints and printmakers are reviewed. Emphasis is on development of the student's own ideas through experimentation, using traditional and non-traditional forms and processes. The course will be administered through lecture, demos, in class work time, and formal and informal peer critiques. Materials fee to cover most supplies except for printing plates and paper. May be repeated once up to 6 credit hours.

ART 3250 - Experimental Filmmaking

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is an introduction to experimental and avant garde filmmaking and cinema. This hands-on production based course will expose students to alternative film and video history, diverse experiences, artistic practice, and experimental methods of filmmaking. Students will be encouraged to push the boundaries of conventional cinema and experiment with the material and conceptual possibilities of filmmaking to create their own film projects.

Pre-requisite(s): ART 2750 or FILM 2280 or COMM 2250.

ART 3310 - Ceramics II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$194.00

Course Fee Purpose: Ceramics Studio lab clay materials, equipment and maintenance. KA Sculpture Studio I Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: The second class in a two-part introductory ceramics series. This course expands upon hand-building and covers wheel-thrown techniques in greater depth. Additional approaches to clay surfacing are explored. Students learn clay mixing, glaze testing and principles of kiln firing.

Pre-requisite(s): ART 2310.

ART 3320 - Ceramic Processes

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$194.00

Course Fee Purpose: Ceramics Studio lab clay materials, equipment and maintenance. KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: This course focuses on specific ceramic processes, trends or concepts that are not normally taught in the regular ceramics classes. Consult department or instructor for course topic prior to enrollment.

Pre-requisite(s): ART 2310 or consent of instructor.

May be repeated 3 times with a maximum of 9 credit hours.

ART 3350 - Small Metals/Jewelry II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$132.00

Course Fee Purpose: Small Metals (Sculpture) studio lab materials and equipment. KA digital lab access, equipment, software and printing.

Description: Development of design concepts and procedures with emphasis on basic techniques and concept development in fabrication, casting, enameling, cold connectors, surface enrichment.

Pre-requisite(s): ART 2350 or consent of instructor.

ART 3410 - Design Seminar for Juniors

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$107.00

Course Fee Purpose: Design Studio materials and equipment and guest lecture fees. KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Orientation to professional Graphic Design practice for the Junior Graphic Design student. Includes art direction and work situations, client relations, portfolio and resume preparation, self-promotion, and career advancement. Course contents will be explored through reading, writing, lecture, discussion, critique, simulation, guest presentations, studio visits, and project work tailored to individual portfolio development.

Pre-requisite(s): ART 3445 and ARTH 3451 or consent of instructor.

ART 3430 - Typography 1

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$107.00

Course Fee Purpose: Design Studio materials and equipment and guest lecture fees. KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Orientation to typographic communications including methods and processes, aesthetics, readability, typographic systems, grids, layout, and digital page composition.

Pre-requisite(s): ART 2430 or consent of instructor.

ART 3435 - Typography 2

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$107.00

Course Fee Purpose: Design Studio materials and equipment and guest lecture fees. KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Investigation into experimental and expressive aspects of typographic communication. Emphasis is placed upon the historical development of letter design, letter and text as visual form, and typographical illustration.

Pre-requisite(s): ART 2430 and ART 3430 or consent of instructor.

ART 3445 - Interaction Design 1

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$107.00

Course Fee Purpose: Design Studio materials and equipment. KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Introduction to designing for the internet. Emphasis on the graphic design techniques and theories as applied to the web. Students explore best practices in web-based graphic design which includes implementing principles of branding, typography, usability, interface design, and information architecture. Students create web interfaces and design systems, and assemble them into working prototypes in preparation for web development.

Pre-requisite(s): ART 3430 or consent of instructor.

May be repeated once for credit.

ART 3460 - Illustration

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$107.00

Course Fee Purpose: Design Studio materials and equipment; KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Introduction to theory, methods, tools and materials, and the professional practice of illustration. Emphasis is placed on concept development, media exploration and technique as applied to a variety of problems in pictorial communication.

Pre-requisite(s): ART 1110 and ART 1120 or consent of instructor.

ART 3465 - Motion Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$107.00

Course Fee Purpose: Design Studio materials and equipment; KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: This course is an introduction to Motion Design (in relation to Graphic Design) and will cover the history and aesthetics of motion design, ways to think in time and space, techniques and methods for planning motion sequences, ways to think about and design with typography in motion, and the use of motion-specific industry-standard software and tools (Apple Motion, Adobe Flash, Adobe After Effects). This course aims to: provide historic and current perspectives regarding motion graphics and design; introduce students to categories, styles, terminology and vocabulary used in motion graphics and design; introduce students to basic techniques, methods and concepts used in motion design; work with typography and image in terms of motion; reinforce graphic design tenets and practices, and show how they extend to motion design.

Pre-requisite(s): (ART 3430 and ART 2435); or consent of instructor.

May be repeated three times for a maximum of nine credit hours.

ART 3500 - Advanced Time-Based Media/Video Art

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$129.00

Course Fee Purpose: Lens-based Studio Lab video materials, equipment and maintenance. KA Sculpture Lab equipment, materials & assistance; KA digital lab access, equipment, software, printing.

Description: A project-oriented studio course providing a more in-depth exploration of time-based media as used by contemporary artists with an emphasis on video. We will explore installation, projection and the web as environments for video art, as well as other media which allows the employment of time as a central element.

Pre-requisite(s): ART 2750.

ART 3515 - Art Methods and Resources for Secondary Teachers I [Art Methods I]

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$132.00

Course Fee Purpose: Art Methods course materials and equipment. KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: This class prepares the art education candidate for teaching in the classroom, grades 7-12 and adaptable to K- 6. Experiences will include art activities, processes, materials, tools and resources, with the development and preparation of the accompanying curricula materials, lesson plans and assessments by the candidate. Curriculum aligns with State of Utah's core curriculum and national standards in the visual arts. Content will focus on the foundations of art education programming, including the art elements and design principles. In addition, this class will examine classroom management strategies and practices for the beginning teacher in the contemporary classroom. Art Education majors should have completed 40 credit hours; minors must have completed 12 credit hours.

Suggested Requisite(s): Professional Core Level, College of Education, or permission of instructor. This course is required for secondary certification and is designed be taken prior to student teaching.

ART 3520 - Art Methods and Resources for Secondary Teachers II [Art Methods II]

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$132.00

Course Fee Purpose: Art Methods course materials and equipment. KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Examination of advanced approaches, methodologies, and curriculum appropriate to teaching visual arts in grades 7-12, and adaptable to K- 6. Candidate will develop and prepare materials for advanced visual arts programming. Further investigation of classroom management practices appropriate to adolescents and young adults. Collaboration, mentorship and leadership will be emphasized. Curriculum aligns with State of Utah's core curriculum and national standards in the visual arts. Art education Majors should have completed 40 credit hours; minors must have completed 12 credit hours.

Pre-requisite(s): ART 3515 or consent of instructor.

Note: This course is required for secondary certification and is designed to be taken prior to student teaching.

ART 3525 - Practicum: WSU ArtsBridge Service-Learning

Credits: (1-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This service-learning course provides the fine arts teacher candidate with academic credit for designing and teaching an integrated arts course in a grade K-12 classroom or equivalent community education

program. The candidate will work closely with a University faculty mentor, host school teacher and ArtsBridge director in implementing and assessing integrated arts curricula and producing a final project by K-12 classroom students. Course components include: curricula pre-planning and implementation, in-class teaching, student assessment, candidate self-assessment and ArtsBridge seminar components. By permission only. Fine arts education content area supervisor and successful interview with faculty mentor and/or ArtsBridge director. Content methodology course(s) complete or in progress.
May be repeated once with a maximum of 12 credit hours.

ART 3530 - Art Methods and Resources for Elementary Art Teachers K-6

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$132.00

Course Fee Purpose: Art Methods course materials and equipment. KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Examination of advanced approaches, methodologies, and curriculum appropriate to teaching visual arts in grades K-6. Candidate will develop and prepare materials for elementary visual arts programming, in alignment with state and national standards.

Pre-requisite(s): ART 3515.

ART 3550 - Advanced Photography: View Camera

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$175.00

Course Fee Purpose: Studio Lab materials, large format photography equipment and maintenance. KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: The theory, aesthetics, and techniques of photographic image making with the view camera. Students will learn the operation of large format cameras, the Zone System method of negative exposure and development and methods for fine-tuning black and white photographic printing. The history of and contemporary trends in working with large format negatives will also be explored.

Pre-requisite(s): ART 3150 or consent of instructor.

May be repeated once with a maximum of 6 credit hours.

ART 3600 - Painting II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$92.00

Course Fee Purpose: Painting Studio Lab painting materials and equipment. KA Sculpture Lab equipment, materials & assistance, KA Digital Lab access, equipment, software and printing.

Description: Consolidates and further develops material covered in Painting I. Investigations include the figure, mixed media, and abstraction. Historical precedents are discussed through slide lecture as an aid to development.

Pre-requisite(s): ART 1120 and ART 2600; or consent of instructor.

ART 3700 - Sculpture II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$132.00

Course Fee Purpose: Sculpture Studio Lab course materials, equipment and maintenance; KA Digital Lab access,

equipment, software and printing.

Description: An introduction to the form language of sculpture with projects designed to develop conceptual thinking skills, to learn technical skills, and to explore new areas of interest in the three-dimensional visual arts.

Pre-requisite(s): ART 1130 and ART 2700; or consent of instructor.

ART 3720 - Public Art

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 2nd Blk, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$137.00

Course Fee Purpose: Sculpture Studio Lab course materials, equipment and maintenance; KA Digital Lab access, equipment, software and printing.

Description: Public Art covers a broad range of historic and current approaches to working in the public realm, including: murals, monuments, community-based projects, ecologically-focused projects, site-specificity and environmental art. Students will learn to create 2D, 3D and/or digital renderings and models to develop public art concepts, while gaining knowledge of real-world opportunities for visual artists and designers. Students will learn professional practices, skill building for the discipline, and how to assemble a public art proposal. Students can repeat the course for additional credit a maximum for 2 times (6 credit hours total).

ART 3800 - Travel-Study Studio

Credits: (1-3)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Description: Studio projects will be based in response to the opportunities afforded by travel-study. These works may be a direct response to the country or region and its culture or they may be related to an event that takes place in that area while students are visiting. Instruction will be given in English.

Pre-requisite(s): ART 1040 or consent of instructor.

May be repeated up to 4 times and up to 12 credit hours.

ART 3810 - Experimental Course

Credits: (1-6)

Experimental

Course Fee: \$132.00

Course Fee Purpose: Topic and material-specific studio lab materials and equipment usage and fees. KA Sculpture Lab equipment, materials and assistance; KA digital lab access, equipment, software and printing.

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ART 3995 - BFA Seminar

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$37.00

Course Fee Purpose: KA Sculpture Lab equipment, materials and assistance, KA Digital Lab access, equipment, software and printing.

Description: This is a seminar/discussion and studio course that guides BFA students in the research, development, and articulation of a thematic body of work, within the context of contemporary art. Studio projects will be directed

toward bringing individual vision toward full expression.

Pre-requisite(s): BFA students who have completed second-level course in their studio area only.

ART 4010 - Museum Methods

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course explains and demonstrates the three main areas of emphasis within the museum studies field: collections management, curation and interpretation, and arts administration. The course meets two time a week for a three hour session.

Pre-requisite(s): Consent of instructor.

ART 4110 - Advanced Drawing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$62.00

Course Fee Purpose: Drawing studio supplies and materials; KA Sculpture Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Continued drawing exploration in various media with emphasis on focused personal direction, independent serial work, presentation of assigned research into related contemporary work, active participation in the critique process.

Pre-requisite(s): ART 3120 or consent of instructor.

May be repeated 3 times with a maximum of 9 credit hours-please consult a faculty advisor.

ART 4120 - Advanced Figure Drawing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$147.00

Course Fee Purpose: Studio lab materials and model fees. KA Sculpture Studio Lab equipment, materials & assistance; KA Digital Lab access, equipment, software and printing.

Description: Advanced study of the structure of the human body with a greater stress on draftsmanship, historical uses of the figure in art, and individual explorations.

Pre-requisite(s): ART 3120 or consent of instructor.

May be repeated 3 times with a maximum of 9 credit hours-please consult a faculty advisor.

ART 4200 - Advanced Printmaking

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$164.00

Course Fee Purpose: Printmaking studio lab materials, equipment, maintenance. KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: An advanced level class in printmaking with emphasis on screen-printing, relief, intaglio, and/or lithography. Emphasis on individual portfolio production.

Pre-requisite(s): ART 3200 or consent of instructor.

May be repeated twice with a maximum of 9 credit hours-please consult a faculty advisor.

ART 4310 - Ceramics III: Intermediate

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$194.00

Course Fee Purpose: Ceramics Studio lab clay materials, equipment and maintenance. KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: This course addresses intermediate issues in craftsmanship, form and content through assignments and projects. Students will conduct directed research, draft proposals, fire kilns, make clay and mix glazes.

Pre-requisite(s): ART 3310 or consent of instructor.

ART 4320 - Ceramics IV: Advanced

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$194.00

Course Fee Purpose: Ceramics Studio lab clay materials, equipment and maintenance. KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: This course addresses advanced issues in craftsmanship and concepts through lecture and proposal based projects. Research assignments that explore ceramic processes and current trends in ceramic art are emphasized.

Pre-requisite(s): ART 4310 or consent of instructor.

May be repeated 4 times with a maximum of 12 credit hours.

ART 4350 - Small Metals/Jewelry III

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$132.00

Course Fee Purpose: Small Metals/Jewelry (Sculpture) studio lab materials and equipment. KA digital lab access, equipment, software and printing.

Description: Development of advanced design concepts and procedures with emphasis on basic techniques and concept development in fabrication, casting, enameling, cold connectors, and surface enrichment.

Pre-requisite(s): ART 3350 or consent of instructor.

May be repeated 3 times with a maximum of 9 credit hours. Please consult a faculty advisor.

ART 4400 - Advanced Graphic Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$107.00

Course Fee Purpose: Design Studio materials and equipment plus guest lecture fees. KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Application of design theory and process to complex problems in visual communication. Emphasis is placed on research, analysis, problem definition, and the development of individual design solutions. Studio projects vary each term and will generally involve visual identity, information design, environmental graphics, publication design, and design for interactive media.

Pre-requisite(s): ART 3435, ART 3445, ARTH 3451, and BFA program admission or consent of instructor.

May be repeated 3 times with a maximum of 9 credit hours-please consult a faculty advisor.

ART 4410 - Design Seminar

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$107.00

Course Fee Purpose: Design Studio materials and equipment plus guest lecture fees. KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Orientation to professional practice in visual communication including art direction and work situations, client relations, portfolio and resume preparation, self-promotion, and career advancement. Course contents will be explored through reading, writing, lecture, discussion, critique, simulation, guest presentations, studio visits, and project work tailored to individual portfolio development.

Pre-requisite(s): ART 3410 and BFA program admission, or consent of instructor.

May be repeated twice with a maximum of 9 credit hours. Please consult a faculty advisor.

ART 4415 - Design Production

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Technical processes and procedures for Art Major, Visual Communication emphasis. Emphasis is placed on file preparation and technical procedures for electronic media and for offset printing including proofing methods, paper, binding and other finishing processes.

Pre-requisite(s): ART 3430 and ART 3435 or consent of instructor.

ART 4420 - Advanced Digital Media

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$82.00

Course Fee Purpose: Design Studio materials and equipment. KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Students will further develop personal expression in the visual arts using computer media through aesthetic problem solving and further development of digital media skills. There will be an emphasis on strengthening the students' ability to work independently while supplying the necessary feedback from the interaction of a class.

Pre-requisite(s): ART 2420A, ART 2420B, ART 2420C, ART 2420D, or consent of instructor.

May be repeated twice with a maximum of 9 credit hours. Please consult a faculty advisor.

ART 4440 - Interaction Design 2

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$82.00

Course Fee Purpose: Design Studio materials and equipment. KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: This course is an introduction to the principles of interaction design as it relates to physical and digital space, with a focus on designing user-centered artifacts like interactive publications and apps for hand-held devices. Theoretical concepts like ethnography, user-testing, and the use of mapping in design will be explored. We will also explore the landscape of technology as it relates to interaction, and the use of appropriate tools and software to create prototypes and functioning digital designs.

Pre-requisite(s): ART 3445 or consent of instructor.

May be repeated once for credit.

ART 4460 - Advanced Illustration

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$107.00

Course Fee Purpose: Design Studio and Illustration materials and equipment. KA Sculpture Studio lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Development of individual approaches to advanced problems in illustration. Emphasis is placed on the formulation of visual metaphor, articulation of form, and on professional practices. Studio projects vary each term and will generally involve editorial, reportorial, scientific, advertising, and instructional problems in pictorial communication.

Pre-requisite(s): ART 3460 or consent of instructor.

May be repeated twice with a maximum of 9 credit hours. Please consult a faculty advisor.

ART 4500 - Special Topics in Graphic Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A study of specific topics in the field of graphic design like Design for Social Impact, Conditional Design, Content to Cover: The Design of Books, Image and Meaning, Design for Healthcare: Understanding Health and Well Being and Global Topics in Graphic Design. The subject and faculty change each time this course is offered.

Pre-requisite(s): ART 3410 or consent from instructor

ART 4550 - Advanced Photography: Lighting for Photo & Video

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$162.00

Course Fee Purpose: Studio Lab materials, lighting equipment and maintenance. KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: This is a practical course that enables students to better control and use light and lighting in their work. Students will be introduced to a range of artificial light sources and lighting techniques to be used as a means of creative control. Work will center in the studio where controlled conditions and a directorial approach can yield the artist's intent.

Pre-requisite(s): ART 2450.

May be repeated once with a maximum of 6 credit hours.

ART 4600 - Painting III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$92.00

Course Fee Purpose: Painting studio lab painting materials and equipment. KA Sculpture Lab equipment, materials and assistance, KA Digital Lab access, equipment, software and printing.

Description: Emphasis on developing independence in the painting student and to provide an opportunity for them to pursue their own area of interest in painting while providing the necessary feedback from the interaction of a class.

Pre-requisite(s): ART 3600 or consent of instructor.

May be repeated 3 times with a maximum of 9 credit hours. Please consult a faculty advisor.

ART 4660 - Advanced Photography: Special Topics

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$137.00

Course Fee Purpose: Studio Lab materials, photography equipment and maintenance. KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: A study of specific topics in photography, the subject and faculty change each time this course is offered. Example topics include "Documentary Photography," "Visual Books," "The Portrait," and "Directed Visions."

Pre-requisite(s): ART 3150 or consent of instructor.

May be repeated 2 times for credit - consult with faculty advisor.

ART 4700 - Sculpture III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$132.00

Course Fee Purpose: Sculpture Studio Lab course materials, equipment and maintenance, plus KA Digital Lab access, equipment, software and printing.

Description: Advanced individual problems in selected areas of concentration; research and development of conceptual, technical, and methodological concerns.

Pre-requisite(s): ART 3700 or consent of instructor.

May be repeated 3 times with a maximum of 9 credit hours. Please consult a faculty advisor.

ART 4750 - Advanced Photography: Experimental Strategies

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$162.00

Course Fee Purpose: Studio Lab materials and equipment. KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: This course explores experimental photographic alternatives to the traditional methods of photographic image making. Emphasis will be placed on using the camera, darkroom techniques and digital and emerging technology in ways that will give the students the mind-set and ability to push the limits of the medium.

Pre-requisite(s): ART 2450 or ART 2250.

May be repeated 3 times with a maximum of 9 credit hours. Please consult a faculty advisor.

ART 4801 - College of Arts & Humanities Leadership Lecture Series

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: This one-credit elective course will give arts and humanities' majors the opportunity to interact with successful guest lecturers whose undergraduate backgrounds are in the arts and humanities. Lecturers will clarify how the talents and skills associated with their degrees have contributed to their pursuit of successful careers and lives.

ART 4810 - Experimental Course

Credits: (1-6)

Experimental

Course Fee: \$114.00

Course Fee Purpose: Topic-appropriate studio materials; KA Sculpture Studio Lab equipment, materials and assistance; KA Digital Lab access, equipment, software and printing.

Description: Consult the semester class schedule for the current offering under this number. The specific title and

credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

ART 4830 - Directed Readings

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individually chosen readings on specialized topic supervised by a faculty member.

Pre-requisite(s): Consent of faculty supervisor prior to registration.

May be repeated twice with a maximum of 3 credit hours. Please consult a faculty advisor.

ART 4890 INT - Cooperative Work Experience

Credits: (1-2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An opportunity for students to receive academic credit for faculty approved on-the-job learning experiences within certain visual arts areas of emphasis. C/NC only.

Pre-requisite(s): By instructor approval only and previous or concurrent enrollment in art classes as specified by each area of emphasis.

May be repeated for a maximum of 6 credit hours. Please consult a faculty advisor.

ART 4900 - Individual Studies

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$37.00

Course Fee Purpose: KA Digital lab access, equipment, software and printing.

Description: Individual studies in selected areas of emphasis. Open to juniors and seniors by instructor approval only.

May be repeated for a maximum of 6 credit hours. Please consult a faculty advisor.

ART 4910 INT - Advanced Photography: Internship

Credits: (1-3)

Description: Students have the opportunity to engage in a close learning relationship with professional photographers. These opportunities include workshops, seminars, professional assistantships, and residencies. Students will be responsible for researching and proposing mentorships. Area faculty will approve proposals, help place students with mentors and review the progress of mentorships.

Pre-requisite(s): ART 3150 or consent of instructor.

May be repeated for credit. Please consult a faculty advisor.

ART 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ART 4930 INT - Teaching Assistantship Experience

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Designed for students who wish to gain teaching experience for graduate school. By observation and participation with the instructor, students will learn how a basic art course is designed and taught.

Pre-requisite(s): Student must be in the BFA program and have instructor consent.

ART 4990 - BFA Thesis

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$37.00

Course Fee Purpose: KA Sculpture Lab equipment, materials and assistance, KA Digital Lab access, equipment, software and printing.

Description: Emphasis on portfolio preparation and professional writing skills pertinent to the completion of the BFA Thesis Exhibit and future career applications. Students work on the development and synthesis of ideas, and fine-tune relevant artistic and critical evaluation skills. During this course students will be required to produce new work for the BFA Thesis Exhibit.

Pre-requisite(s): Senior level BFA student. Completion of ART 3995 BFA Seminar. Registration by departmental approval only. Course cannot be taken during the semester immediately following BFA Seminar.

May be repeated for credit. Please consult a faculty advisor.

ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A global survey of the history of art and architecture from BC 15,000 to AD 1000. Visual art from the first artistic expressions on rocks to the art of emerging civilizations (such as Mesopotamia, Egypt, China, India, and Africa), and the monuments and small-scale artifacts of the Medieval Ages will be analyzed in its historical, social, political, and broader cultural contexts.

Pre-requisite(s): ENGL 1010 or with instructor consent.

ARTH 1100 CA/GLB - Art and Architecture of the World: AD 1000-Present

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A global survey of the history of art and architecture from AD 1000 to the present. Visual art from Gothic cathedrals and Islamic book art to Renaissance Europe and the Chinese Empire, from the Age of Enlightenment to contemporary art will be analyzed in its historical, social, political, and broader cultural contexts.

Pre-requisite(s): ENGL 1010 or with instructor consent.

ARTH 2010 - Art Culture of the Ancient Mediterranean

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: This course will explore the range of cultural interactions in the ancient Mediterranean world. From the Bronze Age (ca. 3000 BCE) to Medieval period (ca. 1300 CE), we will focus on specific moments when disparate cultures interact with one another resulting in multi-cultural art. As powers and empires rose and fell, we will use an

international perspective to see how trade and diplomacy impacted the creation of art and material culture.

Pre-requisite/Co-requisite: ENGL 1010 or with instructor consent.

Suggested Requisite(s): ARTH 1090 or ARTH 1100.

ARTH 2040 - Art and Architecture of Asia

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A historical account of the architecture, sculpture, and painting of Asia (India, Nepal, Tibet, Myanmar, Sri Lanka, Thailand, Cambodia, Indonesia, China, Korea, and Japan), including the political, religious, and intellectual history informing the arts of each country.

ARTH 2050 GLB - Visual Art in a Global Context

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces questions, debates, and developments in art history and visual studies within their broader thematic and global contexts. It provides students with critical frameworks for examining and comparing artistic production from different temporal, geographic, socio-political, and cultural perspectives.

ARTH 2055 - Intermediate Special Topics in Art History

Credits: (1-4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This intermediate-level (lower division) course will explore different topics and content related to the production of visual and material culture and art history; the content of the course will change as the main topic changes. Students will gain the benefit of an exploration into a specific time period, discourse, or exploration of media.

Pre-requisite(s): ENGL 1010.

Suggested Requisite(s): ARTH 1090 or ARTH 1100 or ARTH 2050.

May be repeated 3 times for a max of 12 credits.

ARTH 3010 GLB - Art and Visual Cultures of Latin America

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: This course introduces students to the visual culture and architecture of 20th and 21st century Latin America. Students will analyze a wide range of material from disciplines like architecture, urban planning, printmaking, photography, and painting as they relate to real and imagined definitions of "Latin America," and corresponding notions of nation and state. The course pays particular attention to critical debates around the intersection of art and politics, and the construction of race and gender.

Suggested Requisite(s): ART 1040 or ARTH 1090 or ARTH 1100 or ARTH 2050.

ARTH 3015 - Latinx Visual Art and Culture

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: This course explores visual art and culture of U.S. Latinos/as/x from the 1960s to the present. It examines the history and context of artistic production related to critical debates about representation, identity, gender, sexuality, class, and politics. It analyzes a wide range of media including film, photography, performance,

muralism, and art exhibits as they relate to identity, feminism, collaboration, and the politics of aesthetics within Latinos/as/x in the U.S.

Suggested Requisite(s): ART 1040 or ARTH 1090 or ARTH 1100 or ARTH 2050.

ARTH 3030 - Native American Art of the Southwest: From the Anasazi to the Present

Credits: (4)

Typically Taught Fall Semester: *Full Sem odd years*

Description: Focuses on the arts of the Native Americans in the Southwest from their archaeological past to the present with occasional relevant explorations of Native American art in general. Study of traditional and contemporary modes of artistic expressions.

ARTH 3040 - Global Modernisms

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: This course focuses on the visual art and culture, architecture, and critical debates from 1850 to the 1960s. It explores the continuous evolution of Modernism, its roots, and dissemination across diverse global contexts. Students will explore a range of *-isms*-spanning Africa, Asia, Europe, Latin America, and the United States-and consider how each region contributed to and reshaped Modernism. Emphasis will be placed on the challenges facing Modernism with attention to the political, social, and intellectual histories that shaped these transformations. Cross-cultural influences and exchanges will frame our study of how artists around the world redefined Modernist practices to reflect their unique perspectives.

Pre-requisite(s): ARTH 1090 or ARTH 1100 or ARTH 2050 or ANTH 1000 or ENGL 2010 or ENGL 2015 or HIST 1500 or HIST 1510 or with instructor consent.

ARTH 3045 - Global Modernisms: Early 20th Century to 1960

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: The history of visual art and culture from circa 1900 to the 1960s. This course explores the continuous evolution of Modernism. Areas of study will include Cubism to Vorticism, Colonialism and Modernism in Africa, Central European Avant-Gardes, International Dada and Surrealism, African-American Modernism and the crisis of Modernism in the post-colonial, post-war global community. The political, social, and intellectual histories that inform the arts as well as pertinent cross-cultural considerations will provide the context for exploring these global modernisms.

ARTH 3050 - Contemporary Art

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: Critical analysis of developments in the arts (including multimedia art, photography, performance art, installations, and feminist art) from 1960s to the present. Emphasis on post-modern currents and issues and their study in the context of broader cultural contexts.

Pre-requisite(s): ARTH 1100 or consent of instructor.

ARTH 3055 - Advanced Special Topics in Art History

Credits: (4)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem odd years*

Description: This advanced-level (upper division) will explore different topics and content related to the production

visual and material culture and art history; the content of the course will change as the main topic changes. Students will gain the benefit of a deep dive into a specific time period, discourse, or exploration of media.

Pre-requisite(s): ARTH 1090 or ARTH 1100 or ARTH 2050 or ANTH 1000 or ENGL 2010 or ENGL 2015 or HIST 1500 or HIST 1510 or with instructor consent.

May be repeated four times for a maximum of 12 credit hours.

ARTH 3060 - The Art and Architecture of India

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: An historical account of the architecture, sculpture, and painting of India, including the political, religious, and intellectual history informing the arts of various regions.

ARTH 3070 - The Art and Architecture of China

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: An historical account of the architecture, sculpture and painting of China including the political, religious, and intellectual history informing the arts of different regions.

May be repeated for a maximum of 4 credit hours. Please consult a faculty advisor.

ARTH 3080 - The Art and Architecture of Japan

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: An historical account of the architecture, sculpture and painting of Japan, including the political, religious, and intellectual history informing the arts of different regions.

May be repeated for a maximum of 4 credit hours. Please consult a faculty advisor.

ARTH 3100 - The Art and Architecture of the Byzantine and Islamic Worlds

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: This course will explore two major cultures in the Eastern European and Asian worlds: the Byzantine and Islamic. A historical survey of the architecture, sculpture, and painting of the Byzantine and Islamic worlds, including the political, religious, and intellectual history informing the arts of different countries.

Pre-requisite(s): ARTH 1090 or ARTH 1100 or ARTH 2050 or ANTH 1000 or ENGL 2010 or ENGL 2015 or HIST 1500 or HIST 1510 or with instructor consent.

ARTH 3200 - The Art and Archaeology of Greece

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: This course will explore sites, like Mycenae, Athens, Olympia, and Delphi, and historical impacts, like the Persian War, spread of democracy, and Alexander the Great's campaigns, to study and understand the art and architecture created. We will approach these topics through the archaeology of the Greek world from the bronze age through the end of the hellenistic period (ca. 3000-30 BCE). This class will be centered around the objects to learn how Greek culture is studied through the places they built and the objects they made.

Suggested Requisite(s): ARTH 1090 or ARTH 1100 or ART 1040 or ANTH 2030.

ARTH 3451 - Design History and Theory

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An investigation of selected movements, figures and theories from the history of graphic design. Contents include intersections with art and related disciplines along with the social, political, and technical forces that have influenced visual culture over time. Topics are selected thematically according to their significance to the design profession in our current day and include the role of design research in contemporary practice.

Pre-requisite(s): (ART 3430 and ART 2435); or consent of instructor.

ARTH 3850 - Travel-Study Art History

Credits: (1-4)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Description: The study of the history of art and architecture will be in direct response to a country or region and its culture or it may be related to an event that takes place in that area while students are there. Instruction will be given in English.

Pre-requisite(s): ARTH 1090 or ARTH 1100 or ARTH 2040.

ARTH 3950 - Photography: History, Theory and Criticism

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: This is a reading, writing and discussion course, which addresses historical and contemporary issues of photographic art practices. Written projects and class discussions will focus on developing a critical understanding of the readings as they relate to the historical development and contemporary practice of photography as a fine art, to the influence photography has had on the history of art and to the broader cultural impact of photography and digital media.

Pre-requisite(s): ARTH 1100 or consent of instructor.

ASL 1010 - First Semester ASL

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (N=Novice) Introductory course assuming no significant previous experience with the language. Beginners and students with less than two years of high school language should register for this class. Emphasis on everyday conversation and exposure to cultural perspectives.

ASL 1020 - Second Semester ASL

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (N=Novice) Continuation of ASL 1010. Basic language skills including listening, speaking, reading, writing and culture.

ASL 2010 - Third Semester ASL

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (NH=Novice High) Continuation of ASL 1020. Assumes completion of first-year or equivalent experience. Students learn to understand and express ideas about their community and the world. Includes listening, speaking, reading, writing and culture.

ASL 2020 HU - Fourth Semester ASL

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (NH=Novice High) Continuation of ASL 2010. The learning and application of strategies for acquiring a foreign language. Students also learn how cultural products and practices reflect a culture's attitudes, values, ideas and meaning. The process of language acquisition and the seeking of cross-cultural understanding provide insights into the commonalities of how the human family learns, thinks and communicates.

ASL 2021 - Second Year II

Credits: (3)

Description: (NH=Novice High) Continuation of ASL 2010 without General Education Humanities credit. Offered through examination only.

Note: Only available through testing.

ASL 2030 - Second Year Language Review

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (NH=Novice High) This course will prepare students who wish to continue language study. Emphasis on conversational skills and a review of language structure and usage.

Note: Check with department for course availability.

ASL 2920 - Short Courses, Workshops, Institutes and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ASL 3000 - Proficiency Development

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) This is a transition course to upper division. The course focuses on oral proficiency development. Students will learn a variety of techniques and strategies to increase their oral proficiency in a variety of social, educational and cultural settings. Native-speaking students or those who have acquired proficiency through residence in the target language community are not eligible to take this class.

Note: Check with department for course availability.

ASL 3116 - DLI Bridge Course I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): ASL 2020 or AP exam with a score of 4 or better.

ASL 3117 - DLI Bridge Course II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): ASL 2020 or AP exam with a score of 4 or better.

ASL 3118 - DLI Bridge Course III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): ASL 2020 or AP exam with a score of 4 or better.

ASL 3270 - Special Topics in Linguistics

Credits: (3)

Variable Title

Description: (IM=Intermediate Mid) An introduction to linguistic structures and semantic elements. The course provides useful information and practice in the language, its structures and usage. The sub-disciplines of linguistics, other than phonetics and phonology, will be studied. These may include lexical analysis, semantics, morphology, syntax, linguistic change and dialectal variation.

Note: Check with department for course availability.

ASL 3550 GLB - Cultural Heritage I

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and

civilization.

May be repeated up to 7 times for credit and for other non-English speaking cultures.

ASL 3570 - Special Topics in Culture

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem - Online*

Course Fee: \$8.00

Course Fee Purpose: Course fees for World Languages & Cultures courses are designed to cover the costs of classroom equipment maintenance and replacement such as desktops, projectors, projector screens, and software, including the tutoring suite (EH 244) and the language lab (EH 408); consumable materials and supplies; and support for student tutors, and online instructional resources.

Description: (Intermediate Mid) In-depth studies in history, geography, social customs, fine arts, and civilization of ASL cultures. This is a variable title course; content and emphasis may vary from semester to semester.

Pre-requisite(s): ASL 2020 or ASL 2030 or Equivalent

ASL 4830 - Directed Readings

Credits: (1-3)

Description: (IH=Intermediate High) Independent readings under the direction of a faculty member.

May be repeated up to 10 times.

Note: Check with Department for course availability.

ASL 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: (Minimal proficiency level; varies with content). Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Course not currently being offered.

ASTR 1040 PS - Elementary Astronomy

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$10.00

Course Fee Purpose: Consumables and maintenance of equipment used for teaching demonstrations.

Description: A brief survey of the physical universe using the fundamental laws of physics. Topics include the history of astronomy, the solar system, the sun, the evolution of stars, pulsars, black holes, the Milky Way galaxy, galaxies, quasars, and the Big Bang.

Three hours of lecture per week.

Cross-listed with PHYS 1040.

ASTR 2040 PS - Principles of Observational Astronomy

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An introductory course in observational astronomy. Topics will include planetary, stellar, and galactic astronomy, with a focus on modern observational techniques, including digital imagery, spectroscopy, and observing with science-grade astronomical instrumentation.

Pre-requisite(s): MATH 1060 (minimum grade of C).
Cross-listed with PHYS 2040.

ASTR 2800 - Introductory Individual Research Problems

Credits: (1-3)

Description: Time and credit to be arranged. Intended for students working on a directed research project which includes physics/astronomy at the lower division level for one or more semesters.

Pre-requisite(s): Consent of instructor.

Cross-listed with PHYS 2800.

May be repeated up to 10 times.

ASTR 2830 - Introductory Readings in Physics/Astronomy

Credits: (1-3)

Description: Time and credit to be arranged. Intended for students working on a directed reading project which includes physics/astronomy at the lower division level for one or more semesters.

Pre-requisite(s): Consent of instructor.

Cross-listed with PHYS 2830.

May be repeated up to 10 times.

ASTR 3040 - Principles of Observational Astronomy, Advanced

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An advanced course in observational astronomy. Topics will include planetary, stellar, and galactic astronomy, with a focus on modern observational techniques, including digital imagery, spectroscopy, and observing with science-grade astronomical instrumentation. This course also covers general scientific practice, data analysis, and error propagation.

Pre-requisite(s): PHYS 2710 and PHYS 3180.

ASTR 3160 - Stellar and Planetary Astrophysics

Credits: (3)

Typically Taught Spring Semester: *Full Sem Odd Years*

Description: Selected topics in astrophysics with a focus on stellar and planetary systems. Topics may include celestial mechanics, interaction of light and matter, stellar and planetary spectroscopy, stellar atmospheres and interiors, binary star systems, planets and planet formation, and extrasolar planets.

Pre-requisite(s): PHYS 2220.

Cross-listed with PHYS 3160.

ASTR 3170 - Galaxies and Cosmology

Credits: (3)

Typically Taught Spring Semester: *Full Sem Even Years*

Description: Selected topics in astrophysics, with a focus on galactic astronomy and cosmology. Topics may include gravitational dynamics, interaction of light and matter, galaxy classification, galaxy formation and evolution, the structure of the universe, cosmology, and the origin and fate of the universe.

Pre-requisite(s): PHYS 2220.

Cross-listed with PHYS 3170.

ASTR 4800 - Individual Research Problems

Credits: (1-3)

Description: Time and credit to be arranged. Open to qualified students for one or more semesters.

Pre-requisite(s): Consent of instructor.

Cross-listed with PHYS 4800.

May be repeated up to 10 times.

ASTR 4830 - Readings in Physics/Astronomy**Credits: (1-3)**

Description: Topics which can be studied include (but are not limited to): mechanics, thermodynamics, kinetic theory, statistical mechanics, electronics, electromagnetism, optics, solid-state physics, modern physics, nuclear physics, relativity, cosmology, and astrophysics. These courses may be taken at any time on a personalized basis. Time and credit to be arranged.

Pre-requisite(s): Consent of instructor.

Cross-listed with PHYS 4830.

May be repeated up to 10 times.

ATHL 1080 - Strength Training Level I**Credits: (1)**

Description: -For Club Hockey Players Only

May be repeated five times for credit.

ATHL 1081 - Strength Training Level II**Credits: (1)**

Description: -For Club Hockey Players Only

May be repeated five times for credit.

ATHL 1180 - Varsity Softball**Credits: (1)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This athletic activity course is intended to engage students in the sport of softball at the collegiate level. Students will learn techniques, drills, and games to assist with the development of skills and competitive game play.

May be repeated 7 times with up to 8 credit hours.

ATHL 1510 - Varsity Volleyball**Credits: (1)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This athletic activity course is intended to engage students in the sport of volleyball at the collegiate level. Students will learn techniques, drills, and games to assist with the development of skills and competitive game play.

May be repeated 7 times with up to 8 credit hours.

ATHL 1520 - Varsity Soccer

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This athletic activity course is intended to engage students in the sport of soccer at the collegiate level. Students will learn techniques, drills, and games to assist with the development of skills and competitive game play.

May be repeated 7 times with up to 8 credit hours.

ATHL 1570 - Varsity Basketball

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This athletic activity course is intended to engage students in the sport of basketball at the collegiate level. Students will learn techniques, drills, and games to assist with the development of skills and competitive game play.

May be repeated 7 times with up to 8 credit hours.

ATHL 1580 - Varsity Cross Country

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: This athletic activity course is intended to engage students in the sport of cross country at the collegiate level. Students will learn techniques and participate in drills to assist with the development of competitive skills and prepare for varsity cross country meets.

May be repeated 7 times with up to 8 credit hours.

ATHL 1590 - Varsity Football

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This athletic activity course is intended to engage students in the sport of football at the collegiate level. Students will learn techniques, drills, and games to assist with the development of skills and competitive game play.

May be repeated 7 times with up to 8 credit hours.

ATHL 1600 - Varsity Golf

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This athletic activity course is intended to engage students in the sport of golf at the collegiate level. Students will learn techniques, drills, and games to assist with the development of skills and competitive game play.

May be repeated 7 times with up to 8 credit hours.

ATHL 1630 - Varsity Tennis

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This athletic activity course is intended to engage students in the sport of tennis at the collegiate

level. Students will learn techniques, drills, and games to assist with the development of skills and competitive game play.

May be repeated 7 times with up to 8 credit hours.

ATHL 1640 - Varsity Track, Field, and Cross Country

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This athletic activity course is intended to engage students in the sport of track and field at the collegiate level. Students will learn techniques and drills to assist with the development of skills for competition.

May be repeated 7 times with up to 8 credit hours.

ATHL 1680 - Varsity Indoor Track

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: This athletic activity course is intended to engage students in the sport of indoor track at the collegiate level. Students will learn techniques and drills to assist with the development of skills for competition.

May be repeated 7 times with up to 8 credit hours.

ATHL 1760 - Spirit Squad

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This athletic activity course is intended to engage students in dance/cheer for the spirit squad at the collegiate level. Students will learn techniques to assist with the development of skills and performance.

May be repeated 7 times with up to 8 credit hours.

ATTC 3000 - Introduction to Automotive Technology

Credits: (1)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Course Fee: \$5.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: An introduction to the Automotive Technology program. Degree requirements and options, internship preparation, employment opportunities, required professional publications, communication, and other topics. (This course is a prerequisite for most automotive technology courses.)

Pre-requisite(s): Proof of completion of an Associate of Applied Science AAS or Associate of Science AS degree in automotive service technology or a related degree.

ATTC 3020 - Introduction to Safety Management and Hazardous Materials

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$15.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: An overview of the environmental issues related to the use and service of vehicles, with emphasis on

air quality topics. Environmental regulations, safe practices, disposal of hazardous substances, such as paints and solvents.

ATTC 3260 - Advanced Electrical Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: A study of the advanced electrical systems in today's vehicles. Vehicle communication networks, body control systems, chassis control systems, powertrain control, hybrid control, and battery control systems. Upon completion of this course and the required work experience as set by ASE, student can sit in on "L4 Advanced Driver Assistance Systems" certification provided by ASE.

ATTC 3280 - Advanced Painting and Refinishing

Credits: (3)

Description: Preparation for insurance industry employment. Includes advanced topics in surface preparation and application of contemporary and specialty paints. Matching, blending and complete vehicle refinishing. Inter-Industry Conference on Auto Collision Repair (I-CAR) training modules are included.

Lab included.

Pre-requisite/Co-requisite: ATTC 3000.

Note: Course not currently being offered.

ATTC 3480 - Advanced Structural Analysis and Damage Repair

Credits: (3)

Description: Preparation for insurance industry employment. Includes advanced topics in frame and unibody repair. Replacement of major panels, measuring and corrective pulling, and occupant safety systems. Inter-Industry Conference on Auto Collision Repair (I-CAR) training modules are included.

Lab included.

Pre-requisite(s): ATTC 3280.

Note: Course not currently being offered.

ATTC 3520 - Fleet Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem Online*

Description: Study of fleet standards, fixed operations, inventory and personnel management, financial policies and procedures. Includes financial statement analysis.

ATTC 3620 - Automotive Business Practices

Credits: (3)

Typically Taught Spring Semester: *Full Sem Online*

Course Fee: \$15.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Study of independent shop and corporate dealership standards, fixed operations, inventory and personnel management, and industry report systems, financial policies and procedures. Includes financial statement analysis.

ATTC 3680 - Automotive Damage Analysis and Estimating

Credits: (3)

Description: Preparation for insurance industry employment. Includes an overview of vehicle damage analysis, restraint systems, mechanical and electrical systems. Topics also include industry standard terminology, procedures, and estimation software usage.

Lab included.

Pre-requisite(s): ATTC 3480.

Note: Course not currently being offered.

ATTC 3760 - Advanced Automotive Technologies

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Course Fee: \$10.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: A study of current events/trends in the automotive industry, industry standard professional publications, and the latest technologies used by the automotive industry to meet current emissions, fuel economy, and safety regulations.

ATTC 3860 - Automotive Standards, Laws, and Regulations

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A study of automotive industry related Society of Automotive Engineers (SAE) standards, State Regulations, U.S. Environmental Protection Agency (EPA) emissions regulations, National Highway Traffic Safety Administration (NHTSA), Federal Motor Vehicle Safety Standards (FMVSS), Corporate Average Fuel Economy (CAFE) regulations, and others.

ATTC 3880 INT - Cooperative Practicum

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: Supervised work experience with a sponsoring employer, designed to synthesize theory and practice. Full-time, upper division related employment and approval of faculty supervisor required.

ATTC 4380 - Advanced Non-Structural Analysis and Damage Repair

Credits: (3)

Description: Preparation for insurance industry employment. Includes advanced topics in safety, welding processes, panel repair and replacement, trim application, water and wind leakage. Inter-Industry Conference on Auto Collision Repair (I-CAR) training modules are included.

Lab included.

Pre-requisite(s): ATTC 3480.

Note: Course not currently being offered.

ATTC 4520 - EV3 - Hybrid & Electric Vehicle Safety

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$50.00

Course Fee Purpose: The course fees are established to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements.

Description: An in-depth look at the laws and regulations related to the high voltage safety systems used on hybrid and electric vehicles. Topics include 1. Personal protective equipment types use and care. 2. High voltage service tools and equipment. 3. Vehicle operation and characteristics. 4. Identify high voltage systems and components. 5. High voltage isolation and interlock systems. 6. Disabling and enabling the high voltage system. 7. Maintenance schedules and precautions. 8. Emergency rescue personnel information.

ATTC 4530 - EV4 - Hybrid and Electric Vehicle Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem- Online*

Course Fee: \$50.00

Course Fee Purpose: This course has a fee attached. Course fees are established to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. The course fee expenditure for this specific course covers fees for high-voltage electric vehicle safety equipment.

Description: An in-depth look at the different classifications of Electrified Road Vehicles. 1. The three different types of Hybrid Electric Vehicles (HEV)s, 2. Multi-Mode Plug-in Hybrid Electric Vehicles (PHEV)s, 3. Battery Electric Vehicles (BEV)s, and 4. Hydrogen Fuel Cell Electric Vehicles (FCEV)s. Topics include the theory of operation of high voltage batteries, DC to AC inverters, DC to DC converters, electric motor types, plug-In charging systems, thermal management of the high voltage systems, battery, the passenger cabin, and braking/regenerative braking systems. In addition, preparation for the ASE L3 Light-Duty hybrid/electric vehicles exam is included.

ATTC 4540 - Automated Safety and Convenience Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem - Online*

Description: An in-depth look at the operation, diagnosis and service of the automated safety and convenience systems found on modern vehicles. Topics will include: AUTOMATED: vehicle system classifications (driver assisted, partial automated, conditional automated, high automated, and fully automated). SAFETY: advanced cruise systems, advanced steering systems, advanced suspension systems, advances parking systems. CONVENIENCE: In car WiFi, vehicle to vehicle communication, biometrics, active health monitoring, comprehensive vehicle tracking, advanced heads up displays.

ATTC 4550 - Advanced Automotive Emissions

Credits: (3)

Typically Taught Fall Semester: *Full Sem Online*

Description: The study and evaluation of vehicle and fuel technologies to meet current and future emissions standards. We will explore what automotive emissions are currently regulated, purpose and procedures associated with emissions testing, current and future emissions reduction technologies, and how sustainable manufacturing is being implemented in industry. The topics in this class will help you to prepare for the L1 Advanced Engine Performance test.

ATTC 4560 - EV5 - Hybrid & Electric Vehicle Service & Maintenance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: An in-depth look at the service and maintenance procedures for 1. The three different types of Hybrid Electric Vehicles (HEV)s. 2. Multi-Mode Plug-In Hybrid Electric Vehicles (PHEV)s, 3. Battery Electric Vehicles (BEV)s, and 4. Hydrogen Fuel Cell Electric Vehicles (FCEV)s. Topics include high voltage batteries, DC to AC inverters, DC to DC converters, electric motor types, plug-In charging systems, thermal management of the high voltage systems, battery, the passenger cabin, braking/regenerative braking systems, and Atkinson cycle Internal Combustion Engines (ICE). Upon completion of this course, student can sit in on "xEV Technician Electrical Safety Certification - Level 2 Standards" certification provided by ASE. Upon completion of this course and the required work experience as set by ASE, student can sit in on "L3 Light Duty Hybrid/Electric Vehicle Specialist" certification provided by ASE.

ATTC 4710 - Capstone Research Methods

Credits: (2)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Description: This is the first course in the Capstone Project for seniors. This course will prepare students to complete the capstone project. Students will create the initial proposal and receive approval for the project. Students will start the research for the project using the standards established by the Society of Automotive Engineers (SAE).

ATTC 4720 - Capstone Research and Development

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$100.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: The use of sophisticated diagnostic tools and equipment. Emphasis is on diagnosis and the development of analytical thinking as it applies to technical problems.

Includes lab.

Pre-requisite(s): ATTC 4710.

ATTC 4760 - Alternate Fuel Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: A study of alternate fuel systems including bio fuels (ethanol and bio-diesel systems), advanced diesel systems, hybrid-electric vehicles, Compressed Natural Gas (CNG) systems, hydrogen fuel cell, and other existing or emerging technologies.

ATTC 4780 - Insurance Industry Business Practices

Credits: (3)

Description: An overview of the business practices used by the automotive insurance industry. Included is the use of industry standard software to determine insurance policy coverage, vehicle reparability (current value verses repair costs) and parts availability.

Pre-requisite/Co-requisite: ATTC 3680 and PS 3203.

Note: Course not currently being offered.

ATTC 4830 - Directed Readings

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Individual readings supervised by a faculty member.

Pre-requisite(s): Approval of instructor.

May be repeated twice up to 3 credit hours.

ATTC 5920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offerings under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

AUSV 1000 - Introduction to Automotive Service

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: An introduction to automotive shop safety, pollution prevention, hazardous waste handling, Internet-based electronic service information, diagnostic scan tools, ASE certifications, safety inspection certifications, emissions inspection certifications, developing job interview skills, and resume writing.

Note: This course is a prerequisite for all automotive service courses.

AUSV 1001 - Collision Repair Fundamentals and Estimating

Credits: (2)

Description: This course is an introduction to the collision repair industry and the construction of the modern automobile as it applies to the collision repair industry. Emphasis will be placed on locating vehicle information, basic construction of vehicles, environmental concerns and issues, and writing collision repair estimates on damaged vehicles.

Note: Course not currently being offered.

AUSV 1010 - Automotive Technology Orientation

Credits: (1)

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Course Fee: \$70.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: An introduction to maintenance and light repair tasks including: lube oil and filter change, basic under vehicle inspection and maintenance, basic under hood inspection and maintenance, wheel and tire service, Internet-based electronic service information, and diagnostic scan tools.

Note: This course is a prerequisite for all automotive service courses.

AUSV 1020 - Braking, Steering, Suspension, and Climate Control Systems

Credits: (8)

Description: Theory, operation, diagnosis and repair of braking, steering, and suspension systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized.

Pre-requisite(s): AUSV 1000 and AUSV 1325.

Note: (AUSV 1020 is equivalent to AUSV 1021, AUSV 1022, and AUSV 2320.)

AUSV 1021 - Automotive Braking Systems 1**Credits: (2)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Theory, operation, diagnosis, and repair of braking systems. This is the first part of a two-part class.

Note: (AUSV 1021, AUSV 1022, and AUSV 2320 are equivalent to AUSV 1000, AUSV 1020.)

AUSV 1022 - Steering and Suspension Systems 1**Credits: (2)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Theory, operation, diagnosis, and repair of steering and suspension systems. This is the first part of a two-part class.

Note: (AUSV 1021, AUSV 1022, and AUSV 2320 are equivalent to AUSV 1000, AUSV 1020.)

AUSV 1023 - Automotive Braking Systems 2**Credits: (2)**

Typically Taught Fall Semester: *Full Sem, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 2nd Blk*

Course Fee: \$71.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Theory, operation, diagnosis, and repair of automotive braking systems. This is the second part of a two-part class. Upon completion of this course, student can sit in on "A5 Brakes" certification provided by ASE

AUSV 1025 - Steering and Suspension Systems 2**Credits: (2)**

Typically Taught Fall Semester: *Full Sem, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 2nd Blk*

Course Fee: \$71.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Theory, operation, diagnosis, and repair of steering and suspension systems. This is the first part of a two-part class. Upon completion of this course, student can sit in on "A4 Suspension and Steering" certification provided by ASE

AUSV 1030 - Honda Braking, Steering, Suspension, and Climate Control Systems

Credits: (8)

Description: Theory, operation, diagnosis, and repair of Honda braking, steering, suspension, and climate control systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized.

Pre-requisite(s): AUSV 1000 and AUSV 1335.

Note: (AUSV 1030 is comprised of AUSV 1031, AUSV 1032 and AUSV 2330.) Course not currently being offered.

AUSV 1031 - Honda Braking Systems**Credits: (3)**

Description: Theory, operation, diagnosis, and repair of Honda braking systems.

Pre-requisite(s): AUSV 1000.

Note: (AUSV 1030 is equivalent to AUSV 1031, AUSV 1032, and AUSV 2330). Course not currently being offered.

AUSV 1032 - Honda Steering and Suspension Systems**Credits: (2)**

Description: Theory, operation, diagnosis, and repair of Honda steering and suspension systems.

Note: (AUSV 1031, AUSV 1032, and AUSV 2330 are equivalent to AUSV 1000, AUSV 1030.) Course not currently being offered.

AUSV 1040 - General Motors Braking, Steering, Suspension and Climate Control Systems**Credits: (8)**

Description: Theory, operation, diagnosis, and repair of General Motors braking, steering, suspension, and climate control systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized.

Pre-requisite(s): AUSV 1000 and AUSV 1345.

Note: (AUSV 1040 is comprised of AUSV 1041, AUSV 1042 and AUSV 2340.)

AUSV 1041 - General Motors Braking Systems**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: Theory, operation, diagnosis, and repair of General Motors braking systems.

Pre-requisite(s): AUSV 1000 and AUSV 1345.

Note: (AUSV 1040 is equivalent to AUSV 1041, AUSV 1042, and AUSV 2340).

AUSV 1042 - General Motors Steering and Suspension Systems**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: Theory, operation, diagnosis, and repair of General Motors steering and suspension systems.

Pre-requisite(s): AUSV 1000.

Note: (AUSV 1041, AUSV 1042, and AUSV 2340 are equivalent to AUSV 1000, AUSV 1040.)

AUSV 1050 - Chrysler Braking, Steering, Suspension and Climate Control Systems**Credits: (8)**

Description: Theory, operation, diagnosis, and repair of Chrysler braking, steering, suspension, and climate control systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized.

Pre-requisite(s): AUSV 1000 and AUSV 1355.

Note: (AUSV 1050 is comprised of AUSV 1051, AUSV 1052 and AUSV 2350.) Course not currently being offered.

AUSV 1051 - Chrysler Braking Systems

Credits: (3)

Description: Theory, operation, diagnosis, and repair of Chrysler braking systems.

Pre-requisite(s): AUSV 1000 and AUSV 1355.

Note: (AUSV 1050 is equivalent to AUSV 1051, AUSV 1052, and AUSV 2350). Course not currently being offered.

AUSV 1052 - Chrysler Steering and Suspension Systems

Credits: (3)

Description: Theory, operation, diagnosis, and repair of Chrysler steering and suspension systems.

Pre-requisite(s): AUSV 1000.

Note: (AUSV 1051, AUSV 1052, and AUSV 2350 are equivalent to AUSV 1000, AUSV 1050.) Course not currently being offered.

AUSV 1060 - Toyota Braking, Steering, Suspension, and Climate Control Systems

Credits: (8)

Description: Theory, operation, diagnosis, and repair of Toyota braking, steering, suspension, and climate control systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized.

Pre-requisite(s): AUSV 1000 and AUSV 1365.

Note: (AUSV 1060 is comprised of AUSV 1061, AUSV 1062 and AUSV 2360.) Course not currently being offered.

AUSV 1061 - Toyota Braking Systems

Credits: (3)

Description: Theory, operation, diagnosis, and repair of Toyota braking systems.

Pre-requisite(s): AUSV 1000 and AUSV 1365.

Note: (AUSV 1060 is equivalent to 1061, AUSV 1062 and AUSV 2360.) Course not currently being offered.

AUSV 1062 - Toyota Steering and Suspension Systems

Credits: (3)

Description: Theory, operation, diagnosis, and repair of Toyota steering and suspension systems.

Pre-requisite/Co-requisite: AUSV 1000.

Note: (AUSV 1061, AUSV 1062, and AUSV 2360 are equivalent to AUSV 1000, AUSV 1060.) Course not currently being offered.

AUSV 1071 - H D Truck Brakes

Credits: (4)

Description: Brakes provides theory and hands-on instruction on heavy duty braking systems. Students will learn maintenance and repair of wheels and tires, hubs and wheel bearings, air brake systems, drum and rotor brakes, Anti-lock braking system (ABS), and hydraulic braking systems.

AUSV 1072 - H D Truck Steering & Suspension

Credits: (4)

Description: Course provides theory and hands-on instruction on the maintenance and repair of front axles, alignment, truck frames, steering and suspension systems, and coupling devices.

AUSV 1080 - Non-Structural Analysis and Damage Repair 1

Credits: (4)

Description: Safety, welding processes, panel repair and replacement, trim application, water leak and wind noise issues . Proper use of modern body fillers and repair techniques. I-CAR training modules are included.

Pre-requisite(s): AUSV 1001 or instructor approval.

Note: Course not currently being offered.

AUSV 1085 - Painting and Refinishing 1

Credits: (4)

Description: Introductory course on modern automotive paint application processes. Emphasis will be placed on Panel and part preparation as well as spray and application techniques.

Pre-requisite(s): AUSV 1001 or instructor approval.

Note: Course not currently being offered.

AUSV 1100 - Principles of Technology I

Credits: (2)

Description: Scientific concepts of force, work, rate, resistance and energy are applied to mechanical and fluid systems found in modern industry.

Laboratory activities featuring measurement and instrumentation are emphasized.

Note: Course not currently being offered.

AUSV 1120 - Automotive Engines 1

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Theory, operation, diagnosis, repair, and overhaul of automotive engines.

AUSV 1124 - Automotive Engines 2

Credits: (2)

Typically Taught Fall Semester: *Full Sem, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 2nd Blk*

Course Fee: \$71.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Theory, operation, diagnosis, repair, and overhaul of automotive engines. This is the second part of a two-part class.

AUSV 1130 - Honda Engines

Credits: (3)

Description: Theory, operation, diagnosis, repair, and overhaul of Honda engines.

Pre-requisite(s): AUSV 1000.

Note: Course not currently being offered.

AUSV 1140 - General Motors Engines**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: Theory, operation, diagnosis, repair, and overhaul of General Motors engines.

Pre-requisite(s): AUSV 1000.

AUSV 1150 - Chrysler Engines**Credits: (3)**

Description: Theory, operation, diagnosis, repair, and overhaul of Chrysler engines.

Pre-requisite(s): AUSV 1000.

Note: Course not currently being offered.

AUSV 1160 - Toyota Engines**Credits: (4)**

Description: Theory, operation, diagnosis, repair, and overhaul of Toyota engines.

Pre-requisite(s): AUSV 1000.

Note: Course not currently being offered.

AUSV 1170 - H D Truck Engines 1**Credits: (4)**

Description: Operational principles, diagnosis and complete overhaul of diesel engines. Students learn the removal, service, and repair of engines blocks, crankshafts, pistons, rings, connecting rods, camshafts, valvetrains, injection pumps, and accessories.

AUSV 1180 - Structural Analysis and Damage Repair 1**Credits: (4)**

Description: Frame and unibody repair will be explored. Replacement of major structural panels and introduction to measuring and corrective pulling will be covered. Occupant safety and restraint systems will be examined. I-Car training modules are included.

Pre-requisite(s): AUSV 1001 or instructor approval.

Note: Course not currently being offered.

AUSV 1200 - Principles of Technology II**Credits: (2)**

Description: Scientific concepts pertaining to electricity, heat, sound and light are applied to systems found in modern industry. Laboratory activities featuring measurement and instrumentation are emphasized.

Pre-requisite(s): AUSV 1000.

Note: Course not currently being offered.

AUSV 1220 - Automotive Manual Drivetrain Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$81.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Theory, operation, diagnosis, maintenance, and overhaul of manual transmissions and transaxles, front and rear drive axles and differentials, drivelines, and transfer cases. Upon completion of this course, student can sit in on "A3 Manual Transmission" certification provided by ASE

AUSV 1230 - Honda Manual Drivetrain Systems

Credits: (3)

Description: Theory, operation, diagnosis, maintenance, and overhaul of Honda manual transmissions and transaxles, drive axles and differentials, drivelines, and transfer units.

Pre-requisite(s): AUSV 1000.

Note: Course not currently being offered.

AUSV 1240 - General Motors Manual Drivetrain Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Theory, operation, diagnosis, maintenance, and overhaul of General Motors manual transmissions and transaxles, front and rear drive axles and differentials, drivelines, and transfer cases.

Pre-requisite(s): AUSV 1000.

AUSV 1250 - Chrysler Manual Drivetrain Systems

Credits: (3)

Description: Theory, operation, diagnosis, maintenance, and overhaul of Chrysler manual transmissions and transaxles, front and rear drive axles and differentials, drivelines, and transfer cases.

Pre-requisite(s): AUSV 1000.

Note: Course not currently being offered.

AUSV 1260 - Toyota Manual Drivetrain Systems

Credits: (3)

Description: Theory, operation, diagnosis, maintenance, and overhaul of Toyota manual transmissions and transaxles, front and rear drive axles and differentials, drivelines, and transfer cases.

Pre-requisite(s): AUSV 1000.

Note: Course not currently being offered.

AUSV 1270 - H D Truck Drivetrain

Credits: (4)

Description: In this course, students receive theory and hands-on instruction on maintenance and repair of the heavy-duty drive train systems. Topic will include clutches, transmissions, drive lines, and differentials.

AUSV 1300 - Technical Mathematics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Measurements, common and decimal fractions, square roots, surfaces, columns, capacities. Principles of algebra and geometry.

AUSV 1320 - Automotive Electronics 1

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Electrical fundamentals, use of meters and wiring diagrams, wiring repair. Theory, diagnosis, and repair of computer inputs, outputs, and communication systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools are emphasized. This is a three-part class.

AUSV 1323 - Automotive Electronics 2

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Electrical fundamentals, use of meters and wiring diagrams, wiring repair. Theory, diagnosis, and repair of computer inputs, outputs, and communication systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools are emphasized. This is a three-part class.

AUSV 1325 - Electrical Fundamentals 3

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$121.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Electrical fundamentals, use of meters and wiring diagrams, wiring repair. Theory, diagnosis, and repair of lighting, infotainment, electronic control modules. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools are emphasized. This is the third part of a three-part class.

AUSV 1330 - Honda Automotive Electronics

Credits: (4)

Description: Electrical fundamentals, use of meters and Honda wiring diagrams, wiring repair. Theory, diagnosis, and repair of Honda computer inputs, outputs, and communication systems. The use of Honda electronic service information, the proper diagnostic process, and proper diagnostic service tools are emphasized.

Pre-requisite(s): (Recommended) AUSV 1000.

AUSV 1335 - Honda Electronics, Electrical and Body Control Systems

Credits: (7)

Description: Electrical fundamentals, use of meters and Honda wiring diagrams, wiring repair. Theory, diagnosis, and repair of Honda computer inputs, outputs, and communication systems, starting, charging, lighting, air-bags, power accessories, and various body computer control systems. The use of Honda electronic service information, the

proper diagnostic process, and proper diagnostic service tools is emphasized. (AUSV 1330, AUSV 2130 are equivalent to AUSV 1335.)

Note: Course not currently being offered.

AUSV 1340 - General Motors Automotive Electronics

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: Electrical fundamentals, use of meters and General Motors wiring diagrams, wiring repair. Theory, diagnosis, and repair of General Motors computer inputs, outputs, and communication systems. The use of General Motors electronic service information, the proper diagnostic process, and proper diagnostic service tools are emphasized.

Pre-requisite(s): (Recommended) AUSV 1000.

AUSV 1345 - General Motors Electronics, Electrical and Body Control Systems

Credits: (7)

Description: Electrical fundamentals, use of meters and General Motors wiring diagrams, wiring repair. Theory, diagnosis, and repair of General Motors computer inputs, outputs, and communication systems, starting, charging, lighting, air-bags, power accessories, and various body computer control systems. The use of General Motors electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized. (AUSV 1340, AUSV 2140 are equivalent to AUSV 1345.)

AUSV 1350 - Chrysler Automotive Electronics

Credits: (4)

Description: Electrical fundamentals, use of meters and Chrysler wiring diagrams, wiring repair. Theory, diagnosis, and repair of Chrysler computer inputs, outputs, and communication systems. The use of Chrysler electronic service information, the proper diagnostic process, and proper diagnostic service tools are emphasized.

Pre-requisite(s): (Recommended) AUSV 1000.

Note: Course not currently being offered.

AUSV 1355 - Chrysler Electronics, Electrical and Body Control Systems

Credits: (7)

Description: Electrical fundamentals, use of meters and Chrysler wiring diagrams, wiring repair. Theory, diagnosis, and repair of Chrysler computer inputs, outputs, and communication systems, starting, charging, lighting, air-bags, power accessories, and various body computer control systems. The use of Chrysler electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized. (AUSV 1350, AUSV 2150 are equivalent to AUSV 1355.)

Note: Course not currently being offered.

AUSV 1360 - Toyota Automotive Electronics

Credits: (4)

Description: Electrical fundamentals, use of meters and Toyota wiring diagrams, wiring repair. Theory, diagnosis, and repair of Toyota computer inputs, outputs, and communication systems. The use of Toyota electronic service information, the proper diagnostic process, and proper diagnostic service tools are emphasized.

Pre-requisite(s): (Recommended) AUSV 1000.

Note: Course not currently being offered.

AUSV 1365 - Toyota Electronics, Electrical and Body Control Systems

Credits: (7)

Description: Electrical fundamentals, use of meters and Toyota wiring diagrams, wiring repair. Theory, diagnosis, and repair of Toyota computer inputs, outputs, and communication systems, starting, charging, lighting, air-bags, power accessories, and various body computer control systems. The use of Toyota electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized. (AUSV 1360, AUSV 2160 are equivalent to AUSV 1365.)

Note: Course not currently being offered.

AUSV 1400 - Automotive Fundamentals**Credits: (1)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Operation, diagnosis and repair of selected automotive systems, as well as general auto shop orientation for beginners and non-automotive majors.

AUSV 1600 - EV1 - Intro to Hybrid & EV Safety**Credits: (2)**

Typically Taught Spring Semester: *Full Sem - Online*

Course Fee: \$50.00

Course Fee Purpose: Course fees are established to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. The course fee expenditure for this specific course covers fees for high-voltage electric vehicle safety equipment.

Description: This course will introduce students to hybrid and electric vehicles, proper safety tools and procedures, and basic high voltage components. Basic electrical theory will be explained and showcased in this course. Diagnostic theory and operation will be covered as well as service disconnect procedures and component validation testing.

Upon completion of this course, student can sit in on "xEV Electrical Safety Awareness Certification - Level 1 Standard" certification provided by ASE

AUSV 1890 - Cooperative Work Experience**Credits: (1-6)**

Description: Open to all first year students in Automotive Service. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

AUSV 2020 - Engine Performance**Credits: (4)**

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$81.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Theory, operation, diagnosis, and repair of automotive fuel systems, OBD-II and Tier-2 emission control systems, and ignition systems. Including evaluation of engine condition. Upon completion of this course, student can sit in on "A1 Engine repair and A8 Engine Performance" certification provided by ASE. Upon completion of this course and AUSV 2100 Body Communication, student can sit in on "A7 Heating and Air Conditioning systems.

(Depending on which one is finished last in the degree path)" certification provided by ASE. Upon completion of this course and the required work experience as set by ASE, student can sit in on "L1 Advanced Engine performance" certification provided by ASE.

AUSV 2030 - Honda Engine Control Systems

Credits: (3)

Description: Theory, operation, diagnosis, and repair of Honda automotive fuel systems, OBD-II and Tier-2 emission control systems, and ignition systems. (AUSV 1130, AUSV 2030 are equivalent to AUSV 2635.)

Pre-requisite(s): AUSV 1000, AUSV 1335.

Note: Course not currently being offered.

AUSV 2040 - General Motors Engine Control Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Theory, operation, diagnosis, and repair of General Motors automotive fuel systems, OBD-II and Tier-2 emission control systems, and ignition systems. (AUSV 1140, AUSV 2040 are equivalent to AUSV 2645.)

Pre-requisite(s): AUSV 1000, AUSV 1345.

AUSV 2050 - Chrysler Engine Control Systems

Credits: (3)

Description: Theory, operation, diagnosis, and repair of Chrysler automotive fuel systems, OBD-II and Tier-2 emission control systems, and ignition systems. (AUSV 1150, AUSV 2050 are equivalent to AUSV 2655.)

Pre-requisite(s): AUSV 1000, AUSV 1355.

Note: Course not currently being offered.

AUSV 2060 - Toyota Engine Control Systems

Credits: (6)

Description: Theory, operation, diagnosis, and repair of Toyota automotive fuel systems, OBD-II and Tier-2 emission control systems, and ignition systems. (AUSV 1160, AUSV 2060 are equivalent to AUSV 2665.)

Pre-requisite(s): AUSV 1000, AUSV 1365.

Note: Course not currently being offered.

AUSV 2080 - Painting and Refinishing 2

Credits: (4)

Description: Advanced surface preparation and application of modern paint system. Color matching, blending and complete vehicle refinishing. I-CAR training modules are included.

Pre-requisite(s): AUSV 1085 or instructor approval.

Note: Course not currently being offered.

AUSV 2085 - Non-Structural Analysis and Damage Repair 2

Credits: (4)

Description: This is an advanced non-structural and welding course that expands on what has previously been learned. A great deal of time will be spent working on advanced non-structural techniques and processes. Full frame, unibody, space frames and other modern frame designs will be examined along with proper repair and replacement techniques.

Pre-requisite(s): AUSV 1080 or instructor approval.

Note: Course not currently being offered.

AUSV 2100 - Vehicle Communications

Credits: (3)

Typically Taught Fall Semester: *Full Sem, 2nd Block*

Typically Taught Spring Semester: *Full Sem, 2nd Block*

Course Fee: \$30.00

Course Fee Purpose: Course fees are established to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements.

Description: Theory, diagnosis, and repair of vehicle communication systems and computer-controlled circuits. The use of electronic service information, the proper diagnostic process, and proper diagnostic services tools are emphasized. Upon completion of this course, student can sit in on "A6 Electrical" certification provided by ASE. Upon completion of this course and AUSV 2020 Engine Performance, student can sit in on "A7 Heating and Air Conditioning systems." certification provided by ASE.

AUSV 2120 - Automotive Electrical and Body Control Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem, 2nd Block*

Course Fee: \$81.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: The theory, diagnosis, and repair of automated Heating, Ventilation, and Air Conditioning electrical control systems, lighting systems, airbags and safety systems, body power motor accessories, and various body sensors and switches that operate on a modern vehicle. The use of electronic service information, the proper diagnostic process, and proper diagnostic services tools are emphasized.

AUSV 2130 - Honda Electrical and Body Control Systems

Credits: (3)

Description: Theory, diagnosis, and repair of Honda starting, charging, lighting, air-bags, power accessories, and various body computer control systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic services tools are emphasized. (AUSV 1330, AUSV 2130 are equivalent to AUSV 1335.)

Pre-requisite(s): (Recommended) AUSV 1000. Prerequisite: AUSV 1330.

Note: Course not currently being offered.

AUSV 2140 - General Motors Electrical and Body Control Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Theory, diagnosis, and repair of General Motors starting, charging, lighting, air-bags, power accessories, and various body computer control systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic services tools are emphasized. (AUSV 1340, AUSV 2140 are equivalent to AUSV 1345.)

Pre-requisite(s): (Recommended) AUSV 1000. Prerequisite: AUSV 1340.

AUSV 2150 - Chrysler Electrical and Body Control Systems

Credits: (3)

Description: Theory, diagnosis, and repair of Chrysler starting, charging, lighting, air-bags, power accessories, and

various body computer control systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic services tools are emphasized. (AUSV 1350, AUSV 2150 are equivalent to AUSV 1355.)

Pre-requisite(s): (Recommended) AUSV 1000. Prerequisite: AUSV 1350.

Note: Course not currently being offered.

AUSV 2160 - Toyota Electrical and Body Control Systems

Credits: (3)

Description: Theory, diagnosis, and repair of Toyota starting, charging, lighting, air-bags, power accessories, and various body computer control systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic services tools are emphasized. (AUSV 1360, AUSV 2160 are equivalent to AUSV 1365.)

Pre-requisite(s): (Recommended) AUSV 1000. Prerequisite: AUSV 1360.

Note: Course not currently being offered.

AUSV 2170 - H D Truck Electrical 1

Credits: (4)

Description: Electrical I provides theory and hands-on instruction on the principals of electricity, basic components, sensors, circuits, wiring schematics, and multi-meters.

AUSV 2171 - H D Truck Electrical II

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: In the Electrical II course, students will learn advanced electrical theory and diagnostic procedures.

AUSV 2180 - Structural Analysis and Damage Repair 2

Credits: (3)

Description: Expands on techniques and skills learned in AUSV 1180. Emphasis will be placed on advanced frame and unibody repair techniques and methods.

Pre-requisite(s): AUSV 1180 or instructor approval.

Note: Course not currently being offered.

AUSV 2270 - H D Truck Engines II

Credits: (4)

Description: H D Truck Engines II provides the student with more advanced theory and hands-on instruction in diagnostics and operational systems of the internal combustion engine, including emissions, fuel, and after-treatment systems.

AUSV 2320 - Automotive Climate Control Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$81.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Theory, operation, diagnosis and repair of vehicle climate control systems.

AUSV 2330 - Honda Climate Control Systems

Credits: (3)

Description: Theory, operation, diagnosis and repair of Honda climate control systems. (AUSV 1030 is equivalent to AUSV 1031, AUSV 1032 and AUSV 2330.)

Pre-requisite(s): AUSV 1000, AUSV 1330.

Note: Course not currently being offered.

AUSV 2340 - General Motors Climate Control Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Theory, operation, diagnosis and repair of General Motors climate control systems. (AUSV 1040 is equivalent to AUSV 1041, AUSV 1042 and AUSV 2340.)

Pre-requisite(s): AUSV 1000, AUSV 1340.

AUSV 2350 - Chrysler Climate Control Systems

Credits: (3)

Description: Theory, operation, diagnosis and repair of Chrysler climate control systems. (AUSV 1050 is equivalent to AUSV 1051, AUSV 1052 and AUSV 2350.)

Pre-requisite(s): AUSV 1000, AUSV 1350.

Note: Course not currently being offered.

AUSV 2360 - Toyota Climate Control Systems

Credits: (3)

Description: Theory, operation, diagnosis and repair of Toyota climate control systems. (AUSV 1060 is equivalent to AUSV 1061, AUSV 1062 and AUSV 2360.)

Pre-requisite(s): AUSV 1000, AUSV 1360.

Note: Course not currently being offered.

AUSV 2370 - H D Truck Preventative Maintenance

Credits: (1)

Description: The Preventative Maintenance course introduces students to the service and preventative maintenance practices found within the trucking industry. Instruction includes inspection and maintenance of truck and trailer systems, engine systems, electrical systems, frame, and steering components.

AUSV 2480 - Auto Body Business Practices

Credits: (2)

Description: Estimating, scheduling work, purchasing, inventory, insurance practices and applied customer relations.

Note: Course not currently being offered.

AUSV 2520 - Automatic Transmissions

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$91.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Theory, operation, diagnosis and overhaul procedures of automatic transmissions. Upon completion of this course, student can sit in on "A2 Automatic Transmission" certification provided by ASE

AUSV 2530 - Honda Automatic Transmissions

Credits: (4)

Description: Theory, operation, diagnosis and overhaul procedures of Honda automatic transmissions.

Pre-requisite(s): AUSV 1000, AUSV 1335.

Note: Course not currently being offered.

AUSV 2540 - General Motors Automatic Transmissions

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: Theory, operation, diagnosis and overhaul procedures of General Motors automatic transmissions.

Pre-requisite(s): AUSV 1000, AUSV 1345.

AUSV 2550 - Chrysler Automatic Transmissions

Credits: (4)

Description: Theory, operation, diagnosis and overhaul procedures of Chrysler automatic transmissions.

Pre-requisite(s): AUSV 1000, AUSV 1355.

Note: Course not currently being offered.

AUSV 2560 - Toyota Automatic Transmissions

Credits: (4)

Description: Theory, operation, diagnosis and overhaul procedures of Toyota automatic transmissions.

Pre-requisite(s): AUSV 1000, AUSV 1365.

Note: Course not currently being offered.

AUSV 2600 - EV2 - Intro to Hybrid & EV Systems

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: In-depth theory and operation the low voltage and high voltage systems within hybrid and electric vehicles will be covered. High voltage component inspection, removal, disassembly, and installation will be performed. Supporting cooling systems and low voltage electrical will also be diagnosed.

AUSV 2625 - Engine Mechanical and Engine Control Systems

Credits: (6)

Course Fee: \$143.00

Course Fee Purpose: Vehicle Online Service Information, Scan Tool Updates, Consumables, Lost or broken Tools and Equipment

Description: Theory, operation, diagnosis, and repair of automotive engines, fuel systems, OBD-II and Tier-2 emission control systems, ignition systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized. (AUSV 1120, AUSV 2020 are equivalent to AUSV 2625.)

Pre-requisite(s): AUSV 1000, AUSV 1325.

AUSV 2635 - Honda Engine Mechanical and Engine Control Systems

Credits: (6)

Description: Theory, operation, diagnosis, and repair of Honda automotive engines, fuel systems, OBD-II and Tier-2 emission control systems, ignition systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized. (AUSV 1130, AUSV 2030 are equivalent to AUSV 2635.)

Pre-requisite(s): AUSV 1000, AUSV 1335.

Note: Course not currently being offered.

AUSV 2645 - General Motors Engine Mechanical and Engine Control Systems

Credits: (6)

Description: Theory, operation, diagnosis, and repair of General Motors automotive engines, fuel systems, OBD-II and Tier-2 emission control systems, ignition systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized. (AUSV 1140, AUSV 2040 are equivalent to AUSV 2645.)

Pre-requisite(s): AUSV 1000, AUSV 1345.

AUSV 2655 - Chrysler Engine Mechanical and Engine Control Systems

Credits: (6)

Description: Theory, operation, diagnosis, and repair of Chrysler automotive engines, fuel systems, OBD-II and Tier-2 emission control systems, ignition systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized. (AUSV 1150, AUSV 2050 are equivalent to AUSV 2655.)

Pre-requisite(s): AUSV 1000, AUSV 1355.

Note: Course not currently being offered.

AUSV 2665 - Toyota Engine Mechanical and Engine Control Systems

Credits: (6)

Description: Theory, operation, diagnosis, and repair of Toyota automotive engines, fuel systems, OBD-II and Tier-2 emission control systems, ignition systems. The use of electronic service information, the proper diagnostic process, and proper diagnostic service tools is emphasized. (AUSV 1160, AUSV 2060 are equivalent to AUSV 2665.)

Pre-requisite(s): AUSV 1000, AUSV 1365.

Note: Course not currently being offered.

AUSV 2860 INT - Automotive Shop Practice

Credits: (3-8)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: Provides an opportunity to practice skills needed by Automotive Service technicians derived from classroom and shop experience. Simulates line mechanic work.

Pre-requisite(s): Instructor approval required.

May be taken 10 times up to 30 credit hours.

AUSV 2880 - Cooperative Practicum

Credits: (3-8)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Supervised work experience, at the sponsoring dealership, which applies directly to previous academic courses. Full-time employment and approval of faculty supervisor required.
May be taken 10 times up to 30 credit hours.

AUSV 2890 - Cooperative Work Experience

Credits: (1-6)

Description: Open to second year Automotive Service students. A continuation of AUSV 1890.

Note: AUSV 2890 may be taken in lieu of AUSV 2860 when appropriate work experience is available and the student obtains departmental approval.

AUSV 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

AVET 2110 - Semiconductor Circuits

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Introduction to the design and analysis of semiconductor circuits using diodes, transistors, op-amps, field effect devices, thyristors, and regulators.

Lecture and lab combination. Laboratory activities to include the design, construction, computer simulation, and analysis of semiconductor circuits, amplifiers and power supplies.

Pre-requisite(s): EET 1130, EET 1140, MATH 1060 or higher.

AVET 2120 - Power and Motors

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Introduction to AC and DC motors, relays, transformers, power measurements, National Electrical Code, ladder logic, wiring, and programmable logic controllers (PLCs).

Lecture and lab combination. Laboratory activities to include the design, construction, and analysis of basic power circuits and machinery configurations.

Pre-requisite(s): EET 1140, MATH 1060 or higher.

AVET 2140 - Communications Systems

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Introduction to digital and wireless communication circuits. Topics to include radio frequency circuits, modulation, detection, transmitters, receivers, transmission lines, antennas, and measurement instruments. Digital communications topics to include parallel and serial data transmission.

Lecture and lab combination. Laboratory activities to include the design, construction, computer simulation, and

analysis of communication circuits.

Pre-requisite(s): AVET 2110.

AVET 2160 - Troubleshooting

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: An introduction to troubleshooting techniques and skills. Topics include the use of diagnostic electronic test equipment such as multi-meters, power supplies, signal generators, digital storage oscilloscopes, and spectrum analyzers. Students will diagnose and repair electronic circuits and systems.

Lecture and laboratory combination.

Pre-requisite(s): AVET 2110, AVET 2120, AVET 2170.

AVET 2170 - Industrial Controls

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$100.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Introduction to industrial control systems for manufacturing and automated test applications. The course will focus on LabVIEW control systems and Programmable Logic Controllers (PLCs). Students will configure, program, and troubleshoot industrial control systems.

Lecture and lab combination.

Pre-requisite(s): EET 1130, EET 1140.

AVET 3010 - Circuit Analysis

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Advanced calculus-based topics related to electronic circuit analysis, Laplace transforms, differential equations, Fourier series, Fourier transforms, and applications. Lecture and lab combination. Laboratory activities include circuit design, construction, computer simulation, and analysis.

Pre-requisite(s): AVET 2110, AVET 2140, Credit for or Current Enrollment in in MATH 1210.

AVET 4030 - Controls & Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Introduction to automatic control theory, analysis, and testing, pole, zero, Bode plots, and frequency response. The design and application of programmable controllers using ladder logic, sequential functions charts, PID, and data highway.

Lecture and lab combination. Laboratory activities to include computer simulation, servo-system construction, and analysis.

Pre-requisite(s): AVET 3010, MATH 1210, PHYS 2210.

AVET 4040 - Signals and Systems

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: An introduction to digital signal processing, digital filters, discrete and fast Fourier transforms, quantization, introduction to adaptive filters, industrial applications, and DSP hardware.

Lecture and lab combination. Laboratory activities include the design, construction, computer simulation, and analysis of digital signal processing circuits.

Pre-requisite(s): AVET 3010, MATH 1210.

BIS 2800 - Foundations of Integrated Studies

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Foundations of Interdisciplinary Studies provide students with theories and methods used in interdisciplinary research. The course will introduce students to examples of interdisciplinary research, familiarize them with different disciplinary perspectives, and provide them with the intellectual tools to flourish in an interdisciplinary program of study.

BIS 3800 - BIS Capstone and Graduation Preparation

Credits: (2)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course guides students as they develop a capstone proposal, and begin preliminary research on it. The course also helps them consider future career options and graduate school paths.

Pre-requisite(s): BIS 2800.

BIS 3850 - BIS Internship

Credits: (1-3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: The Bachelor of Integrated Studies Program (BIS) offers BIS students the opportunity to earn 1 to 3 elective credits for a work internship.

Pre-requisite(s): For requirements and guidelines, contact the BIS office.

May be repeated three times for a maximum of three credit hours.

BIS 4800 - Bachelor of Integrated Studies Senior Capstone

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: The Senior Capstone serves as the culmination of the Bachelor of Integrated Studies (BIS) interdisciplinary degree. After completing course work in three different areas of emphasis, BIS student synthesize their three disciplines in this capstone project.

Pre-requisite(s): BIS 3800.

BME 1000 - Introduction to Biomedical Engineering

Credits: (2)**Typically Taught Fall Semester:** *Full Sem***Course Fee:** \$35.00**Course Fee Purpose:** This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, and consumable materials.**Description:** An introductory course to Biomedical Engineering topics including electronic terms, numbering systems, software tools, and documentation practices.**Suggested Requisite(s):** MATH 1050 or MATH 1060 or MATH 1080.**BME 2000 - BME Sophomore Seminar****Credits: (1)****Typically Taught Spring Semester:** *Full Sem***Description:** An engineering seminar designed to help students plan their education and career trajectories by introducing modern topics in biomedical research and available careers. Students will be introduced to both academic and industry-oriented career fields, options for undergraduate research and the challenges of working in interdisciplinary career fields.**Pre-requisite(s):** BME 1000 or ECE 1000.**BME 3000 - Engineering Seminar****Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Description:**

An engineering seminar course designed to prepare the student for professional engineering employment. Topics include resumes, hiring criteria, interviewing techniques, engineering ethics, professional and societal responsibilities, lifelong learning, diversity, creative problem solving, goals, quality, timeliness and continuous improvement. Students will research related topics and write a paper.

Pre-requisite(s): BME 2000.**BME 3090 - Project Management****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** Project Management course is designed to prepare students for the senior capstone project. The course will include development of a contract, goal setting, time management, budgeting, project funding, project leadership and team building principles. Engineering economics, team work, quality statistics and continuous improvement will also be discussed. Other topics include project life cycles, organization and risk management. Students should take this course the semester before taking BME 4010.**Pre-requisite/Co-requisite:** BME 3600 and PUBH 3500 and (BME 3210 or ECE 3210) and (BME 3130 or ECE 3110) and (ECE 3610 or ECE 3710) and (CHEM 2310 or NEUR 2950) and (ZOOL 2420 or HTHS 1104 or HTHS 2110 or NEUR 3950).**BME 3130 - Microelectronics and Instrumentation****Credits: (4)****Typically Taught Fall Semester:** *Full Sem***Course Fee:** \$35.00**Course Fee Purpose:** This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, and consumable materials.

Description: Topics covered are related to microelectronics including bipolar and field-effect transistors, frequency response, feedback systems, filters, signal generation, and applications of op-amp circuits. Lecture and lab combination. Laboratory activities include the design, construction, computer simulation, and analysis of filters and advanced circuits.

Lecture and lab combination. Laboratory activities include the design, construction, computer simulation, and analysis of filters and advanced circuits.

Pre-requisite(s): ECE 2260.

Note: Admittance into the Professional Program is required.

BME 3210 - Signals & Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, and consumable materials.

Description: Topics covered are related to the analysis of linear time-invariant continuous and discrete systems and signal transformations, convolution, frequency spectra, Laplace transforms, Z transforms, and fast Fourier transforms. Lecture and lab combination. Laboratory activities include the computer simulation, analysis, and numerical modeling of biological signals and systems.

Pre-requisite(s): ECE 2260 and ENGR 2240.

BME 3600 - Biomedical Design and Standards

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$80.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, and consumable materials.

Description: Introduction to Computer-Aided Drafting (CAD) design and the engineering design cycle. Students will learn basic CAD skills and apply them to designing a simple biomedical device as a group. Important points on standards and considerations for devices that are used by and interface with humans will also be covered.

Pre-requisite(s): PHYS 2220 and BME 2000.

BME 4010 - Senior Project I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, and consumable materials.

Description: Students will be required to complete a 300-hour engineering project (over two semesters) in a team environment. Project management and problem-solving techniques will be emphasized. Topics include goal setting, developing milestone charts, writing contracts, conducting research, project design and construction, testing and analysis, project documentation, and design review presentations.

Pre-requisite(s): Permission from the department. Before seeking departmental approval, students should be currently enrolled in BME 3090 and should have taken at least four 3000-level core ECE or BME courses, MATH 3410 or ECE 3430, and either ENGL 3100 or PS 3250. Exceptions to this rule are made only if a student's graduation would otherwise be delayed.

Suggested Requisite(s): BME 3090 and MATH 3410 and ENGL 3100.

BME 4020 - Senior Project II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, and consumable materials.

Description: A continuation of Senior Project I. Students will be required to complete a significant engineering project in a team environment. Project management and problem solving techniques will be emphasized. Topics to include goal setting, developing milestone charts, writing contracts, conducting research, project design and construction, testing and analysis, project documentation, and design review presentations.

Pre-requisite(s): BME 4010.

BSAD 1010 - Introduction to Business

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Relation of business managers and firms to contemporary society and the global economy. Topics include human values and ethics in the workplace, multiculturalism, social responsibilities of business, business functions, and general principles of effective business operation.

BSAD 2620 - Executive Lectures/Career Development

Credits: (1)

Typically Taught Summer Semester: *1st Block, 1st Blk Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: The purpose of this class is to expose students to a variety of different business careers through a series of lectures presented by successful business executives. Through class discussions and assignments, students will also develop the skills required to find the job and career that fits them best. *Credit/No Credit*

BSAD 2704 - Information Resources in the Business Disciplines

Credits: (1)

Typically Taught Fall Semester: *1st Blk, Full Sem Online*

Typically Taught Spring Semester: *1st Blk, Full Sem Online*

Description: Information Resources in the Business Disciplines is a one credit hour course that will assist students in developing information literacy and basic research skills to support life-long learning. Students will develop skills in identifying, locating, retrieving, documenting, and critically evaluating both electronic and print resources that are appropriate for undergraduate research, with emphasis in the business disciplines.
Cross listed with LIBS 2704.

BSAD 2899 - Business Foundations Check

Credits: (0)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Completion of BSAD 2899 is required of all students pursuing any major, minor, or emphasis awarded by the John B. Goddard School of Business & Economics. The course checks if you have declared a major in GSBE, if you have passed ENGL 2010 or ENGL 2015, MATH 1050 or MATH 1090 (or their equivalent), and all Business

Foundations courses with a C or higher, and if you are in good academic standing. Credit/No credit.

Pre-requisite(s): Earn a "C" or better in MATH 1050 , MATH 1080 , MATH 1090 , or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS.

Pre-requisite/Co-requisite: ENGL 2010 or ENGL 2015 , ACTG 2010 , ACTG 2020 , BSAD 2620 , ECON 2010 , ECON 2020 , MIS 2010 , QUAN 2600 .

Suggested Requisite(s): Students should register for this course concurrent with (same semester as) their last Business Foundation course (ACTG 2010, ACTG 2020, BSAD 2620, ECON 2010, ECON 2020, MIS 2010 and QUAN 2600) or after the required Business Foundation courses have been completed.

BSAD 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

BSAD 3000 - Small Business Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course is designed for students majoring outside the John B. Goddard School of Business & Economics. It will not be counted for credit toward graduation for students majoring in the John B. Goddard School of Business & Economics. It covers the business management concepts involved in starting and/or managing a small business.

BSAD 3200 - Legal Environment of Business

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Introduction to the legal and judicial system, emphasizing the application of regulatory law (e.g., antitrust, employment discrimination, etc.) and selected common law topics (e.g., contracts, agency, etc.).

BSAD 3330 - Business Ethics & Environmental Responsibility

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 2nd Blk*

Description: An introduction to the rudiments of moral reasoning, concepts and principles, and their application to common ethical issues faced in business. Special attention will be given to moral issues associated with the use of the natural environment by businesses.

Pre-requisite(s): BSAD 2899.

BSAD 3500 - Introduction to Business Research

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introduces students to gathering and analyzing primary and secondary data for various business applications, such as assessing customer or employee satisfaction. The course covers acquisition techniques for secondary data; how to evaluate secondary data quality; exploratory, descriptive, and causal research designs; questionnaire and measurement development processes; basic data analysis and emerging trends; and research report writing.

Pre-requisite(s): BSAD 2899, QUAN 3610.

BSAD 3600 - [World Region] Business and Society

Credits: (3)

Description: The world region or country covered in this course varies and will be indicated in the specific course title and on the student's transcript (e.g., European Business and Society, Japanese Business and Society, etc.). For a specified world region or country, this course considers its historical and cultural roots, together with modern societal issues, as they relate to business; the role of business in society; economic development, industrial policy, and trade relations; and management and business practices, including sociocultural considerations, in the specified world region or country.

Pre-requisite(s): BSAD 2899.

Suggested Requisite(s): Prior course work in business or economics or the appropriate foreign language(s) or culture, or in-country experience.

BSAD 4210 - Survey of Business Law

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem*

Description: An overview of sales, negotiable instruments, property, and debtor/ creditor relations and other selected legal topics.

Pre-requisite(s): BSAD 2899, BSAD 3200.

BSAD 4401 - E-Commerce

Credits: (3)

Description: Technologies, strategies, and methods for an electronic approach to financial, purchasing, marketing, and order fulfillment processes. Emphasis is on creating successful business strategies to exploit Internet and Electronic Data Interchange (EDI) capabilities.

Pre-requisite(s): MKTG 3010 or concurrent enrollment in MKTG 3010.

Note: Course not currently being offered.

BSAD 4500 - Entrepreneurship

Credits: (3)

Description: Integration of various functional areas of business as they relate to evaluating, creating, planning, and managing new business ventures.

Pre-requisite(s): Business Foundations; BSAD 2899; MKTG 3010; MGMT 3010, MGMT 3200.

Note: Course not currently being offered.

BSAD 4620 - Executive Lectures

Credits: (1)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course is designed to acquaint the students with successful executives, their personal styles and philosophies as leaders, and the keys to their effectiveness. *Credit/No credit.*
The format is a series of weekly one-hour lectures delivered by guest executives.
The course may be repeated for credit to a maximum of two credit hours.

BSAD 4680 - Consulting Essentials

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Diagnostic analysis of small business issues through the use of case studies and consultation opportunities with small businesses in the community. Students will work both individually and in teams to analyze the health of sample small businesses, identify issues and develop recommendations for remediation. Case issues will cover a broad spectrum of typical small business issues and require the student to evaluate based on all areas of business operations. Research, written reports and presentations are required.
Cross-listed with ENTR 4680.

BSAD 4780 - Strategic Management

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A capstone course for seniors designed to facilitate integration of the knowledge gained in earlier courses. Focus of the course is on the total enterprise. Emphasis is on crafting well-conceived strategies and on successful strategy implementation.

Pre-requisite(s): BSAD 2899 and BSAD 3200 and SCM 2050 and FIN 3200 and MGMT 3010 and MKTG 3010 and (MGMT 3200 or PS 3250 or ENGL 3100 or ENGL 3530 or SCM 3200); senior standing.

BSAD 4800 - Independent Research

Credits: (1-3)

Description: Directed research and study on an individual basis.

Pre-requisite(s): BSAD 2899; Senior Standing; Written Instructor Approval.
May be repeated until a total of 4 hours credit is accumulated.

BSAD 4850 - Business Administration Study Abroad

Credits: (1-3)

Description: This course is designed for students who wish to explore business administration theory and practice in countries other than the U.S. Students will study international business as offered through a partner university (or other university with department chair approval).

Pre-requisite(s): BSAD 2899.

May be repeated once up to 6 credits.

BSAD 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

BTNY 1010 LS - Plants: Apocalypse Prevention

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Plants are essential pieces in the puzzle of preventing and adapting to the environmental challenges of our time. Because plants are major players in carbon cycles, wildfire behavior, medicine, and food systems, understanding and managing plant communities is key to maintaining thriving human societies. We can learn from plant biology and use plants in strategic ways to solve the problems that our society faces and take care of ourselves in the face of turmoil.

BTNY 1203 LS - Plant Biology

Credits: (3)

Typically Taught Summer Semester: *1st Blk Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: An introductory course for non-majors that emphasizes unique features of plant biology. Included are discussions on: the origins of life; important plants of the world and their habitats; plant diversity, structure, function, and reproduction; plants and environmental science; plants that changed history; practical botany; and botany as a science.

Three lecture/demonstration hours per week.

BTNY 1303 LS - Plants and People

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online, 1st Blk Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This class provides a general introduction to the importance and function of plants in human affairs. It includes an overview of science as a way of knowing, plant forms and functions, plant reproduction, and use of economically and sociologically important plants. Flowering and non-flowering plants and products such as fruits, forages, grains, medicines, herbs and spices, textile fibers, lumber, algae, and foliage plants are studied. Ecological concepts as they relate to the growth and production of world food crops will also be included. The course has a strong emphasis on the historical development of exploitation of certain plants and the role plants played in exploration and international development. This class cannot be used to fulfill requirements for a Botany major or minor.

Three hours of lecture per week.

BTNY 1370 LS - Principles of Life Science

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A survey course for elementary education majors. Course content includes cells, cell chemistry, genetics, plant and animal anatomy, plant and animal classification, physiology, immune systems, evolution, and ecology. Unifying concepts of all living things will be emphasized. Recommended for students intending to major in elementary education. This class cannot be used to fulfill requirements for a Botany major or minor.

Two hours of lecture and one 3-hour laboratory per week.

BTNY 1403 LS SUS - Principles of Environmental Science

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: The course fee is used to purchase consumable supplies for hands-on labs and to maintain and replace lab equipment as needed.

Description: Development of awareness of the consequences of the impact of modern science through technology upon our environments and how we respond to issues related to threats to our biological life-support system. A definition of a quality environment is developed, with student input, and an analysis of the existing quality of our environment is made in light of this definition which challenges our collective wisdom to identify those things which we do well and to prescribe remedies for shortcomings. Three hours of lecture and one 2-hour lab per week. Three hours of lecture per week (3 credits) or three hours of lecture and one two-hour lab per week (4 credits).

BTNY 2104 - Plant Form and Function

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: The course fee is used to purchase consumable supplies for hands-on labs and to maintain and replace lab equipment as needed.

Description: An introduction to the anatomy, cell biology, physiology, and genetics of the seed plants. This course is designed for science majors and is a prerequisite for upper division Botany courses.

Two hours of lecture and two 2-hour labs per week.

Suggested Requisite(s): Botany majors are advised to take BTNY 2121 prior to or concurrently with this course.

BTNY 2114 - Evolutionary Survey of Plants

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are used to purchase consumables (seeds, greenhouse supplies, chemicals, microscope slides, etc.) and to provide a reserve fund to replace prepared slides and lab glassware and to repair or replace microscopes as needed.

Description: A study of the diversity, ecology, and reproduction of plants in the context of the evolution of life on earth. The role of plants in making life on earth possible is an important theme. This course is designed for science majors and is a prerequisite for selected upper division Botany courses.

Two hours of lecture and two 2-hour labs per week.

Pre-requisite(s): BTNY 2104.

Suggested Requisite(s): Botany majors are advised to take BTNY 2121 prior to or concurrently with this course.

BTNY 2121 - Career Planning for Botanists

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A course designed for majors to introduce them to expected student learning outcomes, assessment of these expected outcomes, advisement and/or mentoring, keys to success in getting a job or into graduate school, career resources available, and how to start and develop the Botany Student Portfolio.

One lecture per week.

Pre-requisite/Co-requisite: BTNY 2104 or BTNY 2114.

BTNY 2203 - Home and Garden Plants

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are used to purchase consumables (seeds, soil, planting trays, etc.) and provide reserve funds to replace equipment (pruning shears, etc.) as needed.

Description: Basic principles of plant science with special reference to care of home and garden plants. Includes a general study of lighting, watering, soils, fertilizer, pruning and shaping, propagation, controlling pests, and planting designs.

Two hours of lecture and one 3-hour laboratory per week.

BTNY 2303 - Ethnobotany

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem, Full Sem-Online*

Description: A thorough study of the scientific methodology in ethnobotanical research with opportunities for practical applications. This class includes an introduction to how plants are used by people for food, fiber, shelter, and medicine. Students will learn fundamental botanical principles, how to conduct field work and how to collect plants and prepare them for use. Ethical questions concerning conservation, biodiversity and the continued loss of indigenous plants and cultures will also be discussed.

Three lecture/demonstrations per week.

BTNY 2413 - Introduction to Natural Resource Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Course Fee: \$10.00

Course Fee Purpose: The course fee is used for field trip transportation.

Description: Introduces students, especially those interested in forestry and range management, to concepts and ideologies in the utilization and preservation of forests, range, soils, wildlife, water and fisheries, and the human impact on these resources.

Three hours of lecture per week.

BTNY 2600 - Laboratory Safety

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An interdisciplinary, course that will be an overview of the major chemical, biological and physical safety issues related to science laboratories and field work. Class will meet once per week and will be taught in a lecture/demonstration format.

Cross-listed with BTNY, CHEM, GEO, and PHYS.

BTNY 2750 - Topics in Science and Society

Credits: (3)

Variable Title

Typically Taught Spring Semester: *Full Sem*

Description: An exploration of selected topics related to science and society. The specific title will appear on the student transcript.

BTNY 2810 - Experimental Course

Credits: (1-6)**Experimental**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

BTNY 2830 - Readings in Botany**Credits: (1)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Cannot be repeated.

BTNY 2890 INT - Cooperative Work Experience**Credits: (1-3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all students in Botany programs of study who meet the minimum Cooperative Work Experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

Pre-requisite(s): BTNY 2104 and BTNY 2121, and instructor's permission.

Course may be repeated for a maximum of 3 credit hours.

BTNY 2920 - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

BTNY 2950 - Elementary Field Botany**Credits: (3)**

Course Fee: \$100

Course Fee Purpose: The course fee is used to supply and maintain field equipment and cover the costs of transportation and lodging for a five day field trip.

Description: Fundamentals of Botany as observed during field trips. Trips will be preceded by lectures and exercises designed to prepare the student for maximizing the learning experience in the field. The course involves extensive pre- and post-trip exercises and evaluation.

May be repeated once for a maximum of 2 credit hours.

Note: This course is not currently offered.

BTNY 3105 - Anatomy of Vascular Plants**Credits: (4)**

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: The course fee is used to purchase consumable supplies for hands-on labs and to maintain

and replace lab equipment as needed.

Description: Anatomy of Vascular Plants explores the internal structures of higher plants. This course examines the structural organization of higher plants at all levels of organization -- from the subcellular, to cellular, to tissue, to organism level---and pays close attention to how structure begets function from the subcellular to the ecological level. Additionally, students will learn different technical methods and equipment used to study plants' internal structures. Three hours of lecture and one 3-hour lab per week.

Pre-requisite(s): BTNY 2104, BTNY 2114, BTNY 2121, & (BTNY 2600 OR GEO 2600 OR MICR 2600, OR PHYS 2600, OR CHEM 2600.)

BTNY 3153 - Biology of the Plant Cell

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A study of plant cell structure and function, including biogenesis and activities of organelles, signal transduction, cell-cell interactions, and the molecular processes involved in cellular development and specialization as well as cellular responses. Three hours of lecture per week.

Pre-requisite(s): BTNY 2104 and BTNY 2114, CHEM 1120 or CHEM 2310.

BTNY 3204 - Plant Physiology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: The course fee is used to purchase consumable supplies for hands-on labs and to maintain and replace lab equipment as needed.

Description: A study of the physiological processes of plants, including carbon metabolism, mineral assimilation, water relations, and plant hormones. Three hours of lecture and one 3-hour lab per week.

Pre-requisite(s): BTNY 2600 and BTNY 2104, CHEM 1120 or CHEM 2310, and MATH 1040 or MATH 1050 or MATH 1080.

BTNY 3214 - Soils

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: The course fee is used to purchase consumable supplies for hands-on labs and to maintain and replace lab equipment as needed and field trip transportation.

Description: An introduction to the fundamental principles of soil science. Chemical, physical, geological, and biological properties of soils; Course will examine the role of soils as a fundamental ecological constraint through space and time on patterns and processes, such as plant distribution, nutrient cycling, and cycling of water between terrestrial ecosystems and the atmosphere. Course will also examine the human dimensions of soils as a natural resource, and the historical and current environmental impact of soil use and management. Three hours of lecture and one 3-hour lab per week.

Pre-requisite(s): (BTNY 2104 and BTNY 2114 and BTNY 2121) or (GEO 1110) and (CHEM 1110 or CHEM 1210) and (BTNY 2600 or CHEM 2600 or GEO 2600 or MICR 2600 or PHYS 2600).

Course is cross listed with GEO 3214.

BTNY 3224 - Plant Morphology

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: Exploration and analysis of diversity in plant form using basic principles of plant construction and development. Topics covered include embryogenesis and germination, shoot ontogeny, phyllotaxis, symmetry,

branching and tree architecture, root and floral morphology, organ specializations, and comparative morphology. Principles learned in lecture are applied to the analysis of the development of a plant from seed through reproductive maturity. Structure is discussed in the contexts of adaptation and organismal development.

Pre-requisite(s): BTNY 2104 and BTNY 2114.

BTNY 3303 - Plant Genetics

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: The course fee is used to purchase consumable supplies for hands-on labs and to maintain and replace lab equipment as needed.

Description: The principles of heredity, population genetics, and molecular genetics as applied to plants. Three lecture hours and one 3-hour lab per week.

Pre-requisite(s): (BTNY 2104 and BTNY 2114) or MICR 2054; MATH 1040 or MATH 1050 or MATH 1080; BTNY 2600 or CHEM 2600 or GEO 2600 or MICR 2600 or PHYS 2600.

BTNY 3420 - Wildland Fire Ecology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Wildfires are important processes in many ecosystems, affecting plants, animals, and physical processes. They also impact people's use of natural resources, recreation, safety, and property. This course provides an overview of principles in fire ecology, including fuels, fire regimes, fire histories, ecology, climate impacts, and socio-ecological systems with a focus on ecosystems of the Rocky Mountains. In addition to a theoretical understanding, students will apply their understanding to specific situations and conditions. They will develop conceptual tools in systems thinking and engage with the primary literature in fire ecology research.

Pre-requisite(s): MATH 1040, MATH 1050, or MATH 1080, or permission of instructor

BTNY 3454 - Plant Ecology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: The course fee is used to supply and maintain field equipment and support transportation for field trips.

Description: Nature and development of plant communities and their relations to the environmental factors controlling them.

Three hours of lecture and one 3-hour lab per week.

Pre-requisite(s): BTNY 2104 and BTNY 2114 and (MATH 1040 or MATH 1050 or MATH 1080) or permission of instructor.

BTNY 3473 - Plant Geography

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A study of global and regional distributions of major plant groups and communities as affected by past and present climates, biological, ecological and geomorphic factors. Three lectures per week.

Pre-requisite(s): BTNY 2104 and BTNY 2114 or permission of instructor.

BTNY 3504 - Mycology

Credits: (4)

Typically Taught Fall Semester: *Full Sem odd years*

Course Fee: \$25.00

Course Fee Purpose: The course fee is used to purchase consumable supplies for hands-on labs and to maintain and replace lab equipment as needed and offset the costs of DNA sequencing.

Description: Structure, taxonomy, biology, and physiology of the fungi.

Two hours of lecture and two 2-hour labs per week.

Pre-requisite(s): (BTNY 2104 and BTNY 2114 and BTNY 2121) or MICR 2054, and BTNY/CHEM/GEO/MICR/PHYS 2600.

BTNY 3514 - Algology**Credits: (4)**

Description: A study of the biology of algae, their morphology, cytology, development, taxonomy, ecology, economic and experimental uses.

Two hours of lecture and two 2-hour labs per week.

Pre-requisite(s): BTNY 2104 and BTNY 2114, or MICR 2054, or ZOOL 4480.

Note: This course is not currently offered.

BTNY 3523 - Marine Biology**Credits: (3)**

Description: A study of marine biology and ecology, relating to the plant and animal populations of the sea to their various habitats, including the pelagic environment, the sea bottom, sea shores, and estuaries.

Two hours of lecture and one 2-hour lab per week.

Pre-requisite(s): BTNY 2114, or ZOOL 1610, or MICR 2054, or GEO 3010.

Note: This course is not currently offered.

BTNY 3570 - Foundations of Science Education**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: A thorough investigation of research in science learning and curricular standards at the state and national levels. Foundations of the philosophy of science and scientific inquiry as applicable to science teaching at the secondary level. This course serves as a foundation to a preservice science teacher's education coursework.

BTNY 3583 - Medicinal Plants-Chemistry and Use**Credits: (4)**

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: The course fee is used to purchase consumable supplies for hands-on labs and to maintain and replace lab equipment as needed.

Description: A study of plants and herbal preparations widely used in maintaining health and treating disease in traditional and modern societies. Active ingredients, modern use and side effects will be studied. In lab, students will learn to analyze plants, over-the-counter-drugs and herbal supplements for active ingredients. Students will also learn how to make extractions and preparations from plant materials. This course is especially useful for students interested in careers in Pharmacy, Ethnobotany, Natural Medicine, Nursing and Medicine.

Two hours of lecture and two 3 hour labs per week.

Pre-requisite(s): CHEM 1120 or (CHEM 2310 and CHEM 2315), and (MATH 1040 or MATH 1050 or MATH 1080).

BTNY 3624 - Taxonomy of Vascular Plants

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are used to purchase herbarium curation supplies and fresh plant materials that are representative of a wide variety of plant families and to repair or replace dissecting microscopes as needed.

Description: A study of the basic principles and concepts of vascular plant systematics with emphasis on the identification and classification of flowering plants.

Two hours of lecture and two 2-hour labs per week.

Pre-requisite(s): BTNY 2104, BTNY 2114, and BTNY/CHEM/GEO/MICR/PHYS 2600.

BTNY 3643 - Intermountain Flora

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A taxonomic study of plants that are of major importance to the management of wildland resources. Students will learn to identify 300 of the most important grasses, woody plants, and marsh-aquatic plants. Considers federal laws for the regulation of rare and endangered species and habitat designation.

One hour of lecture and two 2-hour labs per week.

Pre-requisite(s): BTNY 3624.

BTNY 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

BTNY 4113 - Plant Evolution

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The Plant Evolution course focuses on two broad areas: 1) the patterns of evolution of plants from prokaryotes to seed plants and 2) current patterns and processes of evolution among plants. The first area will involve an examination of the evolutionary patterns of plants, with a focus on land plants, and will include tracing patterns of evolution from prokaryotes to eukaryotes to land plants to vascular plants to seed plants. This section of the course will explore patterns, evolutionary innovations, and notable taxa throughout the history of plants. The second area will involve an investigation of the current patterns and processes influencing plant evolution. This includes variation within and among populations, strategies for reproduction and breeding systems in plants, patterns of selection, speciation, macroevolution, etc. We will not only discuss these aspects of plant evolution but also delve into modern (and previous) methods for examining patterns and processes of evolution in plants.

Pre-requisite(s): BTNY 2104 and BTNY 2114.

Pre-requisite/Co-requisite: BTNY 2121.

Note: This course is not currently offered.

BTNY 4252 - Cell Culture

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Basic methods and applications for culturing plant and animal cells in vitro.

Two 2-hour combined lecture and laboratory sessions per week.

Pre-requisite(s): BTNY 2104 or MICR 2054.

BTNY 4570 CEL - Secondary School Science Teaching Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Acquaintance and practice with various teaching and assessment methods. Development of science curricula including lesson and unit plans. It is recommended that this course be completed immediately before student teaching.

Pre-requisite(s): Admission to the Teacher Education Program.

BTNY 4750 - Topics in Botany

Credits: (1-5)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An exploration of selected topics in the discipline. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): BTNY 2104 and BTNY 2114, and any specified courses selected by the instructor.

Course may be repeated up to 10 times for credit.

BTNY 4800 - Individual Research

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Pre-requisite(s): BTNY 2104 and BTNY 2114 and BTNY 2121, two upper division Botany courses, and approval of instructor.

Course may be repeated up to 10 times for credit.

BTNY 4810 - Field Studies of the Utah Flora

Credits: (2)

Experimental

Course Fee: \$40.00

Course Fee Purpose: Course Fee Purpose: The course fee is used to support transportation for field trips and cover some of the cost of herbarium supplies.

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

Note: May be repeated for a total maximum of 6 credit hours.

BTNY 4830 - Readings in Botany

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Independent readings in botany under the direction of a faculty member.

Pre-requisite(s): BTNY 2104 and BTNY 2114 and BTNY 2121, two upper division Botany courses, and approval of instructor.

May be repeated up to four times for a maximum of 6 credit hours.

BTNY 4840 - Thesis Readings

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Literature search and evaluation, culminating in the writing of a thesis proposal.

Pre-requisite(s): BTNY 2104 and BTNY 2114 and BTNY 2121, two upper division Botany courses, and approval of thesis advisor.

Course may be repeated once for a maximum of 4 credit hours.

BTNY 4850 - Thesis Research

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Independent research related to a student's approved thesis proposal.

Pre-requisite(s): BTNY 2600 and BTNY 4840 and (MATH 1040 or MATH 1050 or MATH 1080) and approval of thesis advisor.

May be repeated for a maximum of 8 credit hours.

BTNY 4890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all students in Botany Department programs of study who meet the minimum Cooperative Work Experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

Pre-requisite(s): BTNY 2104, BTNY 2114, BTNY 2121, two upper-division Botany courses, and instructor approval. Course may be repeated 5 times for a maximum of 6 credit hours.

BTNY 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): BTNY 2104 and BTNY 2114 and BTNY 2121 and any specified courses selected by the instructor.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

BTNY 4950 - Advanced Field Botany

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$100

Course Fee Purpose: The course fee is used to supply and maintain field equipment and cover the costs of transportation and lodging for a five day field trip.

Description: A concentrated study of the flora and/or field methods for conducting surveys or ecological studies in a specific geographical region. This course generally involves an extended field trip conducting botanical fieldwork in addition to local fieldwork and/or study to prepare for and summarize trip results.

Pre-requisite(s): BTNY 2104, BTNY 2114, and consent of the instructor.

BTNY 4970 - Botany Thesis

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Written report of thesis research in the form of a scientific paper.

Pre-requisite(s): BTNY 4850 and approval of instructor (thesis advisor).

BTNY 4990 - Botany Capstone Seminar

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Oral presentation of an individual research, thesis research, library research, or internship project in which the student demonstrates understanding of science as a process. This course includes the final evaluation of the student's portfolio and should be taken the last semester of the senior year.

Pre-requisite(s): BTNY 2121 and Senior status.

BTNY 5030G - Botany for Teachers

Credits: (2-5)

Description: Science content course for teachers in MEd Science Emphasis Program. To register, select another departmental course and develop a contract detailing additional work required for graduate credit. Contract must be approved by instructor, department chair, and Director of the Master of Education Program.

Course may be repeated up to 10 times.

Note: This course is offered as needed.

CHEM 1010 PS - Introductory Chemistry

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This is a lecture-demonstration class designed to introduce the subject of chemistry and requires no prior chemistry experience. This class is designed for students who will not be majoring in a discipline that requires any further chemistry coursework. This course is not intended to prepare students for any future chemistry coursework.

CHEM 1110 PS - Elementary Chemistry

Credits: (4)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Fundamentals of inorganic chemistry and introduction to organic chemistry. The first course in a two-semester sequence designed primarily for students of nursing, engineering technology and some other fields of science and health professions who require no more than one year of chemistry.

Co-Requisite(s): CHEM 1115.

CHEM 1115 - Elementary Chemistry Lab

Credits: (1)**Typically Taught Summer Semester:** *Full Sem - Online***Typically Taught Fall Semester:** *Full Sem, Full Sem - Online***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online***Course Fee:** \$35.00**Course Fee Purpose:** Lab related chemicals and consumables.

Description: CHEM 1115 is the lab course designed to accompany CHEM 1110. Students will be introduced to lab safety and lab techniques associated with fundamentals of inorganic chemistry and introduction to organic chemistry. The first lab course in a two-semester sequence designed primarily for students of nursing, engineering technology and some other fields of science and health professions who require no more than one year of chemistry.

Co-Requisite(s): CHEM 1110.**CHEM 1120 - Elementary Organic Bio-Chemistry****Credits: (4)****Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem, Full Sem Online***Typically Taught Spring Semester:** *Full Sem, Full Sem Online*

Description: Elementary study of the compounds of carbon and chemical compounds and reactions of biological systems. The second course in a two-semester sequence designed primarily for students of nursing, engineering technology and some other fields of science and health professions who require no more than one year of chemistry. Four hours of lecture and one 3-hour lab a week.

Pre-requisite(s): CHEM 1110 and CHEM 1115.**Co-Requisite(s):** CHEM 1125.**CHEM 1125 - Elementary Organic Bio-Chemistry Lab****Credits: (1)****Typically Taught Summer Semester:** *Full Sem, Full Sem ONL***Typically Taught Fall Semester:** *Full Sem, Full Sem ONL***Typically Taught Spring Semester:** *Full Sem, Full Sem ONL***Course Fee:** \$35.00**Course Fee Purpose:** Lab related chemicals and consumables.

Description: Students will be introduced to lab techniques associated with organic chemistry and biochemistry. This is the second lab course in a two-semester sequence designed primarily for students of nursing, engineering technology and some other fields of science and health professions who require no more than one year of chemistry.

Pre-requisite(s): CHEM 1110 and CHEM 1115.**Co-Requisite(s):** CHEM 1120.**CHEM 1130 PS - Introduction to General, Organic & Biochemistry****Credits: (4)****Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem, Full Sem Online***Typically Taught Spring Semester:** *Full Sem, Full Sem Online*

Description: An introduction to general, organic and biochemistry designed primarily for students of nursing and other majors that require no more than one semester of chemistry. 4 hours of lecture per week.

Co-Requisite(s): CHEM 1135.**CHEM 1135 - Introduction to General, Organic & Biochemistry Lab****Credits: (1)****Course Fee:** \$35.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: CHEM 1135 is the lab course designed to accompany CHEM 1130. Students will be introduced to lab safety and lab techniques associated with fundamentals of inorganic chemistry, organic chemistry, and biochemistry.

Co-Requisite(s): CHEM 1130.

CHEM 1200 - Preparation for College Chemistry

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: CHEM 1200 prepares students to take the CHEM 1210 -1220 chemistry series. No prior chemistry experience is necessary, however, mathematical and problem-solving competency at the level of intermediate algebra (MATH 1010) or above is expected. *Students who do not plan to take Chemistry 1210-1220 series should not take this class.* This course does not fulfill any general education requirements and does not apply towards hours in any major. Three hours of lecture per week.

Pre-requisite/Co-requisite: MATH 1010, MATH 1050, MATH 1080, MATH 1210, MATH 1220, or MATH 2210.

CHEM 1210 PS - Principles of Chemistry I

Credits: (4)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is the first course in a series designed primarily for science majors and others who will take more than one year of chemistry such as pre-medical students, clinical/medical laboratory scientists, and some engineering students. Course topics include components of matter, stoichiometry, major classes of reactions, gases and kinetic molecular theory, thermochemistry, quantum theory and atomic structure, models of chemical bonding, shapes of molecules, intermolecular forces, and properties of mixtures. The laboratory emphasizes qualitative and quantitative methods of analysis. Four hours of lecture per week.

Pre-requisite(s): CHEM 1200 or MATH 1050 or MATH 1080 or, MATH 1210 or, MATH 1220 or, MATH 2210.

Co-Requisite(s): CHEM 1215.

Note: If CHEM 1200 has been successfully completed MATH 1050 may be taken as a Co-requisite with Chem 1210 with departmental approval.

CHEM 1215 - Principles of Chemistry I Lab

Credits: (1)

Typically Taught Summer Semester: *1st Block*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: CHEM 1215 is the lab course designed to accompany CHEM 1210. This is the first laboratory course in a series designed primarily for science majors and others who will take more than one year of chemistry such as pre-medical students, clinical/medical laboratory scientists, and some engineering students. This laboratory emphasizes qualitative and quantitative methods of analysis.

Pre-requisite/Co-requisite: CHEM 1210.

CHEM 1220 - Principles of Chemistry II

Credits: (4)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is the second course in a series designed primarily for science majors and others who will take more than one year of chemistry such as pre-medical students, clinical/medical laboratory scientists, and some engineering students. Course topics include kinetics, equilibrium including aqueous solution equilibrium, thermodynamics, electrochemistry, and an introduction to inorganic, nuclear, and organic chemistry.

Four hours of lecture and one 3-hour lab a week.

Pre-requisite(s): CHEM 1210 and CHEM 1215, MATH 1050 or MATH 1080 or MATH 1210 or MATH 1220 or MATH 2210.

Co-Requisite(s): CHEM 1225.

CHEM 1225 - Principles of Chemistry II Lab

Credits: (1)

Typically Taught Summer Semester: *2nd Block*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: CHEM 1225 is the lab course designed to accompany CHEM 1220. Students will be introduced to lab safety and lab techniques associated with fundamentals of inorganic chemistry including kinetics, equilibrium, acids and bases, thermodynamics, electrochemistry, nuclear chemistry, and transition metal chemistry. The second lab course in a two-semester sequence designed primarily for science majors.

Pre-requisite(s): CHEM 1210 and CHEM 1215.

Co-Requisite(s): CHEM 1220.

CHEM 1230 PS - Engineering Chemistry

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: This course is designed primarily for engineering majors who will take one semester of introductory chemistry. This course will teach the fundamental principles of chemistry including introduction to atomic structure, chemical bonding, chemical reactions, stoichiometry, kinetics, equilibrium, thermodynamics, and materials. A 1-credit laboratory accompanies this class.

Pre-requisite/Co-requisite: MATH 1050.

CHEM 1235 - Engineering Chemistry Lab

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Defray the cost of chemicals and other expendable laboratory materials, as well as for the purchase, maintenance, and repair of laboratory equipment.

Description: The lab component to foundational chemistry for engineers. By the end of class, students will:

- Determine chemical hazards.
- Perform chemical reactions and analysis safely.
- Set up reaction procedures, and calculate yields.
- Use appropriate glassware correctly, and report their properties accurately and precisely.
- Have a basic knowledge of the following instrumentation: calorimeters, pressure sensors, spectrometers.

CHEM 1360 PS - Principles of Physical Science

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A lecture/laboratory course designed to provide an introduction to the scientific method and its application to the study of selected topics in physics and chemistry.

Two hours of lecture and one 3-hour lab per week. Recommended for Elementary Education majors.

CHEM 2310 - Organic Chemistry I

Credits: (4)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Principles of organic chemistry, including structure and reactivity of carbon based molecules. Detailed study of mechanisms, synthesis, and reactions. Alkane, alkyl halide, alkyne, alcohol, and ether families are covered. Four hours of lecture a week.

Pre-requisite(s): CHEM 1220 and CHEM 1225.

Co-Requisite(s): CHEM 2315 lab.

CHEM 2315 - Organic Chemistry I Lab

Credits: (1)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Lab course designed to be taken with CHEM 2310. Includes organic laboratory techniques, synthesis, product isolation, spectroscopy and analysis.

Pre-requisite(s): CHEM 1220 and CHEM 1225.

Co-Requisite(s): CHEM 2310 lecture.

CHEM 2320 - Organic Chemistry II

Credits: (4)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Principles of organic chemistry, second semester. A continuation of structure and reactivity analysis, along with structure elucidation techniques, spectroscopy and synthetic reactions. Coverage includes aromatics, carbonyls, carboxylic acid derivatives, and sugars. Four hours of lecture a week.

Pre-requisite(s): CHEM 2310 and CHEM 2315.

Co-Requisite(s): CHEM 2325 lab.

CHEM 2325 - Organic Chemistry II Lab

Credits: (1)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Lab course designed to be taken with CHEM 2320. Includes organic laboratory techniques, synthesis, product isolation, spectroscopy and analysis.

Pre-requisite(s): CHEM 2310 and CHEM 2315.

Co-Requisite(s): CHEM 2320 lecture.

CHEM 2600 - Laboratory Safety

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An interdisciplinary, course that will be an overview of the major chemical, biological and physical safety issues related to science laboratories and field work.

Class will meet once per week and will be taught in a lecture/demonstration format.

Cross-listed with BTNY, CHEM, GEO, and PHYS.

CHEM 2820 - Elements of Research in the Sciences

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This interdisciplinary course provides concrete skills for productive entry-level scientific research. Students engage in a hands-on introduction to scientific research and methods, including an introduction to sample handling, data analysis, and dissemination of results through papers and presentations. Upon completion of the course, a student will be prepared for potential internships, summer research programs, and research assistantships both on and off campus.

Pre-requisite(s): MATH 1060 or MATH 1080 or MATH 1210; and CHEM 1210 or PHYS 2210 or PHYS 2010 or (GEO 1110 and GEO 1115).

Cross-listed with GEO 2820 and PHYS 2820.

CHEM 2890 INT - Cooperative Work Experience

Credits: (1-6)

Description: Open to all students in the Chemistry Department who meet the minimum Cooperative Work Experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

May be repeated 5 times with a maximum of 6 credit hours.

Note: This course is offered as needed.

CHEM 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title with the credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

CHEM 2990 - Chemical Technician Seminar

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A course designed to provide the skills necessary to enter the job market as a Chemical Technician.

One hour of lecture/discussion a week.

Pre-requisite(s): CHEM 1220 and CHEM 1225.

CHEM 3000 - Quantitative Analysis

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Theory and methods of gravimetric and volumetric analysis and simple instrumentation. Includes statistical evaluation of results.

Three hours of lecture and one 3-hour lab per week.

Pre-requisite(s): CHEM 1220 and CHEM 1225.

Pre-requisite/Co-requisite: CHEM 3020 or permission of instructor.

CHEM 3005 - Quantitative Analysis Lab

Credits: (1)

Course Fee: \$30.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: CHEM 3005 is a stand-alone lab course designed to accommodate transfer students from other

Universities. CHEM 3005 registration will be allowed only by special permission from the Chair of Chemistry.

Transfer students who have taken the CHEM 3000 lecture without the lab should petition the Chair of the Chemistry Department for permission to take this course.

Pre-requisite(s): Must have completed or currently be enrolled in CHEM 3000 lecture.

Note: This course is offered as needed.

CHEM 3020 - Computer Applications in Chemistry

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A course designed to provide students computer skills for applications including computation and electronic data bases searches. It is required that this course be taken before or with CHEM 3000.

One hour of lecture/discussion a week.

Pre-requisite(s): CHEM 1210 and CHEM 1215.

Pre-requisite/Co-requisite: CHEM 3000

CHEM 3050 - Instrumental Analysis

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Theory and methods of modern instrumental analysis. Includes practical applications in electrochemical, spectrometric, and chromatographic techniques.

Three hours of lecture and one three hour laboratory per week.

Pre-requisite(s): CHEM 3000.

Note: This course is offered as needed.

CHEM 3060 - Applied Analysis

Credits: (1)

Description: Applied Analysis using modern methods of analysis with an emphasis on speed and accuracy.
One 3-hour lab per week.

Pre-requisite(s): CHEM 3000.

Pre-requisite/Co-requisite: CHEM 3050.

Note: This course is offered as needed.

CHEM 3070 - Biochemistry I**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Structure and function of biomolecules including proteins, nucleic acids, fats and carbohydrates. A focus on proteins as energy transforming and catalytic devices; their role in metabolism, defense and other biochemical processes. Three lectures a week.

Pre-requisite(s): CHEM 2310 and CHEM 2315.

CHEM 3075 - Biochemistry I Lab**Credits: (1)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Biochemistry lab course designed to accompany Biochemistry I Lecture, CHEM 3070. Includes biochemical concept illustration using chemical and biological techniques and experimentation.

Pre-requisite(s): CHEM 2310 and CHEM 2315.

Co-Requisite(s): CHEM 3070.

CHEM 3080 - Biochemistry II**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: A detailed study of the molecular basis of life: nucleic acids, biosynthetic pathways, molecular aspects of disease and pharmacology.

Three lectures a week.

Pre-requisite(s): CHEM 2320, CHEM 2325, and CHEM 3070.

CHEM 3090 - Biochemical Techniques**Credits: (1)**

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Advanced techniques including instrumentation for biochemistry.
One 3-hour lab per week.

Pre-requisite(s): CHEM 2320, CHEM 2325, CHEM 3070, and CHEM 3075.

Pre-requisite/Co-requisite: CHEM 3080.

CHEM 3400 - Molecular Symmetry and Applied Math for Physical Chemistry**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: An introduction to molecular symmetry, experimental error analysis, and physical chemistry applications of algebra, linear algebra, and differential equations.

Pre-requisite(s): MATH 1220.

Co-Requisite(s): CHEM 3410.

CHEM 3410 - Foundations in Physical Chemistry

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: The one-semester foundation course in Physical Chemistry covering chemical thermodynamics, kinetics with an introduction to quantum mechanics. Three hours of lecture and one 3-hour lab a week.

Pre-requisite(s): MATH 1220, PHYS 2220, CHEM 3000, ENGL 2010.

CHEM 3510 - Environmental Chemistry

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Fees for this course are used to defray the cost of chemicals and other expendable laboratory materials, as well as for the purchase, maintenance, and repair of laboratory equipment. To help minimize lab fees, students are expected to exercise careful use of chemicals, glassware, and laboratory equipment.

Description: CHEM 3510 focuses on the chemical processes that determine how matter moves through environmental systems. The course emphasizes chemical equilibrium, mass transport, and the relative timescales of chemical, physical, and biological processes in the environment. The lab portion of this course develops students' benchtop chemistry and programming skills in the context of researching the fate of a chemical product in the environment. All laboratory data analysis and calculations will be carried out using the Python programming language.

CHEM 3570 - Foundations of Science Education

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A thorough investigation of research in science learning and curricular standards at the state and national levels. Foundations of the philosophy of science and scientific inquiry as applicable to science teaching at the secondary level. This course serves as a foundation to a preservice science teacher's education coursework.

CHEM 3610 - Foundations in Inorganic Chemistry

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: A foundation course for chemistry majors and minors. Topics include atomic properties, bonding, molecular symmetry, solid state structures, and transition metal complexes. This class will meet for 3 hours each week with one 3 hour laboratory per week.

Pre-requisite(s): CHEM 1220, CHEM 1225, and MATH 1060 or MATH 1080.

CHEM 4150 - Nuclear Magnetic Resonance Spectroscopy

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: NMR theory is investigated from a semi-classical standpoint and practiced on an NMR spectrometer. Pulse and Fourier transform NMR basics are developed and common one- and two-dimensional NMR experiments are described.

Pre-requisite(s): CHEM 2310, CHEM 2315, MATH 1220, and PHYS 2220 with lab.

CHEM 4250 CRE - Medicinal Chemistry

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Medicinal chemistry is a fast-paced and important field that has direct impacts on overall world health and quality of life. This 3-credit-hour course is designed for students with an interest in chemistry, biochemistry, pharmacology, and medicine. It will provide an in-depth look at how pharmacologically active molecules are designed, how they chemically interact with their targets, and how they work molecularly to treat human diseases. Selected case studies will be used to illustrate the concepts being covered. In line with our university mission, an overarching theme will be looking at how medicinal chemistry affects our worldwide community with emphasis on patents, drug development costs, risks, and ethics.

Pre-requisite(s): CHEM 3070.

CHEM 4420 CRE - Quantum Chemistry

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: The second semester course of Physical Chemistry covering quantum mechanics, statistical mechanics, and chemical reaction dynamics.

Three hours of lecture and one 3-hour lab a week.

Pre-requisite(s): CHEM 3000 and CHEM 3410 and CHEM 3610.

CHEM 4540 - Spectrometric and Separation Methods

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Theory and practice of spectrometric and separation methods in the study of chemical systems.

Three hours of lecture and one 3-hour lab per week.

Pre-requisite(s): CHEM 3050.

CHEM 4550 - Geochemistry

Credits: (3)

Description: The chemistry of the earth and geochemical processes operating in the lithosphere, hydrosphere, and atmosphere with a synthesis of these ideas to account for the chemical evolution of the earth. Applications to mineral stability and chemical reactions, geochemical cycles, and isotope geochemistry.

Three hours of lecture a week.

Pre-requisite(s): CHEM 1220, CHEM 1225 and GEO 2050 or consent of instructor.

Note: This course is offered during even years.

CHEM 4560 - Environmental Geochemistry

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: Applications of chemistry to understanding Earth system cycles and assessing environmental health and safety. Course emphasizes modern surface geochemical cycles operating in the lithosphere, hydrosphere, atmosphere, and biosphere. Applications of aqueous chemistry, geomicrobiology, and isotope geochemistry. Laboratory introduces practical skills and real-world applications. Three hours of lecture and three hours of lab per week.

Pre-requisite(s): CHEM 1220, CHEM 1225 and GEO 3000; or consent of instructor.

CHEM 4570 CEL - Secondary School Science Teaching Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Acquaintance and practice with various teaching and assessment methods. Development of science curricula including lesson and unit plans. It is recommended that this course be completed immediately before student teaching.

Pre-requisite(s): Admission to the Teacher Education Program.

CHEM 4620 - Advanced Inorganic Chemistry

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Students will learn how to use symmetry and current bonding theories to explain and predict the structure, properties and reactivity of inorganic molecules. They will explore the breadth of inorganic chemistry including organometallic chemistry, bioinorganic chemistry, and catalysis. The research-based laboratory experience focuses on the synthesis, characterization, and testing of inorganic compounds using state of the art techniques and instrumentation.

Three hours of lecture and one 3-hour lab a week.

Pre-requisite(s): CHEM 3610 or permission of instructor.

CHEM 4630 - Materials Chemistry

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Materials chemistry is the study of the synthesis, structure, properties, and applications of solid materials. Our technology-driven world is fueled by advances in materials chemistry with examples of application in areas such as nanomaterials, polymers, and energy technology. This survey course will focus on the synthesis of materials through gas, liquid, and solid phase reactions. Crystalline and molecular structure of materials will be related to electronic, optical, thermal, and mechanical properties. Some material characterization techniques including x-ray diffraction and microscopy will be covered. The accompanying lab focuses on synthesis of advanced crystalline and amorphous materials through traditional and new techniques. Analysis with scanning electron microscopy, x-ray diffraction, uv/vis spectroscopy, and IR spectroscopy is included.

Three hours of lecture and one 3-hour lab a week.

Pre-requisite(s): CHEM 3610.

CHEM 4700 - Special Topics in Chemistry

Credits: (1-3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Pre-requisite(s): CHEM 4420 or permission of instructor.

This course may be repeated twice for a maximum of 3 credit hours.

CHEM 4710 - Chemical Preparations

Credits: (1-3)

Course Fee: \$20.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Synthesis and determination of the properties of selected chemical compounds.

Three to nine hours of lab a week.

Pre-requisite(s): Permission of the instructor.

Note: This course is not currently being offered.

CHEM 4800 - Research and Independent Study in Chemistry

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Lab related chemicals and consumables.

Description: Open to qualified students for one or more semesters.

May be repeated for credit up to 12 times with instructor approval.

CHEM 4890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A continuation of CHEM 2890. Open to all students.

May be repeated for credit up to 12 times with instructor approval.

CHEM 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

CHEM 4990 CRE - Senior Seminar

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A seminar course where students will share their research results with fellow students and faculty in

written and oral formats.

Pre-requisite(s): CHEM 4800 or permission of instructor.

CHEM 5030G - Chemistry for Teachers

Credits: (3-5)

Description: Science content course for teachers in the M. Ed Science Emphasis Program. To register, select another departmental course and develop a contract detailing additional work required for graduate credit. Contract must be approved by instructor, department chair, and Director of the Master of Education Program.

May be repeated twice with a maximum of 5 credit hours.

CHEM 6110 - Master's Research I

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course is designed for students in the Master's of Applied Chemical Sciences. The student will be assigned to a project as negotiated by their WSU mentor and the mentor provided by their employer. This course is designed for the beginning portion of their project, up to 6 credit hours of their overall 18 credit hours of research within the program.

May be repeated 6 times for a max of 6 credits.

CHEM 6120 - Master's Research II

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course is designed for students in the Master's of Applied Chemical Sciences. The student will be assigned to a project as negotiated by their WSU mentor and the mentor provided by their employer. This course is designed for the intermediate portion of their project, up to 6 credit hours of their overall 18 credit hours of research within the program.

Pre-requisite(s): CHEM 6110.

May be repeated 6 times for a max of 6 credit hours.

CHEM 6130 - Master's Research III

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course is designed for students in the Master's of Applied Chemical Sciences. The student will be assigned to a project as negotiated by their WSU mentor and the mentor provided by their employer. This course is designed for the advanced portion of their project, up to 6 credit hours of their overall 18 credit hours of research within the program.

Pre-requisite(s): CHEM 6120.

May be repeated 6 times for a max of 6 credits.

CHEM 6200 - Published Literature Research

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: Students pursuing the Master of Applied Chemical Sciences develop a working knowledge of modern literature searching methods to extract information from published chemical literature. The primary focus of the course is on using the tools of chemical research in practical applications to problems. Students will distill information from multiple sources to develop actionable applications in industry.

CHEM 6310 - Regulatory Agency Compliance

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course provides an overview of key regulatory frameworks and compliance requirements relevant to industrial chemists working in fields such as nutritional supplements, medical supplies, defense manufacturing, state laboratories, and small molecule synthesis. Students will explore regulations enforced by agencies including the FDA, EPA, OSHA, and DOT, as well as international standards like ITAR/EAR and GHS. Emphasis is placed on understanding the practical application of compliance in areas such as good manufacturing practices, hazardous materials handling, chemical labeling, and safety protocols. By the end of the course, students will be equipped with the tools to navigate regulatory challenges, ensure workplace compliance, and prepare for industry audits.

CHEM 6330 - Quality Control and Materials Validation

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course is designed to help students develop an in-depth understanding of quality control (QC) practices and materials validation methods in the context of applied or industrial chemistry. It focuses on the principles and methodologies used to ensure the quality, reliability, and compliance of chemical products and materials with industry standards and regulatory requirements. Students will explore modern analytical techniques, statistical quality assurance tools, and the implementation of quality management systems in various industries. The course emphasizes practical applications, case studies, and the integration of QC protocols in production environments, preparing students for real-world problem-solving in quality assurance and validation.

CHEM 6340 - Statistical Design of Experiments

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: Planning, conducting, and analyzing scientific experiments are critical skills central to applying the scientific method. An introduction to an efficient and effective experimental design, known as Statistical Design of Experiments (DOE), is presented. The application of DOE principles is broken down into four main steps. (1) Identifying the most important variables in the study using Plackett-Burman screening. (2) Using two-level factorial designed experiments to determine the main and interaction effects on the system responses. (3) Mathematical models are developed based on these responses and used to predict results of further experiments. (4) Introduce students to commercially available DOE software. This course includes laboratory exercises for the student to test and apply the DOE concepts to an experimental study. During the laboratory investigation, students will evaluate both screening and factorial designs.

CHEM 6350 - Industrial Polymers

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course provides an introduction to industrial polymers, focusing on their commercial importance

and the properties that make them essential in various applications. Topics covered include polymer synthesis and nomenclature, molecular weight and molecular weight distribution, methods for polymer characterization and testing, polymer morphology, stereoregular polymers, and polymer blends. The course explores key polymerization techniques such as step-growth, chain-growth, and ring-opening polymerization, as well as an in-depth look at commercially significant addition and condensation polymers.

Students will gain a comprehensive understanding of industrial polymers, enabling them to analyze, characterize, and apply these materials in industrial contexts.

CHEM 6900 - Master's Seminar

Credits: (1)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This master's level course is an advanced, discussion-based class focused on current research topics and trends in the chemical sciences. Students actively engage with guest lecturers, professors and other students by presenting and critically analyzing primary literature, developing their oral communication skills, and fostering in-depth understanding of complex chemical concepts through facilitated group discussions and presentations in a small group setting.

May be repeated 3 times with a max of 3 credits.

CHEM 6990 - Capstone Project

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: The Capstone Project course serves as the culmination of an 18-credit hour graduate-level internship research experience. In this course, students synthesize their research findings into a comprehensive, dissertation-style report. The report includes a thorough literature review, detailed summaries of experimental methodologies, data analysis, and discussion of results. Students will also identify unresolved questions and propose directions for future research. Through this course, students demonstrate their ability to communicate complex research effectively while reflecting on their professional growth and contributions to the field. The course emphasizes scholarly rigor, critical thinking, and professional communication.

Pre-requisite/Co-requisite: CHEM 6130.

CHF 1500 SS/CC - Human Development

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: A survey course which addresses the developmental aspects of individuals across the lifespan. Course content encompasses the study of biological, cognitive, social, and emotional developmental changes of the healthy individual in the context of the family and society. It emphasizes and demonstrates the vital connections between theory, research, and application.

CHF 2400 SS/CC - Family Relations

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 1st Blk Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Examines dynamics of the healthy family using family theory, individual life span development, research, and active learning experiences.

CHF 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

CHF 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

CHNS 1000 - Proficiency Development

Credits: (1-2)

Description: (N=Novice) (Cr/NCr) Non-graded courses for entry-level students to augment foreign language instruction in stress-free activities such as reading children's literature, learning and performing skits, folk dancing, singing, cooking, etc.

May be repeated for credit under different titles.

Note: Course not currently being offered.

CHNS 1010 - First Semester Chinese

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Introductory course assuming no significant previous experience with the language. Beginners and students with less than two years of high school language should register for this class. Emphasis on everyday conversation and exposure to cultural perspectives.

CHNS 1020 - Second Semester Chinese

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Continuation of CHNS 1010. Basic language skills including listening, speaking, reading, writing and culture.

CHNS 1852 - Study Abroad

Credits: (1-3)

Description: (N=Novice) Language and culture studies for students with no previous experience in the target language and culture. Most assignments are performed in English. Prior travel experience does not apply. May be repeated twice with a maximum of 3 credit hours.

Note: Check with Department for course availability.

CHNS 2000 - Proficiency Development**Credits: (1-2)**

Description: (NH=Novice High) (CR/NC) Non-graded courses for second-year students to augment foreign language instruction in stress-free activities appropriate to the linguistic level of second-year students. May be repeated under different titles. Note: Course not currently being offered.

CHNS 2010 - Third Semester Chinese**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of CHNS 1020. Assumes completion of first-year or equivalent experience. Students learn to understand and express ideas about their community and the world. Includes listening, speaking, reading, writing and culture.

CHNS 2020 HU - Fourth Semester Chinese**Credits: (3)**

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of CHNS 2010. The learning and application of strategies for acquiring a foreign language. Students also learn how cultural products and practices reflect a culture's attitudes, values, ideas and meaning. The process of language acquisition and the seeking of cross-cultural understanding provide insights into the commonalities of how the human family learns, thinks and communicates.

CHNS 2021 - Second Year II**Credits: (3)**

Description: (NH=Novice High) Continuation of CHNS 2010 without General Education Humanities credit. Offered through examination only.

Pre-requisite(s): Only available through testing.

CHNS 2030 - Second Year Language Review**Credits: (3)**

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) This is a transition course to upper division. The course focuses on oral proficiency development. Students will learn a variety of techniques and strategies to increase their oral proficiency in a variety of social, educational and cultural settings. Native-speaking students or those who have acquired proficiency through residence in the target language community are not eligible to take this class.

Note: Check with department for course availability.

CHNS 2851 - Study Abroad

Credits: (3)

Description: (NH=Novice High) Language and culture studies for students whose minimal proficiency is Novice High. Language assignments at the Novice or Intermediate-Low levels are performed in the target language. All other assignments are performed in English. Prior travel experience does not apply.

Note: Check with Department for course availability.

CHNS 2852 - Study Abroad**Credits: (1-3)**

Description: (NH=Novice High) Language and culture studies for students whose minimal proficiency is at Novice High. Language assignments at the Novice or Intermediate-Low levels are performed in the target language. All other assignments are performed in English. Prior travel experience does not apply.

Twice with a maximum of 3 credit hours.

Note: Check with Department for course availability.

CHNS 3000 - Proficiency Development**Credits: (3)**

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) This is a transition course to upper division. The course focuses on oral proficiency development. Students will learn a variety of techniques and strategies to increase their oral proficiency in a variety of social, educational and cultural settings. Native-speaking students or those who have acquired proficiency through residence in the target language community are not eligible to take this class.

Note: Check with department for course availability.

CHNS 3060 - Grammar & Composition**Credits: (3)**

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Students will read examples of writing in various modes (such as description, narration, exposition, and argument), write short compositions in those modes, and review the necessary grammar to write correctly in those modes.

CHNS 3116 - DLI Bridge Course I**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 3 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): CHNS 2020 or AP exam with a score of 3 or better.

CHNS 3117 - DLI Bridge Course II**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 3 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): CHNS 2020 or AP exam with a score of 3 or better.

CHNS 3118 - DLI Bridge Course III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 3 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): CHNS 2020 or AP exam with a score of 3 or better.

CHNS 3320 - Applied Language Studies

Credits: (1-3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Minimal proficiency level varies with content).

May be repeated up to 10 times under different titles.

CHNS 3550 - Cultural Heritage I

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and civilization.

May be repeated up to 7 times for credit and for other non-English speaking cultures.

CHNS 3631 - Literature: Prose

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of works in prose by one or various authors of a particular period or place, or spanning several literary movements and geographical regions.

May be taken 3 times up to 9 credits under different titles.

CHNS 3632 - Literature: Drama

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of theater plays by one or various authors of a particular period or place, or spanning several literary movements and geographical regions.

May be taken 3 times up to 9 credits under different titles.

CHNS 3680 - Literature: Film

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of film by one or various filmmakers of a particular period or place, or spanning several literary movements and geographical regions.
May be taken 3 times up to 9 credits under different titles.
Note: Check with department for course availability.

CHNS 3710 - Business Language I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) Business Language and Practices. Required of all commercial majors.

Note: Check with department for course availability.

CHNS 3850 - Study Abroad

Credits: (1-6)

Description: (IM=Intermediate Mid) Language and culture studies for students whose language proficiency is Intermediate Low to Intermediate High. All Intermediate and Advanced tasks will be performed in the target language. All Superior tasks may be performed in English. Prior travel experience does not apply.
May be repeated up to 10 times for credit.

CHNS 4830 - Directed Readings

Credits: (1-3)

Description: (IH=Intermediate High) Independent readings under the direction of a faculty member.

May be repeated up to 10 times.

Note: Check with Department for course availability.

CHNS 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: (minimal proficiency level; varies with content). Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Course not currently being offered.

CJ 1010 SS - Introduction to Criminal Justice

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem, Online*

Description: An introduction to the history, processes and functions of the American criminal justice system and its primary components, law enforcement, courts, and corrections.

CJ 1060 - POST Certification Credits, SFO Block

Credits: (6)

Description: Experiential credit for students completing a State of Utah authorized SFO block at POST Academy. Register through the Department of Criminal Justice. *Does not count for credit toward CJ major, CJ minor or BIS emphasis in CJ.*

CJ 1070 - POST Certification Credits, BCO Block

Credits: (3)

Description: Experiential credit for students completing a State of Utah authorized BCO block at POST Academy. Register through the Department of Criminal Justice. *Does not count for credit toward CJ major, CJ minor or BIS emphasis in CJ.*

CJ 1080 - POST Certification Credits, LEO Block

Credits: (9)

Description: Experiential credit for students completing a State of Utah authorized LEO block at POST Academy. Register through the Department of Criminal Justice. *Does not count for credit toward CJ major, CJ minor or BIS emphasis in CJ.*

CJ 1300 - Corrections: History, Theory and Practice

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem, Online*

Description: An introductory overview of the correctional system including: the historical development and societal context of corrections, contemporary correctional theory and law, jails and prisons, community corrections, treatment, juvenile corrections, and contemporary correctional issues.

CJ 1330 - Criminal Law and Courts

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem*

Description: Surveys American criminal law and the criminal court system. Elements of crime, defenses, historical foundation, limits, purposes and functions of criminal law. History, theory and practice of criminal courts.

CJ 1340 - Criminal Investigation

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: This is an introduction to Criminal Investigation including the necessary functions of interviewing witnesses and suspects, techniques in the collection and preservation of evidence, crime scene processing including some post-crime scene processing of evidence, follow-up investigation and recent techniques of enhancing the criminal investigation function.

CJ 1350 - Introduction to Forensic Science

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: An introduction to the various types of physical evidence commonly encountered at crime scenes (e.g., fingerprints, hairs, fibers, drugs, glass, etc.), including discussion of comparison and identification techniques (i.e., optical examination/comparison, instrumental analysis, and many chemical processes) used in the analysis of such physical evidence.

CJ 2300 - Policing: History, Theory and Practice

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: This course will provide an overview of the history of policing and the role of police in modern society. Particular emphasis will be placed on problems and issues confronting police and solutions within an organizational framework.

CJ 2330 - Juvenile Justice

Credits: (3)

Typically Taught Summer Semester: *Online*

Description: Origin, philosophy, and development of the juvenile justice system, particularly the juvenile court. Emphasis placed upon laws, detention, adjudication, probation, after-care, foster homes, and other alternative correctional practices.

CJ 2340 - Crime Scene Investigation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to give students an understanding of the integration of the criminal investigative process with complex scientific application of modern technology in searching for and processing physical evidence in crime scenes. It will provide background into the theory behind Crime Scene Science and the ethical and legal challenges faced by Forensic Scientists and Crime Scene Investigators. Using modern instructional materials, students will learn of the complexity of processing and documentation of Crime Scenes with the ultimate goal of having a successful outcome in the court system.

Pre-requisite(s): CJ 1350.

CJ 2350 - Laws of Evidence

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Deals with the principles and rules of law emphasizing evidentiary problems related to criminal cases.

CJ 2360 - Juvenile Law and Procedure

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: An investigation of the juvenile justice system emphasizing Utah law and procedure. Studies differences between juvenile and adult systems, delinquent acts, juvenile treatment as adults and role and function of probation, youth corrections, family services and the community.

CJ 2400 - Criminal Court Process

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Introduction to American criminal case processing including instruction on how a case is processed, step-by-step, from beginning to end. The motivations, cultural norms and behaviors of attorneys, judges and jurors will also be studied.

CJ 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

CJ 2860 INT - Criminal Justice Field Experience

Credits: (3)

Description: Field experience in an internship with city, county, and state criminal justice agencies.

May be repeated once for 6 credit hours.

Note: This course is not currently offered (see CJ 4860).

CJ 2861 INT - Victim Advocacy Capstone

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Description: Capstone experience for students in the Victim Advocacy Certificate of Proficiency comprised of a volunteer experience with a victim advocacy agency/department; or victim advocacy training experience. Must be enrolled in the VA Certificate to register. Variable credit course (1-3 credit hours). Credit hours determined by type and length of experience in consultation with instructor prior to beginning course.

Pre-requisite(s): Completion of certificate required and elective courses; and instructor permission.

Co-Requisite(s): Concurrent enrollment in no more than 9 hours of the remaining required and elective courses in the certificate; and instructor permission.

May only be taken once for credit.

CJ 2862 INT - Juvenile Justice Capstone

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Description: Capstone experience for students in the Juvenile Justice Certificate of Proficiency comprised of a volunteer experience with a city, county or state juvenile justice agency/department. Must be enrolled in the JJ Certificate to register. Variable credit course (1-3 credit hours). Credit hours determined by length of experience in consultation with instructor prior to beginning course. May only be taken once for credit.

Pre-requisite(s): Completion of certificate required and elective courses.

Co-Requisite(s): Concurrent enrollment in no more than 9 hours of the remaining required and elective courses in the certificate; and instructor permission.

CJ 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title with the credit authorized will appear in the semester schedule and on the student transcript.
May be repeated for a total maximum of 6 credit hours.

CJ 3000 - Graduate School Prep

Credits: (1)

Typically Taught Fall Semester: *2nd Blk-Online*

Typically Taught Spring Semester: *2nd Blk-Online*

Description: This 1-credit hour course is designed to provide social science students with knowledge about applying for graduate school or a career in the criminal justice field. Additionally, it will help students strengthen their professional writing skills, recognize and identify ethical research strategies, and practice professional verbal communication. Beyond that, students will earn their CITI research training certificate and will hone their APA citation abilities. Students will leave the course with the knowledge and artifacts necessary to apply for a criminal justice position or become a graduate school candidate.

Pre-requisite(s): CJ 1010.

CJ 3005 - Law School Prep

Credits: (1)

Typically Taught Fall Semester: *2nd Blk-Online*

Typically Taught Spring Semester: *2nd Blk-Online*

Description: This 1-credit course is designed to equip students with essential knowledge and skills for advancing to law school and/or pursuing a career in the legal field. The course will compare different career options including lawyers, judges, judicial assistants, victim advocates, legal secretaries, and paralegals. It will then cover critical aspects of the law school application process, legal ethics, and basic communication skills necessary for legal careers. By the end of the course, students will have a clearer understanding of their career options in law and improved skills to help them achieve their goals.

Pre-requisite(s): CJ 1010.

CJ 3010 - CJ Careers Exploration

Credits: (1)

Typically Taught Fall Semester: *1st Blk-Online*

Typically Taught Spring Semester: *1st Blk-Online*

Description: This 1-credit course will provide a basic introduction to career opportunities in the American criminal justice system and pay particular attention to federal, state, and local law enforcement and correction careers. This class will also cover career opportunities in the adult and juvenile justice system as well as victim services and treatment/rehabilitation programs. Students will leave this class with a broad overview of career options in the American criminal justice system.

Pre-requisite(s): CJ 1010.

CJ 3020 - Criminal Justice Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Current command level problems and trends in criminal justice organizations and management including work environment, motivation, leadership, morale, discipline, evaluation, planning, and functioning of line and staff.

CJ 3040 - Community Policing

Credits: (3)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Problem solving and the development of community trust are integral to community policing. The philosophy, concepts and methods in support of identifying the issues in a community that relate to crime are outlined and studied. The goal of creating healthy neighborhoods and sustaining the quality of neighborhood life are explained in detail. Crime is pervasive in American society, but victims and criminals have identified characteristics. These characteristics impact certain neighborhoods more than others. These characteristics and issues surrounding them are explored and researched.

CJ 3060 - Corrections in the Community**Credits: (3)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem*

Description: An overview of community based correctional programs focusing upon the historical origin, development, and current practices in probation, parole, the halfway house, work and educational release, as well as furlough programs.

CJ 3120 - Professional Practice for the Forensic Expert**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: An in-depth analysis of critical issues for forensic experts in all fields. Topics such as evidence preservation, report writing, expert testimony and ethics are investigated. The course will focus on theory and practice through lecture, writing and practical exercises.

Two-hour lecture, three-hour lab.

Pre-requisite(s): CJ 1350 or instructor approval.

CJ 3130 - Investigation of Computer Crime**Credits: (3)**

Description: Deals with the threats, vulnerabilities, and risks of unauthorized system access. Understanding the modus operandi of criminal acts associated with computer crime and how to investigate them. Cryptography and network security will be closely examined.

Note: This course is not currently offered.

CJ 3270 - Theories of Crime and Delinquency**Credits: (3)****Typically Taught Summer Semester:** *Full Sem, Full Sem Online***Typically Taught Fall Semester:** *Full Sem, Full Sem Online***Typically Taught Spring Semester:** *Full Sem, Full Sem Online*

Description: Study of the nature, extent, causes, and treatment of crime.

Pre-requisite(s): CJ 1010.

CJ 3300 - Victimology**Credits: (3)****Typically Taught Summer Semester:** *Full Sem, Full Sem Online***Typically Taught Fall Semester:** *Full Sem, Full Sem Online***Typically Taught Spring Semester:** *Full Sem, Full Sem Online*

Description: This course is designed to review key research areas in the field of victimology. Particular emphasis will be placed on theory, measurement, and empirical results related to different types, consequences, and prevention of victimization.

Pre-requisite(s): CJ 1010.

CJ 3340 - Crime Scene Photography

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Course fees are used to assist with the purchase of lab supplies and equipment needed to facilitate instruction of forensic science techniques

Description: Theory and practice behind photographic documentation of crime scenes. Practice of proper documentation methodology, injury photography, evidence photography, special lighting considerations, etc. This hybrid course is a combination of lecture, laboratory, community workshops, and individual exercises.

Pre-requisite(s): CJ 2340 and ART 2450 and instructor approval.

Pre-requisite/Co-requisite: CJ 4115 or CJ 4125.

CJ 3344 - Advanced Forensic Photography

Credits: (3)

Typically Taught Fall Semester: *Full Sem Online*

Course Fee: \$40.00

Course Fee Purpose: Course fees are used to assist with the purchase of lab supplies and equipment needed to facilitate instruction of forensic science techniques

Description: This course addresses photography and imaging issues relevant to the forensic science laboratory including examination quality physical evidence imaging, alternative lighting and exposure techniques, digital camera calibration and maintenance, and courtroom presentation of image evidence.

Pre-requisite(s): CJ 3340.

CJ 3350 - The American Jail

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Spring Semester: *Full Sem*

Description: Course critically examines the American jail with particular emphasis on history, management, operations and contemporary issues.

CJ 3360 - Prisons - Contemporary Issues and Dilemmas

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A course which focuses upon the contemporary adult prison with a particular emphasis upon current problems, issues and dilemmas. Diversity issues such as integration of the prison work force by women and minorities as well as the problems of elderly, women, and minority inmates will be examined.

CJ 3370 - Death Penalty

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Description: Capital punishment is an interesting and pervasive topic within the field of criminal justice. This course will provide students with the opportunity to get acquainted with the history of capital punishment in the

United States, introduce the social and political perspectives that surround capital punishment, explore methods and costs of capital executions, and examine the implications of using the death penalty as a form of punishment.

CJ 3400 - Drugs and Crime

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The historic, economic, social and political roles of legal and illegal drugs; their contribution to crime of many kinds, accidents, and impacts on the criminal justice system; production and distribution systems; efforts to combat; decriminalization, prevention and treatment.

CJ 3600 - Criminal Justice Statistics

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: An introduction to descriptive and inferential statistics and data analysis for use in criminal justice and the social sciences.

Pre-requisite(s): CJ 1010 and (MATH 1030 or MATH 1040 or MATH 1050 or MATH 1080 or QL completion)

CJ 3610 - Research Methods in Criminal Justice

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem*

Description: Addresses the social scientific methodology utilized in criminal justice and criminological research. The essentials of the scientific method will be studied such as research design, probability sampling, qualitative methods and the classic experimental design. The course will familiarize the student with the methods and problems of social science research as applied to the information needs of criminologists, criminal justice agencies, and criminal justice policy-makers. Students will acquire a better sense of criminology or criminal justice research and of exactly what it is that academic researchers do.

Pre-requisite(s): CJ 1010, or instructor approval.

CJ 3620 - Essential Skills for Criminal Justice Professionals

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem-Online*

Typically Taught Spring Semester: *Full Sem, Full Sem-Online*

Description: This course is designed to equip individuals in the criminal justice profession with the necessary skills to effectively communicate in their field. It provides both a theoretical and practical study of communication's role in criminal justice practice. The course also covers communication technology and strategies for communicating with diverse ethnic groups. By the end of this course, criminal justice professionals will have developed enhanced communication skills necessary for success in their field.

CJ 3700 - Women & Criminal Justice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Course explores women within the American criminal justice system, focusing on females as the victim

and perpetrator of crime as well as the various positions that they hold within the criminal justice profession (i.e. law enforcement, courts, corrections). Additional attention will be paid to the social construction of gender and how it can shape the creation and application of social control within society.

CJ 3800 - White Collar Crime

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is an advanced undergraduate course designed to provide an overview of white collar crime. The course emphasizes defining white collar crime, describing the nature of white collar crime, and applying criminological theories to explaining the perpetration of white collar crime.

CJ 3900 - Intelligence and National Security

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Exploration of the role and structure of intelligence collection and analysis in criminal justice and national security. Course focuses on skill building in the areas of critical thinking, organization and presentation of data, and problem analysis in the scope of intelligence and security driven problems.

CJ 4000 - Critical Legal Studies

Credits: (3)

Description: Critical Legal Studies comprehends the development and application of the criminal law and criminal justice institutions in the United States from a critical perspective. The course begins with a short review of slavery and race, civil rights and civil liberties, and the transformation of legal thought in America. Readings provide a perspective for how the criminal law and justice system are used to bolster the lives of the affluent classes while remaining oblivious or acting as a detriment to the lives of disadvantaged, under-represented and marginalized members of society. The course concludes with readings that provide an understanding for the meaning of justice, the role of the law in fostering a more just society, and the legal tools available to the advocate of social change to propose changes through legal reform.

Note: This course is not currently offered.

CJ 4065 - Law and Society

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course explores how law operates in society and how society influences the nature of the law. Topics may include the role of race in law, legal consciousness, efficacy of legal action, and the nature of the legal profession. Students may take either POLS 4065 or CJ 4065, but may not take both courses.

CJ 4080 - Criminal Justice Senior Thesis

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A writing intensive outcomes-assessment of the concepts, issues, methodologies, policies, and practices learned about the criminal justice system and processes.

Pre-requisite/Co-requisite: CJ 3270 and CJ 3610.
Suggested Requisite(s): CJ 3300 and CJ 4200.

CJ 4110 - Physical Methods in Forensic Science

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$55.00

Course Fee Purpose: Course fees are used to assist with the purchase of lab supplies and equipment needed to facilitate instruction of forensic science techniques

Description: Physical methods for evidence analysis including microscopy, pattern based physical evidence (firearms, footwear, etc.) pattern recovery and analysis and statistical foundations for pattern comparison.

Pre-requisite(s): CJ 2340, CJ 3120 and either CHEM 1120 or CHEM 1220; or instructor approval.

CJ 4115 - Friction Ridge Analysis

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$150.00

Course Fee Purpose: Course fees are used to assist with the purchase of lab supplies and equipment needed to facilitate instruction of forensic science techniques

Description: Legal and scientific methodology behind identification, analysis and comparison of finger and palm prints including computer database methodology. 3 hours lecture, 1 hour lab.

Pre-requisite(s): CJ 2340, CJ 3120 and either CHEM 1120 or CHEM 1220; or instructor approval.

CJ 4116 - Friction Ridge Development

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$55.00

Course Fee Purpose: Course fees are used to assist with the purchase of lab supplies and equipment needed to facilitate instruction of forensic science techniques

Description: Basic and applied scientific theory and practice behind the detection, development, recovery and preservation of latent finger and palm prints. 3 hours lecture, 3 hour lab.

Pre-requisite(s): CJ 4115.

CJ 4125 - Research Methods in Forensic Science

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Course fees are used to assist with the purchase of lab supplies and equipment needed to facilitate instruction of forensic science techniques

Description: Selected topics in forensic instrumentation, trace evidence, pattern evidence, biological and chemical analysis, research methods and data analysis. 3 hours lecture, 3 hour lab.

Pre-requisite(s): CJ 4110, or instructor approval.

CJ 4165 - Constitutional Rights

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course critically examines Amendments to the United States Constitution related to criminal justice issues including the 4th, 5th, 6th, 8th, and 14th amendments. It examines citizen's rights and criminal justice agent's responsibility and liability in connection with those rights.

Pre-requisite(s): CJ 1010 and CJ 1330.

CJ 4167 - State Criminal Justice Rights

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course examines state supreme court decisions interpreting state constitutional provisions similar to the provisions in the U.S. Bill of Rights protecting criminal defendants. Emphasis is placed on discussing state constitutional decisions with broader constitutional interpretations than recognized by the U.S. Supreme Court. This course will focus upon state constitutional provisions analogous to the rights in the Fourth, Fifth, Sixth and Eighth Amendments, and the state supreme court decisions interpreting those state constitutional provisions.

Pre-requisite/Co-requisite: CJ 4165.

CJ 4200 - Ethical Issues in Criminal Justice

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem*

Description: Critically examines selected criminal justice ethical issues such as capital punishment, official corruption, use of deadly force, discretion and deception by the police.

Pre-requisite(s): CJ 1010.

CJ 4300 - History of Law Enforcement

Credits: (3)

Description: An introduction to the history of America's law enforcement organizations, stressing the development, community issues, and organizational designs. The early leaders in policing and the early crime problems in America will be discussed and studied. From slave patrols prior to the Civil War to the U.S. Marshals of the old west, police development issues will be presented.

Note: This course is not currently offered.

CJ 4400 - Sex Crimes

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course examines sex crimes in the United States through the lens of the criminal justice system. Topics may include stereotypes and realities related to perpetrators and victims of sexual violence, how various actors in the criminal justice system respond to allegations of sexual abuse, and potential solutions to the problem of sexual violence in the United States.

CJ 4700 - International Criminal Justice

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Compares United States criminal justice system with other international systems from throughout the world, and reviews the nature and extent of international crime.

Pre-requisite(s): CJ 1010.

CJ 4710 - Race, Crime, and Justice

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: This course is designed to provide students with an overview of the contemporary response to race and crime. It will focus on policies, procedures, practices, and agents that make up the criminal justice system in the U.S. and how all of these factors affect race, ethnicity, and justice. Additionally, this course will explore the complex relationship that exists between the criminal justice system and the social construction of race. We will be exploring the origins, nature, structure, and functions of social capital and justice from a number of different perspectives.

CJ 4810 - Experimental Course

Credits: (1-6)

Experimental

Course Fee: \$55.00

Course Fee Purpose: Course fees are used to assist with the purchase of lab supplies and equipment needed to facilitate instruction of forensic science techniques.

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

CJ 4830 - Directed Readings and Special Projects

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Assigned reading or project with evaluation by faculty member. Requires approval of the Department Chair.

May be repeated for up to 6 credit hours cumulative course work.

Note: May not be used as an elective to complete CJ minor or A.S.

CJ 4860 INT - Criminal Justice Internship

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Volunteer experience with city, county, and state criminal justice agencies.

Pre-requisite(s): CJ 1010 and two of CJ 1300, CJ 1330, or CJ 2300; or instructor approval.

Students may take this course for a combined total of six (6) credit hours.

CJ 4861 INT - CSI Internship

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Volunteer experience with city, county, or state crime scene investigation units or related forensic science organizations. Students must complete a minimum level of course work, be selected by an agency, pass a background check, and have permission from the department to register for this course.

Pre-requisite(s): CJ 4110 or CJ 4115; and permission from the instructor.

CJ 4900 - Current Issues in Criminal Justice

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: In-depth study of current theoretical issues in criminal justice. Specific offering will be identified by name and will be listed on student's transcript with authorized credit.

May be repeated two additional times, for a total of three such classes with different titles.

CJ 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Fall Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title with the credit authorized will appear in the semester schedule and on the student transcript.

May be repeated for a total maximum of 6 credit hours.

CJ 4950 - Field Trips/Travel Study

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Designed to provide students with access to both national and international law enforcement agencies, prisons, detention centers, courts and institutions dealing with criminals and delinquents - male and female. Field trips include 2-3 weeks of intense instruction and then 3-5 days of on-site visits, interviews, and lectures by practitioners in the field.

Course may be repeated for a total of six (6) hours of criminal justice credit. Additional hours will be counted toward 120 elective hours of study.

Note: May not be used as an elective to complete CJ minor or A.S.

CJ 4995 - Criminal Justice Senior Assessment

Credits: (1)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Program assessment for graduating seniors combined with an exploration of selected issues and dilemmas surrounding the criminal justice field. Credit/No credit.

Pre-requisite/Co-requisite: Criminal Justice major core course requirements completed (CJ 1010, 1300, 1330, 2300, 3270, 3300, 3610, 4165, and 4200) and senior standing; or department chair approval.

CM 1100 - Construction Management Orientation

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces students to careers in the construction industry and is designed to help students develop a clear focus on their educational and occupational goals.

CM 1150 - Construction Graphics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course covers graphical communications as they relate to the architectural, engineering, and construction industry. Includes print reading, interpretation of graphical symbols and line types, and understanding of construction terminology.

CM 1210 - Residential Construction Materials and Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course provides students with knowledge of residential building techniques and materials. The course will examine common construction materials, components, and systems as related to wood frame structures, including sustainable materials. The residential construction process will be analyzed from site planning to finish construction.

CM 1220 - Construction Contracts

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course covers the interpretation of contract documents used in the various construction delivery methods. Includes contracts, bidding documents, bonding and insurance, conditions of the contract, general requirements, and technical specifications.

CM 1310 - Materials & Methods

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course covers the materials and construction methods used in buildings. Emphasis is placed on sustainable construction practices.

CM 1330 - Civil Materials

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Equipment maintenance and replacement, software, examinations, certifications, and supplies.

Description: This course covers the properties of concrete, asphalt, and soils. Emphasis is placed on quality control and testing of materials.

CM 1500 - Computer Applications in Construction

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Computer applications used in the construction field will be examined. Various software packages will be introduced and studied specifically to their application in the construction industry.

Pre-requisite(s): WEB 1700.

CM 1550 - Construction Safety

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: The fee covers the cost from the Occupational Safety and Health Administration to provide a "30-Hour" OSHA card to each student upon successful completion of the course.

Description: This course covers the Occupational Safety and Health Act (OSHA) and jobsite safety procedures and practices. Emphasis will be placed on ethics as it relates to safety.

CM 2210 - Construction Jobsite Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course covers the skills necessary to manage construction projects successfully. Emphasis is placed on construction communications and documentation.

CM 2260 - MEP

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to provide a basic knowledge of mechanical, electrical, and plumbing (MEP) systems used in commercial buildings. Emphasis is placed on sustainable MEP systems and analyzing life-cycle costs.

CM 2340 - Civil Design and Layout

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Survey equipment needed in order to learn the principles and also computers and software in the computer lab.

Description: This course is designed to provide a basic knowledge of road, utility, and site design necessary for real estate development. Emphasis is placed on project management required throughout the entire development process.

Pre-requisite(s): ENGR 1040.

CM 2360 - Commercial Design and Codes

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$80.00

Course Fee Purpose: Lab computers, and software used to teach this course

Description: This course is designed to provide a basic knowledge of processes used to design commercial buildings. Includes the use of building information modeling (BIM) in the design process for preparing drawings and coordinating the design of the different building trades. Emphasis is placed on how zoning regulation, building codes, and sustainability are integrated into the design.

Pre-requisite(s): CM 1150.

CM 2640 - Quantity Survey

Credits: (3)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** This course covers the processes and methods used to develop a quantity takeoff (list of required materials) for commercial construction projects. Emphasis is placed on using spreadsheets to prepare the quantity takeoff.**Pre-requisite(s):** MATH 1010 or QL, CM 1150, and CM 1310.**CM 2880 - Internship****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** Supervised work experience in the construction industry with placement and course objectives approved by the faculty supervisor. Ethics as it relates to construction management will be discussed.**CM 2990 - Construction Management Seminar****Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Description:** This course is designed to give students the opportunity to interact with professionals from the architecture, engineering, and construction industries and to learn of emerging trends within these industries. May be repeated twice with a max of two credits.**CM 3115 - Construction Cost Estimating****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$20.00**Course Fee Purpose:** Lab aid, paper.**Description:** This course covers the processes and methods for preparing estimates and bids for construction projects. Emphasis is placed on the use of computers in preparing estimates. Ethics as it relates to bidding will be discussed.**Pre-requisite(s):** CM 2640.**CM 3130 - Construction Planning & Scheduling****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$30.00**Course Fee Purpose:** Lab computers and software licenses.**Description:** This course covers the processes and methods of planning and scheduling of construction projects. Emphasis is placed on the use of computers in the planning and scheduling process.**Pre-requisite(s):** CM 2640.**CM 3310 - Leadership in the Construction Industry****Credits: (2)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** This course explores leadership as applied to the construction industry. Emphasis is placed on the

importance of professional relationships.

Pre-requisite(s): CM 2210.

CM 3330 - Civil Materials and Testing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: The cost of consumable materials used for testing and mixtures etc. throughout the semester so sand and gravel, Concrete Masonry Units, cement powder etc.

Description: This course covers the properties of concrete, asphalt, and soils. Emphasis is placed on quality control and testing of materials.

CM 3370 - Preconstruction Services

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$17.43

Course Fee Purpose: Pull-planning exercise used by industry partners.

Description: This course covers services provided by contractors during the design of projects constructed using alternative delivery methods (e.g., design-build, CM/CG). Emphasis is placed on reducing construction risks during the design process.

Pre-requisite(s): CM 2360 and CM 3115.

CM 4120 - Construction Accounting and Finance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course covers the fundamental principles of construction finance, accounting, and cost control.

Pre-requisite(s): ACTG 2010.

CM 4150 - Construction Equipment and Methods

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course covers the use of equipment used on heavy/civil construction projects. Emphasis is placed on equipment selection, production rates, and unit cost.

Pre-requisite(s): CM 3115.

CM 4330 - Applied Structures

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course covers the processes and methods used to analyze the behavior of engineered structures. Includes the application of the properties of materials and mechanics as they relate to the structural behavior of load resisting components.

Pre-requisite(s): PHYS 2010.

CM 4350 - Temporary Structures

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: This course covers basic design of temporary structures. Emphasis is placed on formwork, scaffolding, dewatering, and excavation shoring.

Pre-requisite(s): CM 4330.

CM 4510 - Design Charrette/CM Challenge

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Students will work in multi-disciplinary teams to solve real-world construction problems.

Pre-requisite(s): CM 3115 or CM 3130.

Students can take the course 2 times for a max of 2 credit hours.

CM 4520 - ASC Student Competition

Credits: (1)

Typically Taught Fall Semester: *2nd Blk*

Typically Taught Spring Semester: *1st Blk*

Description: Students will work in multi-disciplinary teams to solve real-world construction problems. This course requires students to participate in the ASC Region 6 Student competition.

Pre-requisite(s): CM 4510.

CM 4570 - Approaches to Construction Contracting

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course covers the development of a business plan for a small construction company.

Pre-requisite(s): PS 3250, ACTG 2010.

CM 4620 - Senior Project

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$185.00

Course Fee Purpose: AC exam, equipment maintenance and software, certifications and supplies.

Description: This course is a culminating experience for students from the program. Requires integration of concepts from a variety of coursework to prepare and present a solution to a construction problem.

Pre-requisite(s): PS 3250, CM 3130, CM 3370.

CM 4800 - Individual Projects and Research

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual research or projects in Construction Management Technology. Credit and time determined by the student and faculty advisor.

Pre-requisite(s): Junior or Senior standing and consent of instructor.

May be repeated up to 9 credit hours.

CM 4830 - Directed Studies

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The student will receive credit for approved studies in an area not covered in the CMT program. Credit and time determined by the student and faculty advisor.

Pre-requisite(s): Junior or Senior standing and consent of instructor.

May be repeated up to 9 credit hours.

CM 4890 - Practicum

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Supervised work experience in the construction industry with placement and course objectives approved by the faculty supervisor. This course can be used to help the student satisfy the CMT program requirement of 800 hours of approved supervised work experience. Ethics as it related to construction management will be discussed.

Pre-requisite(s): CM 2880.

May be repeated up to 9 credit hours.

CM 4899 - BS Graduation Assessment and Signoff

Credits: (0)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course includes final assessment (e.g., exit interviews) and signoff needed for graduation with a BS degree from the program. Contact your advisor during your last semester before graduation to complete this requirement. Credit/no credit.

CM 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (.5-6)

Workshop

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized for the particular offering will appear on the student transcript.

Pre-requisite(s): Junior or Senior standing and consent of instructor.

May be repeated for a total maximum of 6 credit hours.

COMM 1020 HU - Principles of Public Speaking

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$5.00

Course Fee Purpose: Cameras, microphones and other equipment for recording speeches, classroom equipment

maintenance

Description: Introduces theories and principles of effective speaking with emphasis on: audience analysis and adaptation, listening, organization, content development, use of language, and extemporaneous delivery. Designed to improve the student's ability to research, organize, develop and make presentations.

COMM 1040 - Convocations

Credits: (1)

Description: Features distinguished speakers and artists in broad fields of humanities, sciences, technology, education, national and world affairs, and specialized artists in the fine arts from specialties such as music, theatre, interpretation, ballet and art.

May be repeated 5 times up to 6 credits.

Note: Course not currently being offered.

COMM 1130 - Media Writing

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Maintaining computer lab for writing course

Description: Beginning instruction in information-gathering techniques and media writing styles that inform, entertain and/or persuade. Approach recognizes that new technology is blurring the distinctions among various media and that writers must have a broad base of knowledge and skills.

Pre-requisite(s): Proficiency in word processing.

COMM 1140 - Writing for Workplace Communication

Credits: (3)

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Course Fee: \$15.00

Course Fee Purpose: Maintaining computer lab for writing course

Description: This course is designed to teach communication appropriate to the workplace with an emphasis on written forms. It covers content, organization, tone, grammar and formatting across multiple contexts: presentations, professional biographies, email, executive summary, letters of commendation and complaint, press releases and business and training proposals. It uses verbal communication such as interviewing in addition to primary and secondary research to provide substance in professional communication.

COMM 1270 - Analysis of Argument

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Students will learn to analyze, evaluate, develop and refute arguments using formal argumentation methods and research based evidence. The course is designed to increase student competence and confidence in constructing, defending and critiquing a broad range of arguments found in public discourse.

COMM 1500 - Introduction to Mass Communication

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Examines mass media development and impact upon society. Considers newspapers, magazines, film, radio, TV and multimedia. The role of media in providing information, opinion, entertainment and advertising support are considered along with the social political-economic controls which affect the media.

COMM 1560 - Audio Production and Performance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Purchasing of required items on a yearly basis necessary to teaching digital media course, maintaining and repairing a/v equipment and computer editing stations

Description: An introductory course in audio production and performance. Training in audio console operation, use of recorders and microphones, and audio editing. Class includes basic announcing and formatting for radio stations. Course emphasizes hands-on projects.

COMM 2010 HU - Mass Media and Society

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Media literacy course which examines the non-legal, but ethical and social problems of mass media. Discusses current media issues and explores constructive steps to improve media relationships.

COMM 2110 HU CEL - Interpersonal and Small Group Communication

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Explores the dynamics of verbal and nonverbal communication in personal relationships and small groups. The emphasis is on practical application of course content to enhance interpersonal relationships and to achieve competence as group members.

COMM 2200 - Multi-Camera Production and Performance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Purchasing of required items on a yearly basis necessary to teaching digital media course, maintaining and repairing a/v equipment and computer editing stations

Description: An introductory course in all aspects of in-studio video production. Skills include performing for video as well as the use of cameras, switching, lighting, electronic graphics and audio equipment. In-class projects emphasize directing, writing and performing for video.

COMM 2210 INT - Intercollegiate Debate

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Preparation and competition on the national debate resolutions and participation in individual events.

Pre-requisite(s): Permission of instructor.

May be repeated 7 times up to 8 credits. However, only 6 credits may be used toward the Communication major.

COMM 2220 INT - Intercollegiate Speech

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Preparation for and participation in intercollegiate speech competition and community speaking activities. Course teaches students to research, write, and deliver valuable messages and share their experience through reasoned discourse, presentation, and narrative speaking.

May be repeated up to 10 times for credit.

COMM 2250 HU - Essentials of Digital Media

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Purchasing of required items on a yearly basis necessary to teaching digital media course, maintaining and repairing a/v equipment and computer editing stations

Description: This course introduces the basic digital communication skills necessary to be successful in today's multimedia environment. Students will learn how to produce and edit audio, stills, and video. Students will also learn to upload content for presentation on the Web and will learn to use social media to disseminate information relative to your content. Concepts will first be discussed in two lecture periods, and then put into practice in a lab.

COMM 2270 - Argumentation and Debate

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An examination of the theory and practice of argumentation with emphasis on parliamentary and policy debate formats. Emphasis also placed on making claims and inferences, research and the use of evidence, cross-examination, case construction, rebuttals and style of presentation.

COMM 2400 - Social Media for Communicators

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course needs to gather social media data to learn best practices.

Description: This course is designed for students who are interested in using social media professionally and strategically. Students will apply multiple communication perspectives to make sense of social media adoption and use. Upon completing this course, students will understand the implications of social media for a variety of social issues in personal, organizational, and societal contexts.

COMM 2550 - Communication in Professional Settings

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: This class is designed to acquaint students with many of the major theories, concepts, and research

findings related to the study of organizational communication and public relations. While this class will include a theoretical component, it is designed to be a more "hands on" or "practical skills" course. The information should be of practical value since individuals spend much of their lives in organizations and other professional settings.

COMM 2730 - Digital Radio Production and Broadcast

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Broadcast equipment, events, radio licensing and services.

Description: Students meet once a week and work as DJs for the Weber State radio station, KWCR. One studio shift of 2 hours per week is required. Specific shift hours will be arranged early in the semester. This is offered as a 1-, 2- and 3-credit course. For the 1-credit option, students are graded based on attendance and completing weekly shifts. For the 2- and 3- credit option students have additional work with events and assignments for the station as needed. May be repeated for a maximum of 12 credit hours, but returning students are encouraged to enroll in the upper-division version, COMM 3891.

May be taken up to 12 times.

COMM 2820 - Podcast Production

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are used to buy the equipment required to produce podcasts. Replacement equipment such as auxiliary and microphone (XLR) cables and headphones are needed.

Description: This course will acquaint students with all aspects of podcasting and help them become better storytellers. Students will learn the components of podcast production including interviewing, story development, scriptwriting, interview techniques, remote and digital audio recording, editing of sound, mixing, and final production for streaming.

Pre-requisite(s): COMM 1560 or permission of instructor.

COMM 2890 - Cooperative Work Experience for The Signpost

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Events with professional journalists and other activities, maintenance and updating of computers in work room

Description: Newspaper lab experience at The Signpost for those who want the experience of gathering and producing news. Students will learn facets of producing a print and/or on-line publication and promoting the content on social media. Skills include news reporting and writing, advertising, design and photography. 3 credits requires instructor approval. The 3-credit option will be used for those seeking an Associate in Workplace Communication. May be taken 12 times and up to 12 credits total.

COMM 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Course is offered as needed.

COMM 2980 - Introduction to Storytelling in Cinematic Virtual Reality

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Course fee to cover equipment, maintenance, and software needs.

Description: This course will introduce students to immersive, 360-degree cinematic virtual reality storytelling. It will present a foundational understanding of the conceptualization of constructing digital media content for head-mounted displays, and present theoretical and practical applications for 360VR content. It will allow the students to explore the audio and visual production process to create engaging, compelling 360VR content specifically for head-mounted displays (HMDs), including monoscopic and stereoscopic video and ambisonic audio production, stitching, and editing.

Pre-requisite(s): COMM 2250 or permission of instructor.

COMM 2999 - Capstone in Workplace Communication and Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Description: This class provides an opportunity for students to synthesize and demonstrate their learning in the Associate of Workplace Communication program. The primary purpose of this course is to help students transition from earning an associate's degree to pursuing a job and/or continued education toward a bachelor's degree. The course will include employment-related content such as interviewing skills, job shadows, career research, portfolios, resumes, and cover letters. The course will also include a section on workplace ethics to develop responsible and productive professionals.

Pre-requisite(s): Permission of Instructor.

Crosslisted with ENGL 2999.

COMM 3000 - Communication Theory

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: This course is intended to provide students with an overview of communication theory. It will give students a working knowledge of theories used to explain a wide range of communication phenomena, enabling them to build upon selected theories in other upper-division courses in their chosen communication major concentration.

COMM 3050 - Conflict Management and Negotiation

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to provide students an opportunity to explore conflict management concepts in depth. Upon successful completion of this course, students will have a greater understanding of conflict across a variety of contexts, including interpersonal, organizational, group, and cultural. Students will be provided the analytical and communication tools to understand, evaluate, and respond effectively to conflicts.

Pre-requisite(s): COMM 3000 or permission of instructor.

COMM 3060 - Listening and Interviewing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course covers the purpose, structure, focus, and techniques employed in effective listening and interviewing. Emphasis is placed on observing, attending, listening, responding, recording, and summarizing in a variety of interviewing settings. This course is designed to offer students insight into improved listening and interviewing practices. The theory and research concerning the process of listening and the practice of interviewing will form the basis for students' understanding about listening and interviewing behavior. This course then applies that knowledge to the development of listening and interviewing skills.

COMM 3070 - Performance Studies

Credits: (3)

Description: Study of aesthetic texts through performance featuring the view of text or literature as communicative event and textual meaning as response in readers and audience. A primary emphasis will be placed on the relationship between performative choices and textual understanding.

Pre-requisite(s): COMM 1020 or permission of instructor.

Note: Check with Department for course availability.

COMM 3080 GLB - Intercultural Communication

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Explores theoretical perspectives in intercultural communication. Through analysis of various intercultural theories, students will become aware of cultural influences on communication in both international and domestic cultures.

COMM 3085 - Family Communication

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: No activity is more fundamental to emotional need fulfillment, overall personal satisfaction, and the maintenance of community-social systems than family communication. It is in the recursive cycle of family communication that we learn how to relate to others. This course examines current studies in family communication research and its implications. Students will add to the scholarship of family communication by completing a research project in conjunction with this course.

Pre-requisite(s): COMM 2110 or permission of instructor.

COMM 3090 - Gender and Communication

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Online*

Description: This course is designed to help students understand the influence that communication has upon the shaping of gender and the influence that gender has in shaping communication interactions. Students become aware of, sensitive to, and more experienced in the issues, implications and skills necessary to successfully and meaningfully communicate with males and females, and about males and females, in a wide range of communication contexts. Cross listed in WGS 3090.

COMM 3100 - Small Group Facilitation and Leadership

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Theories and practical communication processes are examined and applied to develop fundamental attitudes and skills for facilitating and leading effective groups.

Pre-requisite(s): COMM 2110 or permission of instructor.

COMM 3120 - Advanced Public Speaking

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Enhanced speaking skills across a range of situations such as the professional workplace and via social media. Increase understanding of audience, publics, and the overall definition of "speaking" as a result of our ever-changing society.

Pre-requisite(s): COMM 1020 or permission of instructor.

COMM 3130 - News Reporting and Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Maintaining computer lab for writing course

Description: Develops journalism skills relevant to newspapers and online news services. Emphasizes news gathering, interviewing and news writing.

Pre-requisite(s): COMM 1130 or permission of instructor.

COMM 3150 CRE - Communication Research Methods

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Maintaining computer lab for research purposes

Description: Explores methods of gathering, analyzing and interpreting data. Topics include: asking questions, observing and measuring communication variables; designing valid and reliable research; research ethics, experimental design and survey research. Emphasis is also placed on how to present research and how to read scholarly journal articles.

Pre-requisite(s): COMM 2110 or permission of instructor.

COMM 3200 - Live Event Production

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Purchasing of required items on a yearly basis necessary to teaching digital media course, maintaining and repairing a/v equipment and computer editing stations

Description: Students will learn to operate field video cameras, switchers, instant-replay and other equipment while experiencing the pressures of live-sports production. Students will be part of a crew supplying the visuals for Weber State's football and basketball scoreboards. The crew will also provide visuals necessary to fulfill production commitments.

May be repeated up to 12 times for a maximum of 12 credit hours.

Note: (A maximum of 6 credit hours total may be counted for the major, however, 6 additional credit hours may be used as elective credit.)

COMM 3220 - Editing

Credits: (3)

Typically Taught Fall Semester: *Online*

Description: Develops editing knowledge and skills for print and online publications. Covers copy editing, content editing and page editing.

Pre-requisite(s): COMM 1130 or permission of instructor.

COMM 3230 - Health Communication

Credits: (3)

Description: A broad examination of communication theory, application, and research in health care delivery and management. Examines many different levels and channels of communication including the development and application of interpersonal communication, small group communication and teamwork, organizational communication, communication ethics, leadership, and motivation skills in dealing with health care providers, staff, and consumers in a variety of health care environments.

Cross-listed with HAS 3230.

Note: Check with Department for course availability.

COMM 3350 - Visual Communication

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Maintaining computer labs for design course.

Description: Visual messages have great power to inform, educate and persuade. In all fields of communication, visual presentation of the message helps determine the success of the message. This course is designed to help students become effective and ethical visual communicators on the page or the screen. In addition to creating design projects, students will learn how to critically analyze visual designs and to understand major visual communication theories.

Pre-requisite(s): COMM 1130.

COMM 3400 - Introduction to Public Relations & Strategic Communication

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Philosophy and practice of public relations in business, government, education and non-profit organizations. Case studies will be selected from a wide range of actual public relations concerns to foster decision-making skills and a mature understanding of public relations management.

COMM 3440 - Public Relations Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Maintaining computer lab for writing course

Description: Explores principles and practices of a variety of public relations writing formats ranging from news releases to websites.

Pre-requisite(s): COMM 1130.

COMM 3460 GLB - Public Relations and Social Media

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$25.00

Course Fee Purpose: This course needs to gather social media data to learn best practices.

Description: This course will combine theory and practice in teaching the principles of the new "Social Media" or "PR 2.0." Students will learn how new web technologies have expanded the practice of Public Relations beyond the traditional arena and into the fast-moving and dynamic world of public communication on the web. They will learn how to communicate with the news media and directly with the public. The course will prepare them to use the newest technology and practices effectively as they represent their companies and their clients.

COMM 3550 - Organizational Communication

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Study of communication in organizations from various theoretical perspectives with an emphasis on the organizational culture perspective. Includes topics such as communicating with external audiences, decision-making, conflict resolution, and power relationships.

Pre-requisite(s): COMM 2110 or permission of instructor.

COMM 3650 - Communication Law

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: First Amendment origins, interpretations and philosophy underlying regulation of the mass media.

Pre-requisite(s): COMM 3000 or permission of instructor.

COMM 3730 - Media Programming and Audiences

Credits: (3)

Description: This course focuses on principles, strategies and approaches for creating and scheduling content for radio, television and the World Wide Web. The course also provides an analytical framework for understanding industry trends in media programming, and how those trends are influenced by audience research. Students create and schedule programs, apply programming strategies and philosophies, and learn relevant terminology and audience measurement techniques.

Pre-requisite(s): Permission of instructor.

Note: Check with Department for course availability.

COMM 3740 - Writing for Screen

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Maintaining computer labs for writing course

Description: Specialized concepts and techniques required to write effectively for film, television, and other new media technologies.

COMM 3750 - Advanced Cinematography and Editing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Description: Capstone course for audio and video production. Emphasis is placed on combining production types to produce longer and more complex programs.

Pre-requisite(s): COMM 2250.

COMM 3751 - Narrative Filmmaking

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Maintaining and repairing a/v equipment and computer editing stations

Description: On-location video production and performance. Skills include screenwriting, directing, producing, use of field cameras and post-production.

Pre-requisite(s): COMM 2250 or FILM 2280 and ART 2750.

COMM 3780 - Broadcast News Writing and Production

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Purchasing of required items on a yearly basis necessary to teaching digital media course, maintaining and repairing a/v equipment and computer editing stations

Description: Classroom instruction and practical experience in writing, reporting, performing, producing, and editing for television news. Students will produce newscasts for a local cable channel.

Pre-requisite(s): COMM 1130 and COMM 2250, or permission of instructor.

COMM 3820 - Persuasive Communication

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Study of theories and principles of persuasion from classical to modern times. Examines persuasion as a means of influence in interpersonal communication, public speaking, public relations, advertising, politics, and other contexts.

Pre-requisite(s): COMM 3000 or permission of instructor.

COMM 3840 - Data Visualization and Storytelling

Credits: (3)

Course Fee: \$15.00

Course Fee Purpose: Maintaining computer labs for design course.

Description: Students taking this course will study the fundamentals of compelling data-driven storytelling.

Students will learn how to detect and articulate the stories behind datasets and communicate data findings in visual, oral, and written contexts for various audiences and the public. Students will become familiar with associated tools.

COMM 3850 - Advertising

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A practical and theoretical study of advertising. Course is designed for students planning careers in advertising, as well as for those who are simply lifelong consumers of advertising and want to understand its role in the economic system.

COMM 3880 - Audience Analysis

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course needs to gather social media data to learn best practices.

Description: Students will focus on consumer behavior, data analysis, and media audience research in this course. Students will learn how to identify trends and patterns in media audience and translate data into stories to help companies make better decisions.

COMM 3890 INT - Advanced Cooperative Work Experience with Signpost

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Events with professional journalists and other activities, maintenance and updating of computers in work room.

Description: Open to students who are Signpost editors and managers.

Pre-requisite(s): COMM 1130 or COMM 2890.

May be repeated 15 times for a maximum of 15 credit hours.

Note: (A maximum of 6 credit hours total from COMM 3890, COMM 3891, COMM 3892 and COMM 3893 may be counted for the major, however, 6 additional credit hours may be used as elective credit.)

COMM 3891 INT - Advanced Cooperative Work Experience with KWCR

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Events with radio professionals and other activities, equipment replacement and upgrades

Description: Open to students who are KWCR senior staff.

Pre-requisite(s): COMM 2730 or permission of instructor.

May be repeated 15 times for a maximum of 15 credit hours.

Note: (A maximum of 6 credit hours total from COMM 3890, COMM 3891, COMM 3892 and COMM 3893 may be counted for the major, however, 6 additional credit hours may be used as elective credit.)

COMM 3892 INT - Advanced Cooperative Work Experience with Public Relations

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$55.00

Course Fee Purpose: Events with PR professionals, printed materials and other activities, maintenance and updating of computers in work room, membership in PRSSA

Description: This is a nontraditional, CEL-designated course that functions as Ogden Peak Communications, Weber State's student-run public relations firm. Modeling the leadership and management roles of a real-world firm, students provide public relations services to community and campus partners.

Pre-requisite(s): COMM 3400 and permission of instructor.

May be repeated 15 times for a maximum of 15 credit hours.

Note: (A maximum of 6 credit hours total from COMM 3890, COMM 3891, COMM 3892 and COMM 3893 may be counted for the major, however, 6 additional credit hours may be used as elective credit.)

COMM 3893 INT - Advanced Cooperative Work Experience with Studio 76

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Events with TV and film professionals and other activities, maintenance and updating of camera and editing equipment

Description: This course gives hands-on experience with video production, in the studio and in the field, through writing, editing, videography, producing stories, team-building, organizational management and leadership, and other experiences. Students learn various technical production skills necessary to produce narrative stories for film, television and other media forms, social media, podcasts, live events, broadcasts, web based content production, and many others.

Pre-requisite(s): COMM 2250 or permission of instructor.

May be repeated 15 times for a maximum of 15 credit hours.

Note: (A maximum of 6 credit hours total from COMM 3890, COMM 3891, COMM 3892 and COMM 3893 may be counted for the major, however, 6 additional credit hours may be used as elective credit.)

COMM 3894 - Advanced Cooperative Work Experience with Social Media and Data Analytics Lab

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: COMM 3894 Advanced Cooperative Work Experiences with Social Media and Data Analytics Lab is designed for students who want hands-on practice in social media content creation and strategic planning. Students will model the leadership and management roles of a real-world social media strategy firm and provide social media services to the campus community and campus partners.

Pre-requisite(s): COMM 2400 or COMM 3460 and instructor permission

Suggested Requisite(s): Trying to say a student can have either COMM 2400 or COMM 3460, but instructor permission could be possible if the student does not have either of those two courses.

May be repeated 15 times for a total of 15 credits.

COMM 4130 - In-depth and Investigative Journalism

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Course Fee: \$15.00

Course Fee Purpose: Maintaining and updating of computer labs for writing and research

Description: Emphasizes finding and writing news stories that move from explanations of what happened to how and why something happened. Examines research techniques and discusses ways to use the law to access information.

Pre-requisite(s): COMM 1130 or permission of instructor.

COMM 4150 - Rhetorical Theory and Criticism

Credits: (3)

Description: Studies the origins of rhetorical theory in Greece and Rome in the works of Corax, Isocrates, Plato, Protagoras, Aristotle, Cicero and Quintilian. Tensions between rhetoric and philosophy. Study and application of neo-classical standards of rhetorical criticism.

Pre-requisite(s): COMM 3820.

Note: Check with Department for course availability.

COMM 4160 - Contemporary Rhetorical and Communication Theories

Credits: (3)

Description: Study of contemporary rhetorical and communication theories.

Pre-requisite(s): COMM 3000 and COMM 4150 or permission of instructor.

Note: Check with Department for course availability.

COMM 4210 INT - Intercollegiate Debate

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Preparation and competition on the national debate resolutions and participation in individual events.

Pre-requisite(s): COMM 2270 or permission of instructor.

May be repeated 7 times up to 8 credit hours. However, only 6 credits may be used toward the Communication major.

COMM 4220 INT - Advanced Intercollegiate Speech

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Preparation for and participation in intercollegiate speech competition and community speaking activities. Course teaches students to research, write, and deliver valuable messages and share their experience through reasoned discourse, presentation, and narrative speaking. This is designed as an advanced course for students in their third or fourth years participating in intercollegiate speech.

Up to 10 times for credit.

COMM 4400 INT - Public Relations Media and Campaigns

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Apply communication principles to internal and external publics; research, plan and evaluate social interrelationships; study of the controlled and uncontrolled media and their role in public relations; prepare a major public relations campaign for a selected client.

Pre-requisite(s): COMM 3150 and COMM 3440, or permission of instructor.

COMM 4440 - Developing and Evaluating Health Communication Campaigns

Credits: (3)

Description: This course prepares students to understand the planning, implementation, and refinement of communication campaigns that affect individual and group level behavior changes in relation to health care issues. It will thus address public health problems. Throughout the semester, students study, practice, and apply the various

stages of a health communication campaign based on real world conditions. The course content will draw from health behavior theory; formative (including pretesting), process, impact, and outcome research; and expert opinion.

Pre-requisite(s): COMM 3400 or permission of instructor.

Note: Check with Department for course availability.

COMM 4500 - Topics in Communication

Credits: (3)

Variable Title

Description: The study and application of Communication in contemporary society is dynamic and ever changing. This course will provide students with opportunities to explore specialized topics in contemporary journalism, electronic mediated communication, human communication studies, and public relations in a seminar format.

Pre-requisite(s): COMM 3000 or permission of instructor.

May be taken 2 times up to 6 credit hours with different designations.

Note: Course is offered as needed.

COMM 4740 - Advanced Writing for Screen

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Maintaining computer labs for writing course

Description: This class is a workshop for students who have a screenplay in progress (Act 1 Complete) and ready to workshop pages and complete Act 2 and Act 3 (90 to 110 pages). Students will develop the ability to analyze the various elements of a feature film, including concept, character arc, dialogue, and plot devices such as suspense, surprise, dramatic irony, planting and payoff.

Pre-requisite(s): COMM 3740.

COMM 4751 - Advanced Narrative Filmmaking

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Maintenance and updating of camera and editing equipment

Description: This class is designed to teach advanced concepts, theories and skills in digital narrative film production. Students develop these skills through group production, individual performance, and repetition of production tasks and procedures from pre-production, production, to post-production.

Pre-requisite(s): COMM 3751.

COMM 4760 - Media Management and Distribution

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Analysis of complex systems necessary to manage media companies. Students will develop a website and a distribution plan for a new media company.

COMM 4770 - Digital Documentary Filmmaking

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Maintenance and updating of camera and editing equipment

Description: This course will provide an introduction to the fundamental theory and craft of non-fictional visual

storytelling and familiarize students with concepts such as drama, structure, story development and visual style. Throughout the semester, students will screen and analyze various filmmaking techniques used by documentary filmmakers. Students will develop and create a short documentary from conceptualization through post production.
Pre-requisite(s): COMM 2250.

COMM 4800 - Special Study and Individual Projects

Credits: (1-3)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Work with an assigned faculty member on a project of special interest.

Pre-requisite(s): COMM 3000 and permission of instructor.

May be taken 3 times up to 6 credit hours. A maximum of 3 credit hours may be counted for the major.

COMM 4801 - College of Arts & Humanities Leadership Lecture Series

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: This one-credit elective course will give arts and humanities' majors the opportunity to interact with successful guest lecturers whose undergraduate backgrounds are in the arts and humanities. Lecturers will clarify how the talents and skills associated with their degrees have contributed to their pursuit of successful careers and lives.

COMM 4840 - Teaching Journalism and Advising Student Media in the Secondary School

Credits: (3)

Description: Prepares students to be teachers of journalism and advisors of student media in secondary schools. Designed to confront problems involved in organizing a staff, gathering material and publishing a newspaper, yearbook and literary magazine.

Pre-requisite(s): COMM 3000 or permission of instructor.

Note: This course is offered through Independent Study only.

COMM 4850 INT - Teaching Speech and Directing Speech Activities in the Secondary School

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Methods and techniques for teaching speech communication in secondary schools. Techniques and practices for coaching and supervising high school speech activities such as individual events, legislative forum, and debate.

Pre-requisite(s): COMM 3000 or permission of instructor.

COMM 4860 - Communication Co-curricular Leadership

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to teach leadership and management skills to students who have taken on leadership roles within the Communication Department co-curriculars: WSU Debate, The Signpost, KWCR, Studio 76 and Ogden Peak Communications. With instructor permission, student leaders take this class in lieu of the co-curricular course during the semester of enrollment and are expected to fulfill their co-curricular responsibilities as well as participate in monthly leadership seminars and one-on-one mentoring sessions with their advisers.

Pre-requisite/Co-requisite: COMM 2210 , COMM 2220 , COMM 3890 , COMM 3891 , COMM 3892 ,COMM 3893 , and COMM 3894 .

May be repeated up to 6 credit hours.

COMM 4880 - Social Media Metrics and Measurement

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces social media analytics with the emphasis on metrics and measurement. The course aims to help students understand how to obtain, monitor, and evaluate digital traces on the online social platforms in a systematic way. The knowledge and skills learned in this course will help students use a data-driven approach to resolve future industry problems.

Pre-requisite(s): COMM 2400 and COMM 3150.

COMM 4890 INT - Communication Internship

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An opportunity for students to receive academic credit for faculty approved on-the job learning experiences within certain communication areas of emphasis.

Pre-requisite(s): COMM 1130 or COMM 1140 and COMM 3000.

May be repeated for 5 times up to 6 credit hours. A maximum of 3 credit hours may be counted for the major.

Note: *Credit/No credit only.*

COMM 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Course is offered as needed.

COMM 4990 - Senior Seminar

Credits: (3)

Typically Taught Summer Semester: *1st Blk Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A capstone course that prepares students to do a senior project and a portfolio to be used in job interviews or application to graduate school.

Pre-requisite(s): COMM 3000.

CS 1010 CA - Introduction to Interactive Entertainment

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement

including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course examines and analyzes the history, philosophy, and impact of digital entertainment (video and computer games along with simulations) on an individual and society. Students take a critical look at the artistic, but also the cultural, economic and social aspects of this expressive medium. Students imagine and articulate their own ideas and work through a series of projects helping them understand the creative challenges behind interactive entertainment design. Implications of certain values embedded in games will be discussed. Elements of the ethical code of conduct for a game creator will be formulated. The issue of balancing individual creativity vs. socio-cultural impact will also be discussed. Students will be required to play video games outside of the regularly scheduled class times. A lab fee is required for this class.

CS 1022 - Software Development

Credits: (4)

Description: Application of the most recent implementation of a selected programming language to the solution of technical and scientific problems.

Pre-requisite(s): CS 1030 and basic skills in Algebra.

CS 1023 - Selected Programming Language

Credits: (4)

Description: Introduction and application of the most recent implementation of a selected programming language to the solution of technical and scientific problems. The language for a particular instance of this course will be based upon demand.

Pre-requisite(s): CS 1030 and basic skills in Algebra.

CS 1030 - Foundations of Computing

Credits: (4)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Computers are an essential part of every occupation. Having a basic understanding of computers will help students become more confident users. This course is taught at an introductory level and presents a broad overview of topics in computing such as personal digital security, ethical behaviors in education and business, how computers work and communicate with one another, how data is stored and used in a computer, and how to create a website and write a computer program.

CS 1400 - Programming I

Credits: (4)

Variable Title

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: Most technology, such as airplanes, laptops, smartphones, and appliances, depends on computer programming to function. This course introduces students to computer programming using a modern programming language. Designed for students with little or no programming experience, it covers topics including logical problem solving, basic input/output, conditionals, loops, functions, arrays, classes, utilizing language libraries, development

environments, and program debugging. Students will gain a basic understanding of how to create software for all computing environments.

CS 1410 - Object-Oriented Programming

Credits: (4)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: An introduction to the C++ language. Topics will include data types, control structures, functions, pointers, arrays, I/O streams, classes, objects, encapsulation, overloading, inheritance and use of these concepts in problem solving.

Pre-requisite(s): (CS 1400 or ECE 1400 or CS 2250) and (ENGL 1010 or ENGL 2010).

CS 2130 - Computational Structures

Credits: (4)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: An overview of the fundamentals of algorithmic, discrete mathematics applied to computation using a contemporary programming language. Topics include sets, functions, logic, matrices, relations, graphs, trees, regular expressions, grammars, finite state machines, and data encoding.

Pre-requisite(s): CS 1400 or ECE 1400.

CS 2140 - Computer Systems Administration

Credits: (4)

Description: An introduction to managing computer operating systems. Covers installation of the operating system, network, and application software. The course will cover the UNIX operating system. Topics include working with disk drives, allocation of resources, security, administering user accounts, monitoring system performance, tuning concepts, remote mounting of file systems, and setting up systems on networks.

Pre-requisite(s): CS 1400.

Note: Course not currently being offered.

CS 2250 - Structured Computing in a Selected Language

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: Introduction to structured problem solving using objects, data enumeration and encapsulation in a selected language. The language for a particular instance of this course will be based upon demand.

Pre-requisite(s): Basic skills in fundamental Algebra.

CS 2335 - Introduction to User Experience Design for Web & Mobile

Credits: (3)**Typically Taught Fall Semester:** *Full Sem*

Description: This course is designed to introduce students to the elements of user experience design for the web and mobile. The following topics will be covered: history of user experience, user centric design, agile development, user interface best practices for web and mobile applications, and analytics. Using current technologies and tools, students will create a basic web or mobile application.

CS 2350 - Client Side Web Development**Credits: (4)****Typically Taught Summer Semester:** *Full Sem, Full Sem - Online***Typically Taught Fall Semester:** *Full Sem, Full Sem - Online***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online***Course Fee:** \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course provides an introduction to client-side programming and Web page development. Subjects covered include responsive Web page design and dynamic Web page development. The course will explore various technologies such as HTML5, CSS3, JavaScript client-side programming, and an introduction to a JavaScript framework.

Pre-requisite(s): CS 1030 and CS 1400.

CS 2400 - Project Management**Credits: (3)**

Description: Strategies and techniques for managing a project from inception to completion to meet all schedule, cost, and technical objectives. Knowledge and skills learned in this course prepare students to perform successfully the role of a project manager in any construction, engineering, health, information technology, business, or research and development project, although emphasis will be on project management applied to Software Engineering. Topics include organizational structures, project planning and evaluation, cost estimating, quantitative methods in schedule and cost management, project information systems, communication skills, and conflict resolution.

CS 2420 - Introduction to Data Structures and Algorithms**Credits: (4)****Typically Taught Summer Semester:** *Full Sem, Full Sem - Online***Typically Taught Fall Semester:** *Full Sem, Full Sem - Online***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online***Course Fee:** \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: General principles of common data structures and design of efficient algorithms. Topics include: arrays, linked-lists, stacks, queues, trees, graphs, tables, storage and retrieval structures, searching, sorting, hashing, and algorithmic analysis. Emphasis will be on abstraction, efficiency, re-usable code, and object-oriented implementation.

Pre-requisite(s): CS 1410.

Pre-requisite/Co-requisite: MATH 1050 or MATH 1080 or MATH 1210.

CS 2450 - Software Engineering I

Credits: (4)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: An Object Oriented Analysis and Design course which provides practical guidance on the construction of object-oriented systems. Its specific goals are to provide a sound understanding of the fundamental concepts of the Software Development Life-Cycle, to teach quality design and development style through applications of object-oriented project development within a variety of problem domains, and provide coverage of current Software Engineering models and diagramming techniques.

Pre-requisite(s): CS 1410.

CS 2550 - Introduction to Database Design and SQL

Credits: (4)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course is an introduction to databases, specifically focusing on the relational database model, database design and modeling and the structured query language (SQL). Students will become proficient at formulating data query requests using SQL and will also gain experience in database normalization and entity-relationship modeling.

CS 2705 - Network Fundamentals and Design

Credits: (4)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Provide an understanding of the basic networking terminology. This will cover the theory of networking, types of network protocols, and wide and local area networks. The student should have a good understanding of network terminology at the completion of the course.

Pre-requisite(s): CS 1030 and CS 1400.

CS 2780 - Windows Application Programming

Credits: (4)

Description: This course provides participants with a working knowledge of the Windows Operating System. The students will develop applications to run under Windows, using the C/C++ languages. Concepts of Memory Management, DLLs, Resources, and Child Window development will be emphasized. The course also introduces the student to the use of OLE controls and MFC architecture.

Pre-requisite(s): CS 1410 and basic algebra skills.

Note: Course not currently being offered.

CS 2800 - Individual Projects & Research

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to permit Computer Science majors to develop an individual project, program, system, or research paper, with coordination and approval of a faculty mentor. The final grade and amount of credit awarded will be determined by the department, depending on the complexity of the upper division work performed.

Pre-requisite(s): CS 1410.

May be repeated 3 times up to 6 credits.

Note: Note: Only 4 credit hours of either CS 2800 or CS 2890 can apply to a CS degree as an elective course, and only a maximum of 6 hours of both CS 2800 and CS 2890 may be taken to satisfy missing credits or to achieve full time academic status.

CS 2810 - Computer Architecture/Organization

Credits: (4)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem, Full Sem-Online*

Typically Taught Spring Semester: *Full Sem, Full Sem-Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Computers are essential to modern life, yet most people use them with no understanding of how they accomplish everything they do. This course will explore how computers function from a technical perspective, allowing students to see why they work and are designed the way they are. The course will focus on Von Neumann computers, covering a variety of topics including logic gates, basic digital circuit concepts, number and data representation, the processor implementation, BIOS, buses, interrupts, addressing, memory management, and storage. The practical implementation of this knowledge will be examined by introducing assembly language code.

Pre-requisite(s): CS 1410 or (CS 1400 and (CYBR 2210 or NET 2210 or NET 3200)).

CS 2890 INT - Cooperative Work Experience

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to permit Computer Science majors who are currently working in a computer related job or internship to receive academic credit for their work, with coordination and approval of a faculty mentor and their supervisor. The amount of upper division credit awarded will be determined by the department, depending on the nature and quantity of work performed.

Pre-requisite(s): CS 1410.

May be repeated 3 times up to 6 credits.

Note: Note: Only 4 credit hours of either CS 2800 or CS 2890 can apply to a CS degree as an elective course, and only a maximum of 6 hours of both CS 2800 and CS 2890 may be taken to satisfy missing credits or to achieve full time academic status.

CS 2899 - Associate Degree Assessment

Credits: (0)

Description: This course is to serve as an assessment tool whereby all AAS degree seeking students in the Department of Computer Science demonstrate core knowledge acquired from course studies in the discipline as specified in the AAS degree program.

May be repeated 11 times.

CS 2920 - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Typically Taught Summer Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

CS 3030 - Scripting Languages**Credits: (4)**

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course addresses the design of scripting languages and their applications. Scripting languages can be used to manipulate text and data using subtle and complex coding to automate many tasks. Students will learn to write simple scripts to automate system administration tasks using appropriate languages. This course explores the nature of scripting, the role of scripting languages, introduces some of the popular scripting languages and their applications, and provides skills in scripting language design.

Pre-requisite(s): CS 1400 and (CYBR 2300 or CS 2705).

CS 3040 - Windows/Unix/Linux Infrastructure and Administration**Credits: (4)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Description: This is the second course for understanding Windows operating systems and the first in the Unix/Linux operating system. It includes administration in a client/server directory services environment. Taught in a networking setting, it builds upon complex issues learned in previous courses. Provides the knowledge and skills necessary to install, configure, network and administer both operating systems.

Pre-requisite(s): CYBR 2300 or CS 2705.

CS 3050 - Enterprise Computing**Credits: (4)**

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course provides an integrated view of using enterprise computing systems. An overview on enterprise hardware concepts, enterprise operating systems concepts, and interactive facilities is covered. Batch applications will be developed, edited, compiled, linked, executed and debugged in enterprise operating systems environments. An introduction to emerging technologies in enterprise computing will be presented. Access to the

latest enterprise systems, hands-on exercises, and online support materials are important components of this course.

Pre-requisite(s): CS 2420 and CS 2810.

CS 3100 - Operating Systems

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: An overview of computer operating system from the programmer's point of view. Input-output hardware, interrupt handling, properties of external storage devices, associative memories and virtual address translation techniques, optimizing programs for performance, concurrent programming with threads, and network programming.

Pre-requisite(s): CS 2420 and (CS 2810 or ECE 3620).

CS 3210 - UNIX System Programming and Internals

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course provides hands-on experience with writing programs using UNIX system calls and inter-process Communication mechanisms, from simple file I/O and I/O management subsystems to network client and server programs. The internal design and operation of the UNIX operating systems are studied. A detailed examination of the UNIX SVR4 source code will be included in the course.

Pre-requisite(s): CS 2420.

CS 3230 - Object Oriented User Interface Development with Java

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: An intermediate programming course that covers the "core" features of the Java programming language with the goal of preparing students to focus on specialized uses of Java. Topics include object-oriented programming and polymorphism, graphics, event handling, building graphical user interfaces with Swing, multithreading and synchronization, and error handling.

Pre-requisite(s): CS 2420.

CS 3250 - Advanced Object Oriented Programming

Credits: (4)

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement

including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Develop and expand abilities in solving lengthy, advanced problems, multiple parallel tasks, generic packages, and other object-oriented techniques using selected languages.

Pre-requisite(s): CS 2420.

CS 3260 - Mobile Development for the iPhone

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course addresses the development of applications for mobile iOS devices, specifically the iPhone using Xcode and associated tools. Students will learn the basics of the Swift programming language and use it to create applications for the iPhone family of products.

Pre-requisite(s): CS 1410, CS 2350 and CS 2550.

CS 3270 - Mobile Development for Android

Credits: (4)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Mobile devices have become an essential part of many people's lives. This course will explore the development of applications using the Android SDK and modern Android development tools while applying industry best practices. Students will develop multiple apps from start to finish, and will be prepared to develop applications on their own.

Pre-requisite(s): CS 2350, CS 2550 and CS 3230.

CS 3280 - Object Oriented Windows Application Development

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course is designed to teach students how to write Windows programs in C# using the .NET environment. The student will learn how to develop programs based on Windows Applications and the .NET Framework. They will also be introduced to APIs and MFC/AFX styles of Windows programming and to become familiar with various data sharing methods and .NET services.

Pre-requisite(s): CS 2420.

CS 3540 - Database Administration

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course describes the role of the Database Administrator in managing an organization's most valuable asset - its data. Topics covered include DBMS architecture, database layout, database development, data fragmentation, rollback segments, database tuning, database security, backup and recovery, database networking, and distributed databases. Special emphasis is given to working with current database management systems such as Oracle, SQL Server and DB2.

Pre-requisite(s): CS 2550.

CS 3550 - Advanced Database Programming

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Students will build upon the basic database knowledge and skills gained in the introductory database course. Advanced database knowledge will be gained through the design and implementation of an enterprise-level database. Students will perform database programming techniques such as stored procedures, user-defined functions, cursors, triggers, and distributed queries. Various database paradigms will be used in the course including RDBMS and NoSQL.

Pre-requisite(s): CS 2550 and (CS 1410 or CS 3030 or WEB 3200).

CS 3610 - Introduction to Game Industry

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Description: This course is an introduction to the game industry and the skills and best practices needed in order to become a game developer. The course will evaluate different gaming hardware, genre, skills, tools, and roles.

Students will also understand the elements in creating a game including the game design document, story line, vision, virtual worlds, playfields, and the mathematics and physics that are involved with game development.

Pre-requisite(s): CS 1400.

CS 3620 - Server-Side Web Architecture

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: An introduction to server-side web architectures using current server-side technologies. General web development principles such as usability, reliability, maintainability, security, and scalability will be taught. Students will also learn how to architect and apply server-side technology to create both dynamic websites, and API's at scale using industry best practices.

Pre-requisite(s): CS 2550 and (CS 2350 or WEB 1430).

CS 3630 - Rich Internet Application Development

Credits: (4)

Description: An introduction to developing and deploying rich Internet applications (RIAs) using current technologies. Students will develop engaging websites by incorporating RIAs in the web application development process.

Pre-requisite(s): CS 2350 and CS 2550.

CS 3645 - Advanced User Interface Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Students will learn the elements of user interface design as it applies to front-end web development and software engineering. Students will identify best practices in user interface design. The following topics will be covered: wire-framing, color palettes, typography, information architecture, contrast, uniformity, and responsive design techniques. Using current technologies and tools, students will wireframe, design, and program effective interfaces.

Pre-requisite(s): WEB 2500 or CS 2335, WEB 1400 or CS 1400, or permission of instructor.

CS 3650 - Human-Computer Interaction

Credits: (4)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course introduces the skills and concepts of Human-Computer Interaction (HCI) that enable students to design systems that effectively meet human needs. A concrete illustration of the practice of HCI, this course covers usability, user experience, and modern diverse interfaces. This course includes both theoretical and practical best practices.

Pre-requisite(s): CS 2420, CS 2450 or WEB 3500.

Cross-listed with WEB 3650.

CS 3705 - Protocol Analysis

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course provides an in depth look at the fundamentals of what protocols do and how they work, how addresses and routing are used to move data through the network, and how information is exchanged over the Internet. In depth analysis of network traffic packets will include normal traffic as well as protocol attack patterns. Topics include: DNS, Apache, email, Samba, PPP, DHCP, TCP, IP, and UDP troubleshooting, and security.

Pre-requisite(s): CYBR 2300 or CS 2705 or CYBR 2435.

CS 3720 - Network Architectures and Protocols

Credits: (4)

Description: A practical applications course designed to teach the basic concepts associated with local and wide area networks and protocols. The course will concentrate on the TCP/IP and other protocols in the UNIX and

Windows NT environments. Covers TCP/IP extensively, NFS, Sockets, RPC and TLI interfaces. The course also covers the use of Domain Name Servers, remote system calls, ports, services, configuration, IP addressing, and UNIX and Windows NT monitoring commands.

Pre-requisite(s): CS 3705.

Note: Course not currently being offered.

CS 3730 - Client/Server Network Programming

Credits: (4)

Description: Covers client/server architecture and application development using TCP/IP and other protocols. The course covers client/server operations on a single machine and across an Ethernet network to multiple machines. The course will also cover distributed processing concepts and applications. Applications include the use of STREAMS, Sockets, TLI, network listener facility, drivers, RPC, and ONC. The course will concentrate mainly on UNIX but will cover some concepts and applications using Windows NT.

Pre-requisite(s): CS 2705 and CS 3210.

Note: Course not currently being offered.

CS 3750 CEL - Software Engineering II

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course emphasizes teamwork in small groups on a substantial software engineering project that will be performed for a real customer in the community. It is the intent of the course to provide a capstone experience that integrates the material contained in the CS curriculum through work on a software project that applies this material. Projects are chosen so as to provide an interdisciplinary service learning component with project proposals being solicited from the community at large. Projects that integrate students and faculty from other disciplines are also encouraged. Lectures will be directed towards the software development lifecycle, requirements gathering and design documentation, as well as software project management. Each team member will contribute to all phases of the project as well as the development of a project prototype.

Pre-requisite(s): CS 2899, CS 3550, and (CS 3230 or CS 3280).

CS 3805 - Computer and Network Security

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to provide students with a solid foundation in network security including a treatment of security issues related to computers and computer networking. The primary emphasis is on developing security policies, security auditing, security models and laws related to security.

Pre-requisite(s): CS 2705 and CS 2420.

CS 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and

credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

CS 3830 - Writing Secure Code

Credits: (4)

Description: This course focuses on how to develop software systems that are robust and can withstand repeated attacks from malicious intruders. The course coverage includes the need for secure systems, basic security principles and strategies, designing secure applications, secure coding techniques, dangerous APIs, data input issues, network security problems, testing secure applications, security code reviews, secure software installation, and writing security documentation.

Pre-requisite(s): CS 2420.

CS 3840 - Computer Forensics for Security Assurance

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: This course is a foundational course in file system analysis, digital forensics and computer media analysis. A combination of lectures and labs will give students a strong understanding of low-level file system knowledge to prepare them for involvement in digital forensic analysis, data recovery and other related tasks. Students will examine widely used file systems such as Windows NTFS and FAT32, UFS, EXT2 and UFS2. Students will also become familiar with software tools used in computer forensic work.

Pre-requisite(s): CS 2420.

CS 4110 - Concepts of Formal Languages and Algorithms for Computing

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Concepts of formal language definition, automata theory, Turing theory, and solvability, with an introduction of algorithms and computational methods used in advanced computer science courses.

Pre-requisite(s): CS 2420 and either MATH 1630 or CS 2130.

CS 4230 - Java Application Development

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course is a continuation of CS 3230 and examines the development of Java applications intended for an enterprise environment. The course is programming intensive and concentrates on designing and implementing multi-tier and Web applications based on the Java Enterprise Edition (Java EE) specification. Topics include JavaBeans, Java Database Connectivity, client/server interactions, servlets, session tracking, JavaServer Pages, JavaServer Faces, Struts, the Model-View-Controller approach, remote method invocation, Enterprise JavaBeans, and application servers. Lab exercises will emphasize how Java Enterprise programming supports the

operation of robust, distributed object architectures.

Pre-requisite(s): CS 3230, CS 3750.

CS 4250 - Design Patterns

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Introduction to fundamental principles of software development using design patterns, including structural design patterns, behavioral design patterns, SOLID principles, and agile approach; Understand and program the basic concepts and techniques for building software in an adaptive way, including dependencies and layering, interfaces, unit testing, and refactoring.

Pre-requisite(s): CS 3230 or CS 3280.

CS 4280 - Computer Graphics

Credits: (4)

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course introduces and investigates the mathematical and programming basis for generating pictures and images using a computer. Fields impacted by visual rendering technologies include filmmaking, publishing, banking, engineering, and education. Students are introduced to the theory and practice of computer graphics, with an emphasis on designing and developing working applications using currently available graphics libraries. The course focuses on strategies for rendering geometric data (points, lines, and polygons), and the analysis of the processing stages and components of the graphics pipeline, including transformations, viewing volumes, and projections. Programming and mathematical techniques related to modeling, viewing, coordinate frames, and perspective will be primary topics for discussion and code development. The course covers the key processing steps and structures needed to appropriately map 3D geometric primitives to 2D screen positions while maintaining a realistic look, which involves hidden surface removal, proper lighting, and simulated material properties.

Pre-requisite(s): CS 2420.

CS 4350 - Advanced Internet Programming

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Capstone client/server web programming group project implemented using an advanced web framework (such as PHP (Laravel, Zend, Cake PHP) or Django, or Ruby on Rails). Includes implementation and concepts of an MVC web architecture, Web UI design and creation, data modeling and retrieval, input validation, security, and unit testing.

Pre-requisite(s): WEB 3620 or CS 3620.

CS 4450 - Advanced Software Engineering Methods

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides a capstone project experience for students interested in software engineering. While previous courses in the Computer Science curriculum provide students with the knowledge and skills necessary to begin a career as a software engineer, the end-to-end design and implementation experience offered in this course, done as part of a team, and addressing an open ended problem (as well as an open ended solution), comes much closer to the experience that software engineering professionals encounter in the workplace. The emphasis on documentation and presentation of designs and results is also valuable career preparation, and forces students to take ownership of their designs and systems as they present them to others.

Pre-requisite(s): CS 3750.

CS 4500 - Introduction to Artificial Intelligence

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course covers basic artificial intelligence principles from the perspective of implementing intelligent agents through software. Students will write intelligent software agents to solve a variety of problems from different application domains. Topics include search, search heuristics, adversarial search, constraint satisfaction problems, knowledge and reasoning, planning, and knowledge representation.

Pre-requisite(s): CS 2420 and either MATH 1630 or CS 2130.

CS 4580 - Data Science Algorithms

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course introduces students to the data management, storage and manipulation tools common in data science and has students apply those tools to real scenarios. Topics include, but are not limited to, the following: data reduction, scalable algorithms, modern distributed solutions, data visualization, applied statistical models, prediction algorithms, and forecasting.

Pre-requisite(s): ((CS 1400 and CS 2550) or CS 2420) and (MATH 1040 or MATH 1120 or MATH 3410 or QUAN 2600) and (at least 60 hours of completed credits).

CS 4640 - Foundations of Game Development

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course introduces students to 2D game development using a programming language, scripting, and a gaming engine. The work includes team work project, graphical programming, GUI, and all other aspects of creating a game program associated with a game design document.

Pre-requisite(s): CS 1010 and CS 3280.

CS 4650 - Advanced Game Development

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course is a continuation of CS 4640 and covers intermediate to advanced level 3D game development using a commercial gaming engine authoring tool like Unity or Unreal. Students work in small teams and reference a game design document (which they've previously created themselves or which is selected from previously approved CS 1010 course documents) to program and fully develop a "medium-scoped" 3D video game. The game will be delivered over several iterations throughout the semester, each requiring peer review and play-test feedback. This course emphasizes several aspects of 3D game development, including but not limited to level, character, environment and world construction, scripting, 3D modeling and asset creation, user interface, scene transitions and cinematics, rudimentary AI, physics, graphical post-processing, as well as solid gameplay principles, core mechanics, scalability, and replayability. The course focuses heavily on game development and programming, assuming the game design has been previously scoped out.

Pre-requisite(s): CS 4640 and CS 3750

CS 4730 - Applied Cryptography

Credits: (4)

Description: This course provides an introduction to the principles of number theory and how they are applied to cryptographic algorithms. Different topics that will be examined are: several classic ciphers, modern cryptographic methods, symmetric encryption, public key cryptography, hash functions, key management, digital signatures, certificates, electronic mail security, steganography, and recent developments affecting security and privacy on the Internet. The focus will be on how cryptography and their application can maintain privacy and security in computer networks.

Pre-requisite(s): CS 2420 and either MATH 1630 or CS 2130.

CS 4760 - CS Capstone

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This CS capstone course is designed to provide real-world software engineering project opportunities for students to apply previous knowledge from the Computer Science curriculum. Students will work together as a team, along with their instructor, to solve a problem by developing a small-scale software application. Relevant software engineering skills emphasized in this course include, but are not limited to, Agile software development principles, project management, software design patterns, repository version control, data integration, security, testing, and documentation. Additional emphasis will be placed on the end user experience, as well as validation of functional requirements defined by the client. The capstone prepares students for experiences that software engineering professionals encounter in the workplace.

Pre-requisite(s): CS 3750.

CS 4790 - .NET Web Application Development

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: In this course, students will work together as a team to develop advanced ASP.NET MVC applications using the latest .NET CORE Framework tools and technologies. The focus will be on coding activities that enhance the performance and scalability of a web application in a small to medium-sized development environment. Students will create websites that separate the user interface, data access, and application logic.

Pre-requisite(s): CS 3750.

CS 4800 - Individual Projects and Research

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$7.50

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: The purpose of this course is to permit Computer Science majors to develop an individual project, program, system, or research paper, with coordination and approval of a faculty mentor. The final grade and amount of credit awarded will be determined by the department, depending on the complexity of the upper division work performed.

Pre-requisite(s): CS 2420 and instructor approval.

May be repeated 3 times up to 4 credit hours.

Note: Note: Only 4 credit hours of CS 4800 or CS 4850 or CS 4890 can apply to a CS degree as an elective course, and only a maximum of 6 hours of CS 4800, CS 4850, and CS 4890 may be taken to satisfy missing credits or to achieve full time academic status.

CS 4820 - Compiler Design

Credits: (4)

Description: A study of compilers, grammars, finite-state and push down automata, scanning, parsing, error handling, semantic analysis and code generation.

Pre-requisite(s): CS 2420, CS 4110.

CS 4830 - Advanced Topics in Computer Science

Credits: (1-4)

Variable Title

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$7.50

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Advanced topics which are demanded by industry, are currently popular in this rapidly changing field, or which meet special needs of students in Computer Science will be offered. Individualized material will be taught on a one time basis as needed. Time and credit to be arranged.

Pre-requisite(s): Consent of instructor.

May be repeated 2 times up to 8 credit hours.

CS 4840 - Computer Science Teaching Methods

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is meant to prepare students to become computer science teachers in secondary education, such as high school and middle schools. The course will prepare students with a general understanding and specific methods for teaching computer science. Students will study a variety of programming tools, virtual environments, and other resources to support teaching computer science, as well as effective pedagogical strategies for curriculum design, assessment, and classroom management.

Pre-requisite(s): CS 2420.

CS 4850 - Faculty Directed Research

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$7.50

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: The purpose of this course is to permit Computer Science majors to work closely and consistently with a faculty mentor on specific research related to current, experimental topics in Computer Science. The final grade and amount of credit awarded will be determined by the faculty mentor, depending on the complexity of the advanced, upper division work performed.

Pre-requisite(s): CS 2420.

May be repeated 3 times up to 4 credit hours.

Note: Note: Only 4 credit hours of CS 4800 or CS 4850 or CS 4890 can apply to a CS degree as an elective course, and only a maximum of 6 hours of CS 4800, CS 4850 and CS 4890 may be taken to satisfy missing credits or to achieve full time academic status.

CS 4890 INT - Cooperative Work Experience

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to permit Computer Science majors who are currently working in a computer related job or internship to receive academic credit for their work, with coordination and approval of a faculty mentor and their supervisor. The amount of upper division credit awarded will be determined by the department, depending on the nature and quantity of work performed.

Pre-requisite(s): CS 2420 and instructor approval.

May be repeated 3 times up to 4 credit hours.

Note: Note: Only 4 credit hours of CS 4800 or CS 4850 or CS 4890 can apply to a CS degree as an elective course, and only a maximum of 6 hours of CS 4800, CS 4850, and CS 4890 may be taken to satisfy missing credits or to achieve full time academic status

CS 4899 - Bachelor's Degree Assessment

Credits: (0)

Description: This course is to serve as an assessment tool whereby all BS/BA degree seeking students in the Computer Science Department demonstrate their learned knowledge in at least three areas of computer science. At present, this knowledge will be demonstrated through the use of Chi Tester exams administered through the Campus

Testing Center. The course is taken during the last term prior to receiving the BS/BA degree.

Pre-requisite/Co-requisite: Successful completion of requirements for the Bachelor's Degree.

CS 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

CS 5100 - Distributed Operating Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Distributed systems or distributed computing deals with the issues encountered while running programs across a computer network. This course will cover key topics including: models of distributed systems, timing, synchronization, coordination and agreement, fault tolerance, naming, security, and middleware. Students will learn both the theoretical background of distributed systems as well as work on hands-on projects developing distributed systems applications.

Pre-requisite(s): CS 3100.

CS 5200 - The Internet of Things

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: The growth of the Internet of Things (IoT) is changing the way we interact with the world by saving time and resources and opening new opportunities for growth and innovation. This course explores the fundamentals of the world of IoT, including design considerations and constraints. It provides an overview of the networks and security issues related to IoT devices. Course participants will get hands-on experience using Arduino and/or Raspberry Pi hardware and software platforms, learn different communication protocols, how to harness the data from IoT devices, and review capabilities of cloud-based IoT platforms.

Pre-requisite(s): CS 2810 or ECE 3710.

CS 5300 - Route Planning and Navigation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The course teaches advanced topics of perception, mapping, route planning and navigation concepts. In this course the students will create maps of the operational environment using SLAM. Given the map, the students would drive the vehicle autonomously to a specified destination. Topics that will be covered include camera calibration, advanced computer vision and path planning. The course will conclude with a capstone project with the expectation that the student can program the vehicle to navigate in a dynamic environment, follow road markings,

and reach a specified goal; latitude and longitude.

Suggested Requisite(s): ECE 3730

CS 5420 - Advanced Algorithms

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Introduction to fundamental principles of advanced algorithm design, including asymptotic analysis; divide-and-conquer algorithms and recurrences; greedy algorithms; practical data structures (heaps, hash tables, search trees, graphs); dynamic programming; graph algorithms; and randomized algorithms.

Pre-requisite(s): CS 2420.

CS 5450 - Software Evolution and Maintenance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course aims to improve student awareness of standard software engineering tools and techniques and make them more capable team members/leaders in software development projects. In this course, students build on their software engineering knowledge by evaluating the Software Development Lifecycle (SDLC) of an existing undergraduate capstone project (or and re-engineering it with specific techniques for maintenance, scalability, dependability, reliability, safety, security, and resilience. Topics such as reverse engineering, design recovery, program analysis, program transformation, refactoring, traceability, and program understanding will be investigated. Accompanying lectures aim to provide timely concepts from the software engineering body of knowledge as they relate to the course work. There will also be class discussions and demonstrations around practical aspects of improving software-related skills that draw upon the students' collective experience and upon the research.

Pre-requisite(s): CS 3100.

CS 5500 - Introduction to Artificial Intelligence

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Dive into the world of Artificial Intelligence and explore how intelligent software agents can solve real-world problems across diverse domains. This course introduces modern AI tools, approaches, and algorithms, preparing students to tackle challenges in fields like natural language processing, autonomous systems, and more. Students will engage with key AI concepts such as heuristic search, machine learning, neural networks, reinforcement learning, knowledge representation, planning, and reasoning. Additionally, the course addresses ethical considerations in AI, ensuring students understand the broader impact of their work. Whether you're aiming to innovate or solve complex problems, this course equips you with the skills to harness AI's potential in today's dynamic landscape.

Pre-requisite(s): CS 2420 and either MATH 1630 or CS 2130.

CS 5550 - Advanced Database Management Systems

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The course covers design, management, implementation, and programming of relational database systems in a high-volume data environment. Database design principles like E-R modeling, schema design and refinement, normal forms and constraints are introduced. Data Definition Language queries and Data Manipulation Language queries are covered to implement and query a database. Other SQL implementation topics like stored procedures, functions, triggers, and indexes are covered. Advanced database topics like big data analytics, storage management principles, query processing and optimization, transaction management, concurrency control, parallel and distributed databases are covered. The course also introduces alternatives to relational databases.

Pre-requisite(s): CS 3550.

CS 5580 - Data Science Algorithms

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course offers a comprehensive introduction to algorithms widely used in data science, emphasizing both foundational principles and practical applications. Students will learn to analyze and interpret data through essential topics such as machine learning, data preprocessing, and optimization techniques. The curriculum combines theoretical insights with hands-on experience using real-world datasets, equipping students with the core skills required for entry-level roles in data science, including positions as a data scientist, data engineer, or data analyst.

Pre-requisite(s): CS 4580.

CS 5600 - Machine Learning

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Introduction to fundamental principles and practical techniques of machine learning and its applications, including parametric and non-parametric algorithms, support vector machines, kernels, neural networks, clustering algorithms, dimensionality reduction, recommender systems, and deep learning. This course focuses on understanding and implementing the machine learning algorithms.

Pre-requisite(s): CS 2420.

CS 5610 - Computer Architecture

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Investigation of high-performance computer processing architectures, including concurrent, multicore platforms; memory hierarchy; static and dynamic scheduling; instruction-level parallelism, including branch prediction; graphics processing units; cache performance and analysis.

Pre-requisite(s): CS 2810 or ECE 3710.

CS 5650 - Interaction Design

Credits: (3)**Typically Taught Fall Semester:** *Full Sem, Full Sem - Online***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online***Course Fee:** \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: The most exciting technologies of today are immersive, interactive, solve big problems, and are even entertaining. In this course, we will study how, as software developers, we can understand our users and create innovative designs that best meet their needs and desires. Known tools and techniques from the field of human-computer interaction are reviewed. User center research and evaluation techniques will be presented and students will have the opportunity to undertake a study on user design where they apply these techniques.

Pre-requisite(s): CS 3100.

CS 5700 - Deep Learning Theory**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Course Fee:** \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Deep learning is at the heart of many life-changing applications and areas of interests including language understanding, face recognition, speech synthesis and recognition, object detection, and robotics to name a few. This course introduces the fundamental principles of deep learning and its applications, including multilayer perceptrons, backpropagation, auto-differentiation, optimizers, convolutional networks (CNNs), recurrent networks (RNNs), autoencoders (AEs), and generative adversarial networks (GANs). This course focuses on both understanding deep learning algorithms (their strengths and limitations) and getting acquainted with the current deep learning research landscape.

Pre-requisite(s): CS 5600.

CS 5705 - Applied Cloud Computing**Credits: (3)****Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Current business demands often require an amount of data that cannot reasonably process on a single computer. Even companies that work with reasonably small datasets expect rapid growth, so they prefer to use data processing solutions that scale when needed. In this course, you will gain practical, hands-on experience with modern cloud computing resources through publicly available cloud infrastructures. This course will prepare students with practical, hands-on experience in modern cloud and distributed computing paradigms and tools.

Pre-requisite(s): CS 3100 and CS 4580.

CS 5720 - Program Debugging and Repair**Credits: (3)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Introduction to software testing as a precursor of debugging and repair. Understanding the cognitive process behind debugging and an introduction to scientific debugging. Introduction to automated debugging

techniques like Fault Localization and Delta Debugging. Understanding the intuition behind Automatic Program Repair (APR). Introduction to APR techniques and tools. Introduction to recent advances in program debugging and repair. Understanding challenges and opportunities associated with automated program debugging and repair.
Pre-requisite(s): CS 3280 or CS 3230 or Instructor Approval.

CS 5740 - Computer Systems Security

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Computer Systems Security studies the design and implementation of secure computer systems. Topics include threat models, operating system security, TCP/IP security issues, information flow control, language security, hardware security, security in web applications, and detecting/monitoring unauthorized activity. Assignments include readings from current articles, labs that involve implementing and compromising a secure computer system, and a team final project.

Pre-requisite(s): CS 2420 and CS 3100.

CS 5820 - Compiler Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: A study of compilers, grammars, finite-state and push down automata, scanning, parsing, error handling, semantic analysis and code generation.

Pre-requisite(s): CS 2420 and CS 2130.

CS 5830 - Special Topics in Computer Science

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course explores new or otherwise relevant computer science topics that are not covered in a regularly offered course. Each offering will have a specific title and authorized credit that will appear on the student's transcript. May be repeated for credit under different titles. Lecture or Lecture/Lab combination.

Pre-requisite(s): CS 3100.

CS 5840 - Formal System Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Methods for developing high-quality hardware/software systems that are delivered on time, within budget, and according to requirements. Techniques for specifying programs and reasoning about them, including formal logical proofs, correct code synthesis, model checking, type theory specifications, and properly evaluating concurrent programs.

Pre-requisite(s): CS 2420.

CS 5850 - Parallel Programming and Architecture

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: In parallel programming you will learn how to utilize multiple CPU's/Cores/Nodes in parallel to increase the performance of your applications. Different architectures will be discussed along with the advantages and disadvantages of each. This course will cover key topics parallel programming including: memory models, parallel programming architectures, Flynn's Taxonomy, synchronization, and performance analysis and tuning. In addition to learning the theoretical background of parallel programming, you will work on hands-on projects using multiple parallel programming languages and libraries including (CUDA, openMP, MPI, open CL, and python).

Pre-requisite(s): CS 3100.

CS 6000 - Fundamentals of Graduate Studies

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to introduce students in the graduate programs in the College of Engineering, Applied Science, and Technology to the expectations of graduate study and the scholarly requirement options for their program. Students will learn the difference between a research thesis and a design project as well as how to select, narrow, and refocus a research topic. Students will explore academic electronic databases and Internet search engines, thus developing skills that allow them to critically evaluate published scholarly work. They will also be introduced to research methods and design and will develop skills in organization, effective editing, reviewing, and proofreading. This course should be taken within the first year of study to establish a program of study and support future work on a thesis or project.

CS 6010 - Design Project

Credits: (2-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$7.50

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Students are required to complete a substantial computer science project. Students must demonstrate proficiency in research, design, analysis, project planning, implementation, testing, presentation and documentation. Students receive T (temporary) grades until their final design review, after which these grades are changed retroactively. Students must be enrolled in CS 6010 at the time of their final design review. May be taken up to 10 times for credit.

CS 6011 - Thesis Research

Credits: (2-6)**Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$7.50

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Students are required to complete original computer science research resulting in a thesis. Students must demonstrate proficiency in research, design, analysis, project planning, implementation, testing, presentation and documentation. Students receive T (temporary) grades until their final design review, after which these grades are changed retroactively. Students must be enrolled in CS 6011 at the time of their final thesis defense.

May be taken up to 10 times for credit.

CS 6100 - Distributed Operating Systems**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Course Fee:** \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Distributed systems or distributed computing deals with the issues encountered while running programs across a computer network. This course will cover key topics including: models of distributed systems, timing, synchronization, coordination and agreement, fault tolerance, naming, security, and middleware. Students will learn both the theoretical background of distributed systems as well as work on hands-on projects developing distributed systems applications.

Pre-requisite(s): CS 3100.

CS 6200 - The Internet of Things**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: The growth of the Internet of Things (IoT) is changing the way we interact with the world by saving time and resources and opening new opportunities for growth and innovation. This course explores the fundamentals of the world of IoT, including design considerations and constraints. It provides an overview of the networks and security issues related to IoT devices. Course participants will get hands-on experience using Arduino and/or Raspberry Pi hardware and software platforms, learn different communication protocols, how to harness the data from IoT devices, and review capabilities of cloud-based IoT platforms.

Pre-requisite(s): CS 2810 or ECE 3710.

CS 6300 - Route Planning and Navigation**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Course Fee:** \$25.00

Course Fee Purpose: Course fees for the CS major are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors,

and online instructional resources.

Description: The course teaches advanced topics of perception, mapping, route planning and navigation concepts. In this course the students will create maps of the operational environment using SLAM. Given the map, the students would drive the vehicle autonomously to a specified destination. Topics that will be covered include camera calibration, advanced computer vision and path planning. The course will conclude with a capstone project with the expectation that the student can program the vehicle to navigate in a dynamic environment, follow road markings, and reach a specified goal; latitude and longitude.

Suggested Requisite(s): ECE 3730

CS 6420 - Advanced Algorithms

Credits: (3)

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Introduction to fundamental principles of advanced algorithm design, including asymptotic analysis; divide-and-conquer algorithms and recurrences; greedy algorithms; practical data structures (heaps, hash tables, search trees, graphs); dynamic programming; graph algorithms; and randomized algorithms.

Pre-requisite(s): CS 2420.

CS 6450 - Software Evolution and Maintenance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course aims to improve student awareness of standard software engineering tools and techniques and make them more capable team members/leaders in software development projects. In this course, students build on their software engineering knowledge by evaluating the Software Development Lifecycle (SDLC) of an existing undergraduate capstone project (or and re-engineering it with specific techniques for maintenance, scalability, dependability, reliability, safety, security, and resilience. Topics such as reverse engineering, design recovery, program analysis, program transformation, refactoring, traceability, and program understanding will be investigated. Accompanying lectures aim to provide timely concepts from the software engineering body of knowledge as they relate to the course work. There will also be class discussions and demonstrations around practical aspects of improving software-related skills that draw upon the students' collective experience and upon the research.

Pre-requisite(s): CS 3100.

CS 6500 - Advanced Artificial Intelligence

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Building on the foundational principles introduced in CS 5500, this course delves deeper into advanced AI techniques and applications. Students will explore cutting-edge topics such as advanced machine learning architectures, deep reinforcement learning, generative models, and AI-driven optimization. Emphasis is placed on the integration of theory with practical challenges, enabling students to solve complex problems and innovate across domains like large-scale data systems and real-time decision-making. The course also examines emerging trends and the broader implications of AI in society, ensuring graduates are equipped to lead in this rapidly evolving field.

Pre-requisite(s): CS 5500.

CS 6550 - Advanced Database Management Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: The course covers design, management, implementation, and programming of relational database systems in a high-volume data environment. Database design principles like E-R modeling, schema design and refinement, normal forms, and constraints are introduced. Data Definition Language queries and Data Manipulation Language queries are covered to implement and query a database. Other SQL implementation topics like stored procedures, functions, triggers, and indexes are covered. Advanced database topics like big data analytics, storage management principles, query processing and optimization, transaction management, concurrency control, parallel and distributed databases are covered. The course also introduces alternatives to relational databases.

Pre-requisite(s): CS 2550 or equivalent.

CS 6570 - Data Science Algorithms I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course introduces students to the data management, storage and manipulation tools common in data science and has students apply those tools to real scenarios. Topics include, but are not limited to, the following: data reduction, scalable algorithms, modern distributed solutions, data visualization, applied statistical models, prediction algorithms, and forecasting.

CS 6580 - Data Science Algorithms II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is the second in a two-course sequence that prepares students to apply practical solutions to modern data science problems as a professional data analyst. The intent of this course is to go further in-depth and reinforce the concepts taught in CS 6570. Students will investigate and analyze the topics of CS 6570 using advanced tools and techniques to better prepare them for the challenges associated with the data science discipline. The principles of visualization will also be emphasized as well as exposure to recommendation engines and time series forecasting and analysis.

Pre-requisite(s): CS 6570 or CS 4580.

CS 6600 - Machine Learning

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Introduction to fundamental principles and practical techniques of machine learning and its applications, including parametric and non-parametric algorithms, support vector machines, kernels, neural networks, clustering algorithms, dimensionality reduction, recommender systems, and deep learning. This course

focuses on understanding and implementing the machine learning algorithms.

Pre-requisite(s): CS 3100.

CS 6610 - Computer Architecture

Credits: (3)

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Investigation of high-performance computer processing architectures, including concurrent, multicore platforms; memory hierarchy; static and dynamic scheduling; instruction-level parallelism, including branch prediction; graphics processing units; cache performance and analysis.

Pre-requisite(s): CS 2810 or ECE 3710.

CS 6650 - Interaction Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: The most exciting technologies of today are immersive, interactive, solve big problems, and are even entertaining. In this course, we will study how, as software developers, we can understand our users and create innovative designs that best meet their needs and desires. Known tools and techniques from the field of human-computer interaction are reviewed. User center research and evaluation techniques will be presented and students will have the opportunity to undertake a study on user design where they apply these techniques.

Pre-requisite(s): CS 3100.

CS 6700 - Deep Learning Theory

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Deep learning is at the heart of many life-changing applications and areas of interests including language understanding, face recognition, speech synthesis and recognition, object detection, and robotics to name a few. This course introduces the fundamental principles of deep learning and its applications, including multilayer perceptrons, backpropagation, auto-differentiation, optimizers, convolutional networks (CNNs), recurrent networks (RNNs), autoencoders (AEs), and generative adversarial networks (GANs). This course focuses on both understanding deep learning algorithms (their strengths and limitations) and getting acquainted with the current deep learning research landscape.

Pre-requisite(s): CS 6600.

CS 6705 - Applied Cloud Computing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$300.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement

including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Current business demands often require an amount of data that cannot reasonably process on a single computer. Even companies that work with reasonably small datasets expect rapid growth, so they prefer to use data processing solutions that scale when needed. In this course, you will gain practical, hands-on experience with modern cloud computing resources through publicly available cloud infrastructures. This course will prepare students with practical, hands-on experience in modern cloud and distributed computing paradigms and tools.

Pre-requisite(s): CS 6570 or CS 4580.

CS 6710 - Software Testing

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Introduction to fundamental principles and processes of software testing, including testing throughout the software development lifecycle, static testing, testing techniques and management; develop and apply knowledge and skills in implementing testing techniques in software development projects; including black-box and white-box testing, desktop, web, and mobile testing, testing automation, and test metrics.

CS 6720 - Programming Debugging and Repair

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Introduction to software testing as a precursor of debugging and repair. Understanding the cognitive process behind debugging and an introduction to scientific debugging. Introduction to automated debugging techniques like Fault Localization and Delta Debugging. Understanding the intuition behind Automatic Program Repair (APR). Introduction to APR techniques and tools. Introduction to recent advances in program debugging and repair. Understanding challenges and opportunities associated with automated program debugging and repair.

Pre-requisite(s): Graduate standing in Master of Science in Computer Science (MS).

CS 6740 - Computer Systems Security

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Computer Systems Security studies the design and implementation of secure computer systems. Topics include threat models, operating system security, TCP/IP security issues, information flow control, language security, hardware security, security in web applications, and detecting/monitoring unauthorized activity. Assignments include readings from current articles, labs that involve implementing and compromising a secure computer system, and a team final project.

Pre-requisite(s): CS 2420 and CS 3100.

CS 6820 - Compiler Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: A study of compilers, grammars, finite-state and push down automata, scanning, parsing, error handling, semantic analysis and code generation.

Pre-requisite(s): CS 2420.

Suggested Requisite(s): CS 4110.

CS 6830 - Special Topics in Computer Science

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course explores new or otherwise relevant computer science topics that are not covered in a regularly offered course. Each offering will have a specific title and authorized credit that will appear on the student's transcript. May be repeated for credit under different titles. Lecture or Lecture/Lab combination.

Pre-requisite(s): Instructor permission.

May be taken twice up to 6 credits.

CS 6840 - Formal System Design

Credits: (3)

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Methods for developing high-quality hardware/software systems that are delivered on time, within budget, and according to requirements. Techniques for specifying programs and reasoning about them, including formal logical proofs, correct code synthesis, model checking, type theory specifications, and properly evaluating concurrent programs.

Pre-requisite(s): CS 2420.

CS 6850 - Parallel Programming and Architecture

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: In parallel programming you will learn how to utilize multiple CPU's/Cores/Nodes in parallel to increase the performance of your applications. Different architectures will be discussed along with the advantages and disadvantages of each. This course will cover key topics parallel programming including: memory models,

parallel programming architectures, Flynn's Taxonomy, synchronization, and performance analysis and tuning. In addition to learning the theoretical background of parallel programming, you will work on hands-on projects using multiple parallel programming languages and libraries including (CUDA, openMP, MPI, open CL, and python).

Pre-requisite(s): CS 3100.

CYBR 1030 - Foundations of Computing

Credits: (4)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course follows the core body of knowledge specified by the ACM which provides students with a broad overview of topics they might encounter within the major areas of computing. The course is taught at an introductory level and includes topics such as: history of computers, computer architecture, operating systems, web design and development, programming, database, software engineering, networking, and more. Cross-listed with CS 1030 and WEB 1030.

CYBR 1300 - Networks and Emerging Technologies

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to introduce the fundamentals of voice and data networking technologies. The course includes topics such as history of telecommunications, history of data networking, study of industry, transport media, common networking protocols, and emerging technologies.

CYBR 1400 - Introduction to Cyber Defense and Ethics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course will introduce the terminology, concepts, and defense techniques related to cyber defense. An overview of careers and professional organizations related to cybersecurity is also included. The ethics of working with information and cyber tools will be discussed.

CYBR 2010 - Business English Applications

Credits: (3)

Typically Taught Fall Semester: *Full Sem Online*

Description: Includes Business English essentials: grammar, punctuation, and proofreading. Keyboarding 40 wpm recommended.

Pre-requisite(s): WEB 1700 or WEB 1701/WEB 1501.

CYBR 2200 - Cybersecurity and System Fundamentals

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement

including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Students enrolling in this course will be exposed to current computer hardware and software technologies including computer processors, memory, storage, motherboards, graphical processing units, and other related hardware. Current operating systems will be installed, configured, and optimized following industry best practice. Cybersecurity topics such as password policies, patch management, and system hardening will be emphasized throughout the course.

CYBR 2210 - Linux Systems Administration

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Description: This course gives students a solid foundation in the fundamentals of the Linux operating system. Students gain system-level experience through problem-solving exercises at the command line and in the graphical user interface (GUI). By the end of the course, students will have learned the major, essential, command-line commands necessary to be accomplished users of Linux.

Pre-requisite(s): CYBR 2200.

CYBR 2300 - Introduction to Networking and Cybersecurity

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course provides students with an introduction to the principles of computer networking and cybersecurity. Covered concepts include network topologies and design, network models, networking protocols, cybersecurity concepts, physical media, network addressing, equipment, basic cryptography, LAN management, network operations, troubleshooting, network attacks, and defense strategies.

Pre-requisite(s): CS 1030 or CYBR 2200.

Pre-requisite/Co-requisite: CYBR 2200.

CYBR 2310 - Network Server Administration

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students will learn how to install, configure, manage, and troubleshoot hardware and applications in a Server environment in different cloud ecosystems. With a specific focus on Server fundamentals, this course will teach students how to install servers, configure active directories, create and manage users, install server roles and features, perform diagnostics, and troubleshoot malfunctioning servers.

Pre-requisite(s): CYBR 2300 or CS 2705.

CYBR 2415 - Routing and Switching

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement

including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course is designed to provide a practical understanding of the configuration, securing, and administration of routing and switching devices. Practical labs using Cisco equipment will be used to introduce, reinforce, and evaluate networking and security concepts. A detailed look into IP addressing, networking protocols, and security best practices is included.

Pre-requisite(s): CYBR 2300 or CS 2705.

CYBR 2435 - Cisco Advanced LAN and WAN Switching and Routing Theory and Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course is the second in a two-course series designed to prepare students to pass the examinations for Cisco Certified Network Associate (CCNA). This course covers advanced router configurations, LAN switching theory and VLANs, advanced LAN and LAN switched design, Novell IPX, WAN theory design and technology, PPP, frame relay, ISDN, network troubleshooting, network SCANs skills, and threaded case studies.

Pre-requisite(s): CYBR 2415.

CYBR 2500 - Practical Cybersecurity Infrastructure

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students enrolled in this course will be exposed to hands-on application of concepts and topics in the computer networking and cybersecurity fields. Topics covered in this course include exposure to current physical desktop and server hardware, configuration of networking devices such as switches, routers, access points, firewalls, copper and/or fiber optic cable installation, and applying theory and concepts from prior courses in a hands-on environment.

Pre-requisite(s): CYBR 2210 and CYBR 2310 and CYBR 2415.

CYBR 2510 - Cyberethics

Credits: (1)

Typically Taught Fall Semester: *1st Blk, 1st Blk - Online*

Typically Taught Spring Semester: *1st Blk, 1st Blk - Online*

Description: Explores how the structural, competitive, economic, environmental, and ethical forces affect the continuing transformation of the networking industry both domestically and internationally.

Pre-requisite(s): CS 1030.

CYBR 3210 - Cloud Architecture and Security

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Cover the costs of equipment maintenance and replacement of hardware, academy memberships, software licensing, consumable materials and supplies, and cloud fees.

Description: This course covers designing and securing complex environments in the cloud. A particular focus will be on LAMP stack development and support of business processes. Lab work in cloud environments will be used to

learn and reinforce key concepts.

Pre-requisite(s): CYBR 2210 and CYBR 2310.

CYBR 3300 - Advanced LAN Security Management

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course provides an in-depth look into the field of network security. Specific topics to be examined include networking protocols and threats, authentication models, cryptography, layer 2 security, application security, social engineering, access control lists, firewalls, risk management, and OS hardening.

Pre-requisite(s): CYBR 2300 or CS 2705.

CYBR 3415 - Cisco CCNPB-Advanced Router Configuration

Credits: (3)

Description: Building Scalable Cisco Networks (BSCN). Addresses tasks network managers and administrators need to perform when managing access and controlling overhead traffic in growing routed networks once basic connectivity has been established. Discusses router capabilities used to control traffic over LANs and WANs, as well as connecting corporate networks to an Internet Service Provider (ISP).

Pre-requisite(s): CYBR 2435 or CCNA Certification or CS 3705.

Note: This course is not currently offered.

CYBR 3425 - Cisco CCNP-Building Cisco Switched Networks

Credits: (3)

Description: Building Cisco Multilayer Switched Networks (BCMSN). Teaches network administrators how to build campus networks using multilayer switching technologies over high speed Ethernet. Teaches how routing and switching concepts and implementations technologies work together.

Pre-requisite(s): CYBR 2435 or CCNA Certification.

Note: This course is not currently offered.

CYBR 3435 - Cisco CCNP--Remote Access Networks

Credits: (3)

Description: Teaches how to build a remote access network to interconnect central sites to branch offices and home office/telecommuters. Further teaches students how to control access to the central site as well as maximizes bandwidth utilization over remote links.

Pre-requisite(s): CYBR 2435 or CCNA Certification.

Note: This course is not currently offered.

CYBR 3445 - Cisco CCNP--Internetwork Troubleshooting

Credits: (3)

Description: Hands-on lab exercises. Covers developments in Cisco IOS and Catalyst software. Teaches how to baseline and troubleshoot an environment using Cisco routers and switches for multiprotocol client hosts and servers connected with: Ethernet, Fast Ethernet, and Token Ring LANS; and Serial, Frame Relay and ISDN BRI WANs.

Pre-requisite(s): CYBR 2435 or CCNA Certification.

Note: This course is not currently offered.

CYBR 3550 - Supervising Information Technology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Application of supervisory functions in network management and multimedia settings including planning, structure, design, implementation, evaluation, problem-solving, and human resources.

Pre-requisite(s): CYBR 2300 or WEB 2300 or CS 2705.

CYBR 3600 - Principles of Business/Marketing Education

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course includes professionalism, curriculum, standards, counseling, tech prep, competency-based testing, research, and current issues and trends in Business/Marketing Education. Along with advanced electronic presentations, this course will include a review of other technologies used in teaching.

Pre-requisite(s): WEB 1700; or WEB 1701/WEB 1501 and WEB 1702/WEB 1502 and WEB 1703/WEB 1503.

CYBR 3610 - Methods of Teaching Marketing Education Subjects

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Analysis and research into methods of teaching business and marketing subjects with emphasis on teaching demonstrations and practices, objectives, outcome measurements, testing, and grading.

Pre-requisite(s): WEB 1700 or WEB 1701/WEB 1501 and WEB 1702/WEB 1502 and WEB 1703/WEB 1503.

CYBR 3710 - Switching and Transmission Network Systems Management

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course covers management of switching and transport systems and their technologies from industry carrier systems to private business networks. Hands-on labs working with TDM lines and trunks, transport, IP routing, and SIP. Applications will be run on live LAN/WAN networks. Also, the course includes discussion of new technologies.

Pre-requisite(s): CYBR 2300 or CS 2705.

CYBR 3715 - Transmission Network Applications

Credits: (2)

Typically Taught Fall Semester: *Fall [Full Sem]*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Hands-on labs working with TDM lines and trunks, transport, IP routing, and SIP. Applications will

be run on live LAN/WAN networks. Also, the course includes discussion of new technologies.

Pre-requisite(s): CYBR 2300.

Co-Requisite(s): CYBR 3710.

CYBR 3720 - Wireless Networking and Security

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: A study of wireless networks and wireless security. Topics include: WLAN standards, RF technologies, WLAN network security, WLAN troubleshooting, wireless administration, and wireless equipment configuration.

Pre-requisite(s): CYBR 2415.

CYBR 3730 - Survey of Information Security Policies

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Explores how the structural, competitive, economic, environmental, and ethical forces affect the continuing transformation of the networking industry both domestically and internationally. Discussion of the impact of contemporary issues on the provider and the consumer of telecommunication services including the legal and ethical requirements and ramifications of electronic privacy are included.

Pre-requisite(s): CYBR 3300.

CYBR 4700 - Data and Voice Network Design

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: As a capstone course, students will design data and voice networks using industry metrics and rationale. Architecture, technologies, and standards associated with the design and management of modern data and voice networks will be covered.

Pre-requisite(s): CYBR 3710 and CYBR 3720.

CYBR 4740 - Security Vulnerabilities and Intrusion Mitigation

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: A treatment of security issues related to computers and computer networking. This course is designed for advanced users, system administrators and network administrators. The course covers TCP/IP security issues,

security policies, packet filtering, Internet firewall architecture and theory, detecting and monitoring unauthorized activity, password authentication, intrusion detection and prevention and other security issues involving Linux, UNIX and Microsoft Windows operating systems. A team project is included.

Pre-requisite(s): CYBR 3300, PS 3250, and CS 3705.

CYBR 4760 INT - Cybersecurity and Network Management Internship

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Must be completed senior year in an information technology environment with company placement and outcomes approved by the department.

Pre-requisite/Co-requisite: CYBR 4700.

CYBR 4790 INT - Cybersecurity and Network Management Senior Project

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Capstone course applying the principles learned in the Cybersecurity and Network Management program to complete a student-designed project.

Pre-requisite/Co-requisite: CYBR 4700.

CYBR 4850 - Faculty Directed Research

Credits: (1-4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to permit Network Management Technology majors to work closely and consistently with a faculty mentor on specific research related to current, experimental topics in Network Management Technology. The final grade and amount of credit awarded will be determined by the faculty mentor, depending on the complexity of the advanced, upper division work performed. May be repeated 3 times up to 4 credit hours. Note: Only a maximum of 6 hours of NET 4800, NET 4850 and CYBR 4890 may be taken to satisfy missing credits or to achieve full time academic status.

Pre-requisite(s): CYBR 2300.

CYBR 4890 - Cooperative Work Experience

Credits: (1-4)

Description:

The purpose of this course is to permit Network Management Technology majors who are currently working in a computer related job or internship to receive academic credit for their work, with coordination and approval of a

faculty mentor and their supervisor. The amount of upper division credit awarded will be determined by the department, depending on the nature and quantity of work performed. May be repeated 3 times up to 4 credit hours. Note: Only a maximum of 6 hours of NET 4800, CYBR 4850, and NET 4890 may be taken to satisfy missing credits or to achieve full time academic status

Pre-requisite(s): CYBR 2300.

CYBR 4990 - Senior Project

Credits: (3)

Course Fee: \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Research, analysis, presentation, and discussion of topics relative to graduating majors and minors.

Pre-requisite(s): WEB 2860 or equivalent.

Note: This course is offered as needed.

CYBR 6600 - Principles of Business/Marketing Education

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This graduate-level course includes professionalism, curriculum, standards, counseling, tech prep, competency-based testing, research, and current issues and trends in Business/Marketing Education. Along with advanced electronic presentations, this course will include a review of other technologies used in teaching. NET 6600 may be substituted for CYBR 3600 in the undergraduate Business Education Composite Teaching major, Business Education Teaching minor, or Business/Marketing Teaching minor for those working on a second bachelor's degree.

Pre-requisite(s): WEB 1700; or WEB 1701/WEB 1501, WEB 1702/WEB 1502, and WEB 1703/WEB 1503 and a bachelor's degree.

CYBR 6610 - Methods of Teaching Business Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This graduate-level course includes an evaluation and application of the methods of teaching business and marketing subjects with emphasis on teaching demonstrations and practices, objectives, outcome measurements, testing, and grading. The students will write a unit-long Learning Activity Package (LAP) and will demonstrate teaching in a business/marketing course. NET 6610 may be substituted for CYBR 3610 in the undergraduate Business Education Composite Teaching major, Business Education Teaching minor, or Business/Marketing Teaching minor for those working on a second bachelor's degree.

Pre-requisite(s): WEB 1700; or WEB 1701/WEB 1501, WEB 1702/WEB 1502, and WEB 1703/WEB 1503; and a bachelor's degree.

DANC 1010 CA/CC - Introduction to Dance

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$11.00

Course Fee Purpose: Fee supports world dance forms master classes and/or dance concert tickets.

Description: An introduction to dance providing a knowledge base from which to experience dance from a variety of viewpoints: historically, culturally, aesthetically, critically, and creatively. This course takes a close-up look at the rules, messages, and meanings embodied in dance around the world. This is a writing intensive course. Students are expected to attend dance concerts and cultural dance experiences outside regularly scheduled class time. Open to all students.

DANC 1100 - Ballet I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Fees support dance technology and live accompaniment: Live musicians, instruments, stereo components, video projection, Zoom monitor, and dance studio computers.

Description: Introduction to the techniques of the classical ballet including alignment, positions, port de bras, and allegro combinations. Open to all students.

May be repeated for credit, but use toward Major/Minor must be approved by program advisor. May be repeated for a maximum of 4 credit hours.

DANC 1200 - Contemporary/Modern I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Fees support dance technology and live accompaniment: Live musicians, instruments, stereo components, video projection, Zoom monitor, and dance studio computers.

Description: Introduction to the movement techniques of modern dance. Open to all students.

May be repeated for credit, but use toward Major/Minor must be approved by program advisor. May be repeated for a maximum of 4 credit hours.

DANC 1310 - Music for Dance

Credits: (2)

Typically Taught Spring Semester: *Full Sem odd years*

Course Fee: \$4.00

Course Fee Purpose: Fees support dance technology: stereo, projection, Zoom monitor and computers.

Description: Study of the relationship between sound and movement, accompaniment and dance. Focus extends to creative and working relationship(s) between accompaniment/composer and teacher/choreographer with emphasis on practical applications of methods and understandings.

DANC 1450 - Special Topic: World Dance Experiences I

Credits: (2)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: Fees support dance technology: stereo, projection, Zoom monitor and computers.

Description: This course is designed to provide enrichment opportunities for those who undertake dance as a field of study or as a recreational activity. It allows for the study of changing series of dance forms, including, but not

limited to, African, Flamenco, Middle Eastern, Clogging, Ballroom, Hip Hop, Mexican Folklorico, and Aerial Dance. May be repeated for 2 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 1500 - Jazz I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: Fees support dance technology: stereo, projection, Zoom monitor and computers.

Description: Introduction to the style, technique, and rhythmic structures of jazz dance with emphasis on increasing movement capabilities and personal expression. Open to all students.

May be repeated for credit, but use toward Major/Minor must be approved by program advisor. May be repeated for a maximum of 4 credit hours.

DANC 1520 - Dance in World Cultures

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: Fees support dance technology: stereo, projection, Zoom monitor and computers.

Description: Dance in World Cultures explores various dance forms practiced around the world. Open to all students.

May be repeated for up to 4 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 1560 - African Dance and Culture I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Dance and cultural studies of West and Central Africa with a focus on technique, style, and rhythmic acuity. The course will explore the cultural and historical significance of the various dances and rhythms.

DANC 1580 - Rhythm Tap I

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: Fees support dance technology: stereo, projection, Zoom monitor and computers.

Description: Special training in tap dance skills and techniques.

May be repeated 2 times up to 3 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 2250 - Alignment and Conditioning for Dance/Pilates

Credits: (1)

Typically Taught Spring Semester: *Full Sem even years*

Course Fee: \$2.00

Course Fee Purpose: Fees support dance technology: stereo, projection, Zoom monitor and computers.

Description: Strength and alignment for dancers, using Pilates mat exercises. The class addresses areas of strength essential for dancers, focuses on breathing techniques integral to the exercises, and uses the exercises as a means to better understand and improve alignment. The course also addresses how strength and alignment facilitates more ease and efficiency in movement. To repeat the class a student must have the permission of the instructor.

May be repeated twice for up to 3 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 2300 - Dance Kinesiology

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Course Fee: \$4.00

Course Fee Purpose: Fees support dance technology: stereo, projection, Zoom monitor and computers.

Description: This course provides a study of anatomy and dance kinesiology with a specific focus on anatomical analysis, conditioning principles and injury prevention, with special attention given to application of information to technique class, rehearsal, choreography and individual anomalies. The course prepares the student to understand basic kinesiological analysis and fundamental concepts of somatic inquiry.

Pre-requisite/Co-requisite: NUTR 1020.

DANC 2350 - Dance for Aging Populations

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: This course explores the latest applications of movement, dance, and creativity as a healing and somatic form of therapy. It includes lecture/discussion, student workshops in dance, laboratory experiences, and community-engaged service learning. Furthermore, it provides basic to intermediate-level mentored practices in senior centers, assisted living, and memory care communities. This course is appropriate for students of the arts and/or of health-related fields who are willing to access their creative potential and service to the community.

DANC 2410 - Improvisation

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: Fee supports world dance forms master classes and/or dance concert tickets.

Description: Guided exploration in the elements of dance for the creative development of personal movement repertoire, spontaneous group interaction, and choreographic skills.

May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 2470 - Ballet II

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$37.00

Course Fee Purpose: The fee supports dance forms master classes and/or dance concert tickets, screening of dancers for injury prevention, dance technology, and live accompaniment; live musicians, instruments, stereo components, video projection, Zoom monitor, and dance studio computers.

Description: Technique course designed to increase skill in classical ballet.

Pre-requisite(s): DANC 1100 (2 credit hours minimum), or by audition.

May be repeated for credit, but use toward Major/Minor must be approved by program advisor. May be repeated 4 times for a maximum of 6 credit hours.

DANC 2490 - Contemporary/Modern II

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$37.00

Course Fee Purpose: The fee supports dance forms master classes and/or dance concert tickets, screening of

dancers for injury prevention, dance technology, and live accompaniment; live musicians, instruments, stereo components, video projection, Zoom monitor, and dance studio computers.

Description: Refinement of beginning skills, emphasis on development of technical abilities and performance qualities.

Pre-requisite(s): DANC 1200 (4 credit hours minimum), or by audition.

May be repeated for a maximum of 6 credit hours.

DANC 2500 - Jazz II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Refinement of beginning skills, emphasis on development of technical abilities and performance qualities.

Pre-requisite(s): DANC 1500, or by audition.

Pre-requisite/Co-requisite: DANC 1500

May be repeated for credit, but use toward Major/Minor must be approved by program advisor. May be repeated for a maximum of 4 credit hours.

DANC 2610 - Dance and Digital Technology

Credits: (2)

Typically Taught Spring Semester: *Full Sem even years*

Course Fee: \$10.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as used in class for hands-on activities and lab / studio space maintenance.

Description: This course will provide students with an opportunity to explore the integration of dance and technology, specifically the use of the digital video medium and the use of the internet for creative and professional distribution. DANC 2610 will introduce students to dance-videography, video editing, dissemination of work through media such as the DVD format, YouTube, Vimeo and the creation/maintenance of on-line portfolios.

May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

DANC 2920 INT - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: Fee supports world dance forms master classes and/or dance concert tickets.

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: In individual cases, this course might be considered as an elective in the Dance Major.

DANC 2950 INT - Dance Festival Participation

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Students attend the American College Dance Festival Association's regional gathering to study a variety of dance forms with professionals from across the country. Students see the choreographies of peers and professionals. Students may be responsible for their own registration fees and transportation, lodging and meal costs.

Pre-requisite(s): Audition and permission.

May be repeated for up to 4 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 3015 - Dance History

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Study of the history and philosophy of dance from lineage-based societies through the early decades of modern dance, ballet, vernacular forms and dance as public art. Areas covered will include pre-Christian civilizations, the Middle Ages, the Renaissance and the Golden Age of Ballet, the Age of Innovation in Ballet through the Contemporary Period of history.

Pre-requisite(s): DANC 1010.

DANC 3320 INT - Secondary Dance Pedagogy

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: Fee supports world dance forms master classes and/or dance concert tickets.

Description: Methods, teaching techniques, accompaniment, and practical experience in teaching modern dance. This is the secondary teaching methods class.

Pre-requisite(s): DANC 2490

DANC 3450 - Special Topic: World Dance Experiences II

Credits: (2)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: Fees support dance technology: stereo, projection, Zoom monitor and computers.

Description: This course is designed to provide enrichment opportunities for those who undertake dance as a field of study or as a recreational activity. It allows for the study of changing series of dance forms, including, but not limited to, African, Flamenco, Middle Eastern, Clogging, Ballroom, Hip Hop, Folklórico, and Aerial Dance.

May be repeated up to 2 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 3470 - Ballet III

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$36.00

Course Fee Purpose: The fee supports dance forms master classes and/or dance concert tickets, screening of dancers for injury prevention, dance technology, and live accompaniment; live musicians, instruments, stereo components, video projection, Zoom monitor, and dance studio computers.

Description: Coordinating course designed to increase skill in classical ballet technique.

Pre-requisite(s): DANC 2470 (4 credit hours minimum) or by audition.

May be repeated for a maximum of 6 credit hours.

DANC 3490 - Contemporary/Modern III

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$36.00

Course Fee Purpose: The fee supports dance forms master classes and/or dance concert tickets, screening of dancers for injury prevention, dance technology, and live accompaniment; live musicians, instruments, stereo components, video projection, Zoom monitor, and dance studio computers.

Description: Exercises and activities to develop strength, flexibility, endurance, and technical dance skill.

Pre-requisite(s): DANC 2490 (4 credit hours minimum), or by audition.

May be repeated for a maximum of 6 credit hours.

DANC 3500 - Choreographic Process

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: Fees support dance technology: stereo, projection, Zoom monitor and computers.

Description: Studies in the elements of time, space, and energy as they are artistically significant in the meaning of dance. Exploration of the time, space, and energetic design in related fields of music and art included as relevant to choreographic design and communication in dance.

Pre-requisite(s): DANC 2410.

May be repeated twice for up to six credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 3520 INT - Choreography Practicum

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Supervised experience choreographing a dance for public performance. Arranged through cooperative effort of student and supervisor.

Pre-requisite(s): DANC 3500.

May be repeated three times for a maximum of six credit hours.

DANC 3525 - ArtsBridge

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: ArtsBridge is a course that provides undergraduate students with an internship and academic credit for designing and implementing a comprehensive, needs-based, integrated arts project with community organizations or area schools. The course will offer students a clear structure and process for navigating the complexities of community engagement. ArtsBridge students will work closely with a WSU faculty mentor, community/school stakeholder, peers, and the ArtsBridge program coordinator throughout the process culminating in the development of an arts integrated project.

Pre-requisite(s): Recommendation by education supervisor in fine arts content area faculty mentor. Content methodology course(s) completed or in progress.

Note: Following faculty recommendation, please contact the ArtsBridge coordinator for an interview.

DANC 3560 - African Dance and Culture II

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Dance and cultural studies of West and Central Africa with a focus on technique, style, and rhythmic acuity. The course will provide an in-depth exploration of the cultural and historical significance of the various dances and rhythms.

Pre-requisite(s): DANC 1560 African Dance and Culture (lower division)

DANC 3580 - Rhythm Tap II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: Fees support dance technology: stereo, projection, Zoom monitor and computers.

Description: Intermediate/Advanced training in tap dance skills and techniques.

Pre-requisite(s): Lower Division Tap Dance (DANC 1580) and/or instructor approval.

May be repeated 2 times up to 3 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 3640 INT - Elementary Dance Pedagogy

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: Fee supports world dance forms master classes and/or dance concert tickets.

Description: Techniques for teaching creative dance and basic dance forms. Suggested for Elementary Education majors.

DANC 3860 INT - Field Experience

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A course designed to provide opportunities for students to gain practical experience in the field by assisting in the activities of community agencies, schools, and Weber State.

Pre-requisite(s): DANC 3320 for those who plan to teach in a middle or secondary school or DANC 3640 for those who plan to teach in an elementary school.

May be repeated twice, up to 3 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 3910 INT/CEL - Moving Company: Rehearsal & Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The Moving Company is designed to give students the opportunity to learn about the various aspects of creating, rehearsing, and implementing performances off-campus and to reach the community with our dance program. The commitment is for both fall (rehearsal - 3910) and spring (performance - DANC 3911) semesters. This segment deals with preparation and rehearsal.

May be repeated 3 times up to 8 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 3911 INT/CEL - Moving Company: Performance

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The Moving Company is designed to give students the opportunity to learn about the various aspects

of creating, rehearsing, and implementing performances off-campus and to reach the community with our dance program. The commitment is for both fall (rehearsal - DANC 3910) and spring (performance - 3911) semesters. This segment deals with implementation and performance.

Pre-requisite(s): DANC 3910.

May be repeated 3 times up to 8 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 4250 - Alignment and Conditioning for Dance/Pilates

Credits: (2)

Typically Taught Spring Semester: *Full Sem even years*

Course Fee: \$4.00

Course Fee Purpose: Fee supports world dance forms master classes and/or dance concert tickets.

Description: Strength and alignment for dancers, using Pilates mat exercises and Reformer. The class addresses areas of strength essential for dancers, focuses on breathing techniques integral to the exercises, and uses the exercises as a means to better understand and improve alignment. The course also addresses how strength and alignment facilitate ease and efficiency of movement.

Co-Requisite(s): DANC 2250.

May be repeated once up to 4 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 4610 - Dance and Digital Technology

Credits: (2)

Typically Taught Spring Semester: *Full Sem even years*

Description: This course will provide students with an opportunity to explore the integration of dance and technology, specifically the use of the digital video medium and the use of the internet for creative and professional distribution. DANC 4610 will introduce students to dance-videography, video editing, and dissemination of work through media such as the DVD format, You Tube, Vimeo and the creation/maintenance of on-line portfolios. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 4620 - Dance and Digital Technology Seminar

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: This seminar will provide students with individual and collaborative study and research in the field of dance and the digital video medium. The course will cover artistic and technical forms, including, but not limited to capturing dance on the digital/video medium, choreographic processes through non-linear digital editing, audio/visual editing for dance, lighting, dance theory and criticism in the context of dance in the digital age.

Pre-requisite(s): DANC 2610.

May be repeated once up to 2 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 4700 INT - Creative Synthesis in Dance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: Fee supports world dance forms master classes and/or dance concert tickets.

Description: Project oriented experience intended to coordinate student work. It will serve as guide in the synthesis of philosophy, experience, and understanding of dance as an art form and/or dance as education. This capstone course will include a portfolio and have an artistic or scholarly outcome.

Pre-requisite(s): Students Pursuing BA in Dance: DANC 2610, DANC 3520 and senior dance major standing.

DANC 4800 - Individual Study

Credits: (1-4)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** Individual work or work in small groups by arrangements in special topics not included in the announced course offerings.**Pre-requisite(s):** Approval of instructor. In individual cases, this course might be considered as an elective in the Dance Major.

May be repeated 3 times up to 8 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 4801 - A&H Leadership Lecture Series**Credits: (1)****Typically Taught Spring Semester:** *Full Sem***Description:** This one-credit elective course will give arts and humanities' majors the opportunity to interact with successful guest lecturers whose undergraduate backgrounds are in the arts and humanities. Lecturers will clarify how the talents and skills associated with their degrees have contributed to their pursuit of successful careers and lives.**DANC 4890 INT - Cooperative Work Experience****Credits: (1-6)****Description:** Individual work or work in small groups by arrangement; in special topics not included in the announced course offerings.**Pre-requisite(s):** Approval of instructor. In individual cases, this course might be considered as an elective in the Dance Major.

May be repeated 3 times up to 18 credit hours, but use toward Major/Minor must be approved by program advisor.

DANC 4910 INT - Rehearsal and Performance**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$2.00**Course Fee Purpose:** Fee supports world dance forms master classes and/or dance concert tickets.**Description:** Preparation and rehearsal of dance composition to be presented in concert.**Pre-requisite(s):** consent of instructor. May be repeated for an unlimited number of credit hours.

May be repeated 11 times for credit, but use toward Major/Minor must be approved by program advisor.

DANC 4920 INT - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop****Description:** Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed. This course might be considered as an elective in the Dance Major. Use toward Major/Minor must be approved by program advisor.

DANC 4950 INT - Dance Festival Participation**Credits: (1)****Typically Taught Spring Semester:** *Full Sem***Description:** Students attend the American College Dance Festival Association's regional gathering to study a

variety of dance forms with professionals from across the country. Students see the choreographies of peers and professionals. Students may be responsible for their own registration fees and transportation, lodging and meal costs.

Pre-requisite(s): Audition and permission.

May be repeated 3 times up to 4 credit hours, but use toward Major/Minor must be approved by program advisor.

DENT 2201 - Concepts of Community Dental Health

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: This course will present the basic concepts of planning and implementing community dental health programs. These principles include epidemiology, sociological concepts of health and illness, health behavior, public attitudes and principles of dental health education.

DENT 2205 - Head/Neck and Dental Anatomy

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Course fee is used for supplies for dental anatomy and/or non-inventoried instructional materials.

Description: Identification of major anatomical landmarks of the head and neck, their innervation, blood supply and function. Also includes instruction in the histology and embryology of head and neck development and tooth morphology.

DENT 2206 - Clinical Dental Hygiene/Radiology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$630.00

Course Fee Purpose: Course fees are used to purchase patient treatment items, such as infection control barriers, gloves, masks, etc., for equipment maintenance and replacement, and instructional software, such as a radiology simulation program.

Description: Clinical application of principles of DENT 2207 and DENT 2208. Must accompany DENT 2207 and DENT 2208.

Students participate in three four-hour labs each week.

DENT 2207 - Dental Hygiene I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Theory essential to performing clinical treatment, including, but not limited to armamentarium, client-operator positioning, aseptic technique, soft tissue exam, health history, principles of instrumentation and disease control therapies. Must accompany DENT 2206.

DENT 2208 - Radiology

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Preparatory skills for clinical dental radiology, including information on radiation safety and exposure techniques. Must accompany DENT 2206.

DENT 2211 - Oral Pathology

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The study of manifestations and identification of disease processes in the oral cavity.

DENT 2215 - Periodontology

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$7.00

Course Fee Purpose: Course fee is used for supplies/services for periodontology and/or non-inventoried instructional materials.

Description: The study of basic periodontal structures and disease processes.

DENT 2216 INT - Clinical Dental Hygiene II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$228.00

Course Fee Purpose: Course fee is used for supplies/services for clinical lab and/or non-inventoried instructional materials.

Description: Clinical application of DENT 2217. Must accompany DENT 2217.

Two four-hour clinic lab sessions each week.

Pre-requisite(s): DENT 2206 and DENT 2207.

DENT 2217 - Dental Hygiene II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Continuation of DENT 2206. Didactic instruction for intermediate skills in dental hygiene treatment. Must accompany DENT 2216.

Pre-requisite(s): DENT 2207.

DENT 2219 - Dental Materials

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$85.00

Course Fee Purpose: Course fee is used for supplies/services for dental materials and/or non-inventoried instructional materials.

Description: Identification of and laboratory experiences with materials used in dentistry and dental hygiene.

DENT 2230 - Oral Health Research & Statistics

Credits: (2)

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: This course is designed to provide the student with research design and statistics principles as they apply to oral health settings and issues.

Pre-requisite(s): WSU Quantitative Literacy requirement.

DENT 2235 - Dental Medicine I

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: The study of common medical conditions and their treatment. Emphasis is placed on oral manifestations of systemic disease and related pharmacology.

DENT 2250 - Professional Ethics

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Professional Ethics is designed to provide dental hygiene students with a foundation in the professional standards governing the dental hygiene profession and the development of ethical decision-making skills, in the context of diversity and respect for others. Throughout the course the student will be guided to explore issues of diversity, prejudices, and their responsibility to provide culturally sensitive care.

DENT 2800 - Individual Research

Credits: (1-3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Special project in a student's area of interest.

May be repeated twice for a maximum of 4 credit hours.

DENT 2830 - Directed Readings, Projects and Research

Credits: (1-3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Limited to dental hygiene majors.

A maximum of nine hours may be accumulated with this course.

DENT 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

DENT 3130 - Independent Study

Credits: (1-3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Independent project in an area of interest; second year dental hygiene students only. Project approval by dental hygiene faculty.

A maximum of nine hours may be accumulated with this course.

DENT 3301 INT - Community Dental Health Service Learning Lab

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$34.00

Course Fee Purpose: Course fee is used for supplies/services for community lab and/or non-inventoried instructional materials.

Description: This course leads the student through on-campus and off-campus field projects with selected community agencies.

DENT 3305 - Pain Control

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: Course fee is used for clinical supplies/services for pain control, including labs and/or non-inventoried instructional materials.

Description: The study of local anesthesia with regard to pharmacology, administration techniques, methods of pain and apprehension control and nitrous oxide sedation. Includes laboratory experiences in the administration of local anesthesia and nitrous oxide sedation.

Pre-requisite(s): DENT 2235.

DENT 3336 INT - Clinical Dental Hygiene III

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$210.00

Course Fee Purpose: Course fee is used for clinical supplies/services for clinical lab and/or non-inventoried instructional materials.

Description: Clinical application of DENT 3337. Dental Hygiene clinical practices including: direct patient care, rotations, and labs.

Three four hour clinics each week.

Pre-requisite(s): DENT 2206 and DENT 2216.

DENT 3337 - Dental Hygiene III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Continuation of DENT 2207, DENT 2217. Emphasis on advanced instrumentation in the care of patients with periodontal disease. Must accompany DENT 3336.

Pre-requisite(s): DENT 2207 and DENT 2217.

DENT 3346 INT - Clinical Dental Hygiene IV

Credits: (5)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$195.61

Course Fee Purpose: Course fee is used for clinical supplies/services for clinical lab and/or non-inventoried instructional materials.

Description: Clinical application of DENT 3347. Dental Hygiene clinical practices including: direct patient care, rotations, and labs.

Twelve hours of clinic each week.

Pre-requisite(s): DENT 2206, DENT 2216, DENT 3336.

DENT 3347 - Dental Hygiene IV

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Continuation of DENT 2207, DENT 2217, DENT 3337. Emphasis on expanded client care services and with client populations with special treatment needs. Must accompany DENT 3346.

Pre-requisite(s): DENT 2207, DENT 2217, DENT 3337.

DENT 4010 - Interdisciplinary Health Care Teams

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an interdisciplinary experience with the team concept as a priority. The students learn the role of the health care team members, each with their different skills and objectives. The course teaches students to practice an interdisciplinary approach as they research, interact and learn in the interdisciplinary environment of a health care setting.

Cross-listed with HTHS 4010 and NRSB 4010.

DENT 4405 INT - Dental Hygiene Clinical Teaching Practice

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Supervised teaching in the Weber State Dental Hygiene program as an assistant to the supervising faculty.

Pre-requisite(s): Consent of the faculty member and acceptance into the BS/DH major program.

DENT 4410 - Dental Hygiene Needs of the Geriatric Client

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An overview of dental health needs of elderly clients.

Pre-requisite(s): Consent of instructor and acceptance into the BS/DH major program.

DENT 4530 INT CRE - Principles and Application of Evidence-Based Dental Hygiene Practice

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Emphasis is on the critical appraisal of scientific literature, the development of clinical problem statements and hypotheses and the formulation of a research proposal. Ethical issues inherent in the research process and the identification of appropriate hypothesis testing procedures will also be discussed.

Pre-requisite(s): Acceptance into the BS/DH program and completion of WSU Quantitative Literacy requirement.

DENT 4780 - Baccalaureate Thesis

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to give dental hygiene students an opportunity to complete a thesis project in partial fulfillment of the requirements for the BS/DH major.

Pre-requisite(s): Acceptance into the BS/DH program, completion of the WSU Quantitative Literacy requirement.

DENT 4800 - Individual Research

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Special project in a student's area of interest.

May be repeated twice for a maximum of 3 credit hours.

DENT 4810 - Summer Elective Clinic

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Summer intensive clinical course which allows the student to set personal achievement goals for clinical techniques and assists them through the process of skill development.

May be repeated six times for a maximum of six credit hours.

DENT 4830 - Directed Readings, Projects and Research

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Limited to dental hygiene majors.

A maximum of nine hours may be accumulated with this course.

DENT 4850 - Study Abroad

Credits: (1-6)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to provide opportunities for students in health professions to experience a study abroad program that is designed to explore healthcare, culture, and clinical experience.

May be repeated 5 times with a maximum of 6 credit hours.

DENT 4890 INT - Advanced Community or Clinical Work Experience

Credits: (2)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: This course is designed to specifically meet the interests and career goals of the Dental Hygiene Degree-completion student or the student completing the Baccalaureate degree, Dental Hygiene major prior to initial licensure as a dental hygienist. The student who is completing this course as part of their BS degree, initial entry into the profession, will participate in an advanced community or clinical work experiences under the direct supervision of program faculty. The baccalaureate degree completion student must be licensed to practice dental hygiene at the site in which the work experience will take place, have successfully completed an accredited dental hygiene program, or have a work experience site that does not have direct patient care as its community role.

Pre-requisite(s): Acceptance into the BS/DH Program and consent of the instructor.

DENT 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

DENT 4990 - Seminar

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Current concepts in dental hygiene for baccalaureate level dental hygiene students.

May be repeated once for a maximum of 2 credit hours.

DMS 4100 - Introduction to Sonography Principles and Instrumentation

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of this course is to introduce basic principles of sonographic physics and instrumentation including the production and reception of sound waves and transducers.

DMS 4110 - Sonography Principles & Instrumentation

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance.

Description: Elementary principles, propagation through tissues, transducers, pulse echo principles and instruments, images, storage and display, Doppler, image features and artifacts, bioeffects, and safety.

DMS 4120 - Quality Assurance

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Course Fee: \$09.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance

Description: Developing, analyzing and evaluating a quality assurance program.

DMS 4210 - Cardiac Sonography I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance.

Description: Concepts in cardiac sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4220 - Cardiac Sonography II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance

Description: Continuation of 4203.

DMS 4230 - Cardiac Sonography III

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance.

Description: Continuation of DMS 4220.

DMS 4240 - Fundamentals for Cardiac Sonography Certification

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of this course is to aid in the development of review skills and competency necessary for national certification. Faculty will act as facilitators to clarify, explain, and reiterate content specifications as standardized by certifying agencies. At the completion of this course, students will be eligible and prepared to sit for the ARDMS or CCI adult echocardiography certification.

DMS 4310 - Abdominal Sonography

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance.

Description: Concepts in abdominal intraperitoneal and retroperitoneal sonographic scanning technique and protocol to produce and evaluate diagnostic images in the clinical setting.

DMS 4320 - Superficial Structure and Special Study Sonography

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance

Description: Concepts in superficial structure sonographic scanning technique and protocol to produce and evaluate diagnostic images in the clinical setting.

DMS 4330 - Gynecologic Sonography

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance

Description: Concepts in gynecologic sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4340 - Obstetric Sonography

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance

Description: Concepts in obstetric sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4350 - Fundamentals for Abdominal Sonography Certification

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of this course is to aid in the development of review skills and competency necessary for national certification. Faculty will act as facilitators to clarify, explain, and reiterate content specifications as standardized by certifying agencies. At the completion of this course, students will be eligible and prepared to sit for the ARDMS abdominal specialty certification.

DMS 4360 - Fundamentals for OB/GYN Sonography Certification

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of this course is to aid in the development of review skills and competency necessary for national certification. Faculty will act as facilitators to clarify, explain, and reiterate content specifications as standardized by certifying agencies. At the completion of this course, students will be eligible and prepared to sit for the ARDMS OB/GYN specialty certification.

DMS 4410 - Vascular Sonography I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance.

Description: Concepts in vascular sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4420 - Vascular Sonography II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment,

Software upgrades and Maintenance

Description: Continuation of DMS 4410.

DMS 4430 - Fundamentals for Vascular Sonography Certification

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of this course is to aid in the development of review skills and competency necessary for national certification. Faculty will act as facilitators to clarify, explain, and reiterate content specifications as standardized by certifying agencies. At the completion of this course, students will be eligible and prepared to sit for the ARDMS Vascular specialty certification.

DMS 4510 - Breast Sonography

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$3.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance.

Description: Concepts in breast sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4610 - Cardiac Sonography - Clinical Simulation I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance.

Description: Clinical Simulation in Cardiac Sonography Labs.

DMS 4620 - Medical Sonography - Clinical Simulation I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance

Description: Clinical Simulation in Medical Sonography Labs.

DMS 4621 - Medical Sonography - Clinical Simulation II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Clinical Simulation in Medical Sonography Labs.

DMS 4622 - Medical Sonography - Clinical Simulation III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Clinical Simulation in Medical Sonography Labs.

DMS 4630 - Cardiovascular Sonography - Clinical Simulation I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Sonography lab supplies i.e.: table paper, transducer gel; Sonography Lab Equipment, Software upgrades and Maintenance

Description: Clinical Simulation in Vascular Sonography Labs.

DMS 4801 - Individualized Research

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Contract with faculty advisor required.

May be repeated twice with a maximum of 3 credit hours.

DMS 4811 INT - Cardiac Clinical I

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A minimum of 24 hours per week in an active diagnostic cardiac sonography department.

DMS 4812 INT - Cardiac Clinical II

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Continuation of DMS 4811.

DMS 4813 INT - Cardiac Clinical III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Continuation of DMS 4812.

DMS 4820 - Orientation to Clinical Education

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of this course is to provide new sonography students with an orientation to sonography in the clinical setting prior to beginning full time clinical work in the following semesters. Students will become familiar with their clinical sites, their clinical instructors and the staff with whom they will be working in future semesters. They will gain an introduction into the various sonographic exams that they will be expected to learn and perform at the completion of their program as well as an introduction to the sonographic equipment used at their assigned clinical sites.

DMS 4821 INT - Medical Clinical I

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A minimum of 24 hours per week in an active diagnostic medical sonography department.

DMS 4822 INT - Medical Clinical II

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Continuation of DMS 4821.

DMS 4823 INT - Medical Clinical III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Continuation of DMS 4822.

DMS 4831 INT - Cardiovascular Clinical I

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A minimum of 24 hours per week in an active diagnostic cardiovascular sonography department.

DMS 4832 INT - Cardiovascular Clinical II

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Continuation of DMS 4831.

DMS 4833 INT - Cardiovascular Clinical III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Continuation of DMS 4832.

DMS 4841 INT - Breast Clinical

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A minimum of 24 hours per week performing breast sonography examinations.

Pre-requisite(s): DMS 4510 Breast Sonography.

DMS 4911 - Cardiac Comprehensive Review

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Review and requirements for advanced responsibilities of the cardiac sonographer.

DMS 4912 - Medical Comprehensive Review

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Review and requirements for advanced responsibilities of the medical sonographer.

DMS 4913 - Vascular Comprehensive Review

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Description: Review and requirements for advanced responsibilities of the vascular sonographer.

DMS 4921 - Workshops, Conferences and Telecourses

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

May be repeated twice with a maximum of 3 credit hours.

ECE 1000 - Introduction to Electrical Engineering

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: An introductory course to Electrical & Computer Engineering topics including electronic terms, numbering systems, software tools, and documentation practices.

Pre-requisite/Co-requisite: MATH 1060 or MATH 1080 or MATH 1210 or equivalent.

Suggested Requisite(s): College algebra and trigonometry are strongly recommended.

ECE 1270 - Introduction to Electrical Circuits

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: The basics of analog circuits as an introduction to Electrical Engineering. Concepts of voltage, current, power, resistance capacitance and inductance. Circuit analysis techniques such as Kirchhoff's Laws, node voltages, and mesh currents. Thevenin's and Norton's equivalent circuits, sinusoidal steady state and phasors. (Concurrent enrollment with ENGR 1000 is not recommended.)

Lecture and lab combination.

Pre-requisite(s): MATH 1210

Pre-requisite/Co-requisite: MATH 1220 and either ECE 1000 or ENGR 1000.

ECE 1400 - Fundamentals of Engineering Computing

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Computer programming and computational tools applied to electrical and computer engineering problems. Topics include coding fundamentals, numeric libraries and debugging techniques. Lecture and lab combination.

Pre-requisite(s): MATH 1210 and either ECE 1000 or ENGR 1000.

ECE 2210 - Electrical Engineering for Non-majors

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Combined lecture/laboratory course as an introduction to electrical engineering for non-electrical engineers. Fundamentals of DC and AC circuits, digital circuits, and power circuits.

Pre-requisite(s): MATH 1210.

Pre-requisite/Co-requisite: ENGR 1000 or ECE 1000.

ECE 2260 - Circuits and Signals

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Fundamental electric-circuit techniques including: time domain transient responses for 1st and 2nd order circuits, Laplace transforms, Fourier series, and filters.

Lecture and lab combination.

Pre-requisite(s): MATH 1220 and either ECE 1270 or ECE 2210.

Pre-requisite/Co-requisite: ECE 1400 and either ENGR 2240, MATH 2250 or MATH 2280.

ECE 2700 - Digital Circuits

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: An introduction to digital electronics, integrated circuits, numbering systems, Boolean algebra, gates, flip-flops, multiplexers, sequential circuits, combinational circuits, and computer architecture. Introduction to hardware description language and programmable logic devices.

Lecture and lab combination. Laboratory activities to include the design, construction, analysis, and measurement of basic digital systems.

Pre-requisite/Co-requisite: ECE 1000 or ENGR 1000.

ECE 3000 - Engineering Seminar

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: An engineering seminar course designed to prepare the student for professional engineering employment. Topics to include resumes, hiring criteria, interviewing techniques, engineering ethics, professional and societal responsibilities, lifelong learning, diversity, creative problem solving, goals, quality, timeliness, and continuous improvement. The students will research related topics and write a paper.

Pre-requisite(s): ECE 1270.

Note: Admittance into the Professional Program required.

ECE 3090 - Project Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to project management. The course prepares students for Senior Projects. This course

will include 1) the writing of technical documents including project proposals, white papers, presentations and/or legal contracts. 2) Principles of project management including project scheduling, project life cycles, principles of engineering economics, quality, statistics and continuous improvement. 3) Project management skills including goal setting, team building and leadership, organization, and risk management. Students should take this course the semester before taking ECE 4010.

Pre-requisite/Co-requisite: ECE 3210 and (ECE 3110 or ECE 3130) and (ECE 3510 or ECE 3610) and (ECE 3710 or ECE 3730) and (ECE 3310 or CS 3100).

Note: Admittance into the Professional Program required.

ECE 3110 - Microelectronics I

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Fundamental semiconductor device characteristics including diodes, MOSFETs and bipolar transistors; small and large signal characteristics and design of linear circuits.

Lecture and lab combination. Laboratory activities to include the design, construction, computer simulation, and analysis of semiconductor circuits, amplifiers and power supplies.

Pre-requisite(s): MATH 1220 and ECE 1400 and either ECE 1270 or ECE 2210.

Note: Admittance into the Professional Program required.

ECE 3120 - Microelectronics II

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Intermediate topics related to microelectronics including differential and multistage amplifiers, frequency response, feedback systems, power amplifiers, filters, and signal generation.

Lecture and lab combination. Laboratory activities to include the design, construction, computer simulation, and analysis of filters and advanced circuits.

Pre-requisite(s): ECE 2260 and ECE 3110.

Note: Admittance into the Professional Program required.

ECE 3130 - Microelectronics and Instrumentation

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35

Description: Topics covered are related to microelectronics including bipolar and field-effect transistors, frequency response, feedback systems, filters, signal generation, and applications of op-amp circuits. Lecture and lab combination. Laboratory activities include the design, construction, computer simulation, and analysis of filters and advanced circuits.

Pre-requisite(s): ECE 2260.

Note: Admittance into the Professional Program is required.

ECE 3210 - Signals and Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Topics related to the analysis of linear time invariant continuous and discrete systems and signal transformations, convolution, frequency spectra, Laplace transforms, Z transforms, and fast Fourier transforms. Lecture and lab combination. Laboratory activities to include the computer simulation, analysis, and numerical modeling of signals and systems.

Pre-requisite(s): ECE 2260 and either ENGR 2240, MATH 2250 or both MATH 2270 and MATH 2280.

Note: Admittance into the Professional Program required.

ECE 3310 - Electromagnetics

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: An introduction to electrostatics, magnetostatics and Maxwell's equations with specific applications to wave propagation and transmission line theory.

Lecture and lab combination. Laboratory activities to include the design, construction, and analysis of RF radar subsystems.

Pre-requisite(s): MATH 2210, PHYS 2220, and either ECE 1270 or ECE 2210.

Note: Admittance into the Professional Program required.

ECE 3430 - Engineering Probability and Statistics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course covers basic concepts and techniques of probability theory with applications to statistics, machine learning, and signal processing. Topics include probabilistic modeling and analysis, confidence intervals, and statistical inference. Example problems are drawn from engineering applications and include both analytic and computational solutions.

Pre-requisite(s): ECE 1400 and MATH 1220 and either ENGR 2240 or ECE 2260.

ECE 3510 - Power Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: A study of AC and DC power systems and machines, including single and 3-phase power, power factor and correction, transformers, synchronous and induction machines, DC motors, power transmission lines, and analysis of power flow and faults. Lecture and Lab combination.

Pre-requisite(s): ECE 1270 or ECE 2210.

Note: Admittance into the Professional Program required.

ECE 3610 - Digital Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Introduction to microprocessor architecture, arithmetic logic units, memory systems, input/output interfaces, peripheral devices, and communication.

Lecture and lab combination. Laboratory activities to include the programming and operation of microprocessor

circuits.

Pre-requisite(s): ECE 2700 and (CS 2250 or CS 1410 or ECE 1400).

ECE 3620 - Microprocessor Architecture

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on the concepts of modern computer and microprocessor architecture including pipelining, caches and branch prediction. Students will gain an understanding of the key design concepts of modern computer architecture and its implications on software and hardware design.

Pre-requisite(s): ECE 3610.

Pre-requisite/Co-requisite: ECE 3710.

ECE 3710 - Embedded Systems

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$70.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Design and implementation of a microcontroller or microprocessor embedded system including assembly language programming, interfacing to peripherals, interrupt handling and debugging techniques.

Lecture and Lab. Laboratory exercises build toward a final embedded systems project.

Pre-requisite(s): (ECE 2700 or CS 2810) and (ECE 1400 or CS 2250 or CS 1410).

Pre-requisite/Co-requisite: ENGL 2010 or ECE 3090.

ECE 3730 - Fundamentals of Robotics

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Course fees are used to maintain robotic equipment and other laboratory instruments.

Description: Fundamentals of robotic systems. Introduction to the Robot Operating System and the Gazebo simulator. Topics include reading data from sensors, localization, mapping, navigation and task planning. Students will demonstrate the ability to program a provided robotic system to navigate to a position and perform a task in both simulated and real environments.

Pre-requisite(s): ECE 1400 or CS 1410.

ECE 3890 INT - Internship

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is a core course that is required for the BS Engineering degree. The student will need department approval before being allowed to register.

Pre-requisite(s): Permission from the department.

ECE 3890 can be taken a maximum of three times for a total of three credits, but only one credit counts toward the

major.

Note: Admittance into the Professional Program required.

ECE 4010 CEL - Senior Project I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: Students will be required to complete a 300-hour engineering project (over two semesters) in a team environment. Project management and problem solving techniques will be emphasized. Topics to include goal setting, developing milestone charts, writing contracts, conducting research, project design and construction, testing and analysis, project documentation, and design review presentations. Before seeking departmental approval, students should be **currently** enrolled in ECE 3090 and should have taken at least four 3000-level core ECE courses and either MATH 3410 or ECE 3430. Exceptions to this rule are made only if a student's graduation would otherwise be delayed.

Pre-requisite(s): Permission from the department.

Note: Admittance into the Professional Program required.

ECE 4020 CEL - Senior Project II

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: A continuation of Senior Project I. Students will be required to complete a significant engineering project in a team environment. Project management and problem solving techniques will be emphasized. Topics to include goal setting, developing milestone charts, writing contracts, conducting research, project design and construction, testing and analysis, project documentation, and design review presentations.

Pre-requisite(s): ECE 4010.

Note: Admittance into the Professional Program required.

ECE 4100 - Control Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Topics related to control theory, analysis, and testing of systems in the time domain, frequency domain and state space.

Lecture and lab combination.

Pre-requisite(s): ECE 3110 and ECE 3210.

Note: Admittance into the Professional Program required.

ECE 5110 - Digital VLSI Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Software licensing and maintenance of laboratory equipment.

Description: Introduction to Digital VLSI design. Includes the development of standard cell library of common CMOS circuits. Use of hardware description language and CAD tools for the design and simulation of custom large-scale digital systems. Students will understand the impacts and tradeoffs from speed, power consumption, and thermal properties of large-scale custom ICs.

Pre-requisite(s): ECE 3610 and either ECE 3110 and ECE 3130 or BME 3130.

Note: Admittance into the Professional Program required.

ECE 5120 - Analog VLSI Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Software licensing and maintenance of laboratory equipment.

Description: Design of analog VLSI systems. Course includes design, modeling, and verification of analog circuits in large-scale systems. Students will develop custom analog system designs utilizing CAD programs.

Pre-requisite(s): ECE 3120.

Note: Admittance into the Professional Program required.

ECE 5130 - Advanced Semiconductor Devices

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: Introduction to advanced semiconductor physics and devices. Topics include carrier transport theory, energy band diagrams, PN junctions, metal-semiconductor junctions, BJTs and MOSFETs. Study of current semiconductor process technologies and discussion of off-roadmap technologies.

Pre-requisite(s): PHYS 2220 and ECE 3110 and ECE 3130 or BME 3130.

Note: Admittance into the Professional Program required.

ECE 5140 - Sensors and Instrumentation

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: This course introduces a host of sensor technologies from both theoretical and practical perspectives. A study of the electronics for sensor signal conditioning will be complemented by lectures on the principles and operation of various sensor modalities including pressure, thermal, strain, displacement, inertial, magnetic field, optical, acoustic, and/or bio-medical. Students will be introduced to precision analog circuit architectures, noise analysis, and signal processing algorithms commonly used in data acquisition systems.

Pre-requisite(s): PHYS 2220 and ECE 3210 and either ECE 3110 or ECE 3130 or BME 3130.

ECE 5150 - Thin Film Engineering

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Thin films are shaping the future of electronic devices. Understanding how materials are grown and characterized is vital to understanding and mitigating limitations in device design. This course focuses on the

materials used to create state of the art ultra-thin device quality layers and coatings as well as how they are grown, characterized, and then used in fabrication processes for electronic devices such as transistors.

Pre-requisite(s): PHYS 2220 and (MATH 3410 or ECE 3430)

ECE 5160 - Power Electronics

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: The fees associated with this course are used to provide electronic components and wire for students to build their circuits. Remaining funds, if any, are used to maintain the electronic equipment in the laboratory.

Description: Introduction to modern power conversion techniques and devices at a circuit level covering basic topologies of power converters and techniques of analyzing converter circuits. Students learn to analyze and design suitable circuits and subsystems for practical applications for AC/DC, DC/DC and DC/AC converters.

Pre-requisite(s): ECE 3120.

ECE 5170 - Advanced Materials Science and Engineering

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The fee associated with this course is used to provide consumable materials for students and to maintain and periodically replace lab equipment.

Description: This course delves into the advanced properties, processing, and applications of advanced materials in the context of electrical engineering. Students will explore the latest developments in materials science, including nanomaterials, semiconductors, biomaterials, and smart materials. The course combines theoretical knowledge with practical applications and research methodologies.

Pre-requisite(s): ECE 3110.

ECE 5210 - Digital Signal Processing

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: Theory, application, and implementation of digital signal processing (DSP) concepts, from the design and implementation perspective. Topics include: Fast Fourier transforms, adaptive filters, state-space algorithms, random signals, and spectral estimation.

Pre-requisite(s): ECE 3210.

Note: Admittance into the Professional Program required.

ECE 5220 - Image Processing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: Advanced image processing theory and methods. Topics include digital image formation, transformation, filtering, enhancements, segmentation and morphological processing. Lectures, computer assignments and project (including term paper).

Pre-requisite(s): ECE 3210.

Note: Admittance into the Professional Program required.

ECE 5230 - Engineering Applications in Deep Learning

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course covers deep learning architectures with a focus on learning end-to-end models for these tasks, particularly image and signal processing. Students will learn to implement, train and debug their own deep neural networks and gain a detailed understanding of cutting-edge research in this field. Strong emphasis will be placed on real-world applications for both solving engineering problems using these methods as well as practical techniques for training and fine-tuning the networks. Case studies will be drawn from medical imaging, semiconductors, and audio signal processing.

Pre-requisite(s): ECE 3210, either ECE 3430 or MATH 3410, and either ENGR 2240 or MATH 2250 or MATH 2270.

ECE 5310 - Radar Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: Theory and practice of radar systems and signal processing used for detection, tracking, and location of targets. Topics include CW and pulsed-Doppler systems, EM wave propagation applied to the Radar Range equation. Hardware system characterization including noise, sensitivity, range resolution, ambiguity function, detection and false alarm probabilities.

Pre-requisite(s): ECE 3210, ECE 3310 and either ECE 3430 or MATH 3410.

Note: Admittance into the Professional Program required.

ECE 5320 - Antennas and Wave Propagation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Behavior of radiated electromagnetic waves in atmosphere, space, urban and indoor environments; path, frequency and antenna selection for practical communication systems; propagation prediction.

Pre-requisite(s): ECE 3310.

Note: Admittance into the Professional Program required.

ECE 5410 - Communication Circuits and Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: A study of communication circuits, modulation and decoding theory, spectrum usage, networks, and protocols.

Pre-requisite(s): ECE 3210 and either ECE 3430 or MATH 3410.

Note: Admittance into the Professional Program required.

ECE 5420 - Digital Communication

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: This course provides an in-depth coverage of the theory, analysis, and design of digital communications systems with an emphasis on advanced topics related to wired, wireless data communication and the physical networking layer. Topics include PAM, QPSK and QAM. Spread spectrum concepts such as FHSS, DSSS, OFDM and/or MIMO may be included. Students will develop software models to emulate the concepts. The course would be beneficial particularly to students who are interested in doing work/research in fields related to communications, networks, and signal processing.

Pre-requisite(s): ECE 3210 and ECE 3430 or MATH 3410.

Note: Admittance into the Professional Program required.

ECE 5430 - Computer Networks

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course investigates the design and analysis of modern data networks using the framework of the five-layer Internet service model. Application layer services and protocols are introduced through a survey of various TCP/IP applications. The fundamentals of the transport, network and data link layers are investigated in conjunction with key network protocols. Various wired and wireless physical layers are also studied. Math models are developed and used to better understand performance issues and compare approaches.

Pre-requisite(s): ECE 3430 and ECE 3710.

ECE 5440 - Optical Communication Systems

Credits: (3)

Description: This course covers the fundamentals of optical communication. Topics include wave propagation in fiber optics, optical transmitters and receivers, system design and performance, multichannel lightwave systems, optical losses and loss management, fiber dispersion and dispersion management.

Pre-requisite(s): ECE 3310.

ECE 5510 - Advanced Power Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: This course will explore advanced power systems concepts.

Pre-requisite(s): ECE 3510.

Note: Admittance into the Professional Program required.

ECE 5620 - Digital System Testing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Fundamentals of testing digital circuits and memory devices, including fault modeling, test pattern generation, and test coverage. Introduction to design for test and built-in self-test. Laboratory activities include performing bench and automated testing of digital and memory chips, and generating test patterns for fault detection.

Pre-requisite(s): ECE 3610.

Note: Admittance into the Professional Program required.

ECE 5640 - Model-based Systems Engineering

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is an introduction to the use of formal models to describe complex electrical systems. Topics include modeling tools, design, verification and testing of model-based systems, model validation and verification, and the use of state-machines in models.

Pre-requisite(s): ECE 3610.

ECE 5710 - Real-Time Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: An advanced course on real-time system design. Topics include task concurrency, scheduling paradigms, synchronization, resource access control, and inter-process communication. Lecture and Lab combination.

Pre-requisite(s): ECE 3710.

Note: Admittance into the Professional Program required.

ECE 5730 - Robotics

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Robotic hardware design and control principles. Topics include selection and design of sensors, motor and actuator types and control, computer vision for navigation and tasks and hardware interfaces to sensors. Use of the Robot Operating System to interface and fuse data from various sensors such as LIDAR, Inertial measurement units, compass and physical and visual odometry for navigation and control. Use of the Gazebo simulation environment to validate designs before implementation.

Pre-requisite(s): ECE 3730 and ECE 4100.

ECE 5750 - Quantum Computer Engineering

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Overview of quantum computer engineering. How quantum computers are fundamentally different from classical computers. Key applications of quantum computers. Topics include qubits, entanglement, EPR paradox, Bell's theorem, Bloch sphere, single-qubit gates, multi-qubit gates, Shor's algorithm, Simon's algorithm. Also covers physical realizations of a quantum computer: photons, polarization, and decoherence.

Pre-requisite(s): ECE 2700, PHYS 2220, either ECE 3430 or MATH 3410, and either ENGR 2240 or MATH 2250 or MATH 2270 .

ECE 5800 - Individual Studies

Credits: (1-4)

Description: The students will receive credit for approved studies in the Electrical & Computer Engineering programs. A maximum of four credits can count as an elective course in the Electrical & Computer Engineering programs.

May be repeated four times for a maximum of four credit hours.

Note: Admittance into the Professional Program required.

ECE 5900 - Special Topics

Credits: (1-4)

Variable Title

Description: A one-time special study course designed to introduce a new relevant topic that is not covered in the Electrical & Computer Engineering programs.

Lecture and lab combination. Laboratory activities support the selected course topic.

May be repeated three times for a maximum of nine credit hours.

Note: A maximum of four credits can be counted for the Electrical & Computer Engineering programs. Admittance into the Professional Program required.

ECE 6010 - Design Project

Credits: (2-6)

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: Students are required to complete a substantial engineering design project. Students must demonstrate proficiency in research, design, analysis, project planning, implementation, testing, presentation and documentation. Students receive T (temporary) grades until their final design review, after which these grades are changed retroactively. Students must be enrolled in ECE 6010 at the time of their final design review. This course may be repeated.

Pre-requisite(s): Permission from the department.

May be repeated 11 times for a maximum of 20 credit hours.

ECE 6020 - Thesis

Credits: (2-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students are required to perform original research that results in a thesis under the direction of a faculty advisor. Students receive T (temporary) grades until their thesis defense, after which these grades are changed retroactively. Students must be enrolled in ECE 6020 at the time of their thesis defense.

Pre-requisite(s): Permission from the department.

This course may be taken 3 times and up to 9 credits.

ECE 6110 - Digital VLSI Design

Credits: (3)

Course Fee: \$100.00

Course Fee Purpose: Software licensing and maintenance of laboratory equipment.

Description: Introduction to Digital VLSI design. Includes the development of standard cell library of common CMOS circuits. Use of hardware description language and CAD tools for the design and simulation of custom large-scale digital systems. Students will understand the impacts and tradeoffs from speed, power consumption, and thermal properties of large-scale custom ICs.

Pre-requisite(s): ECE 3610 and either ECE 3110 and ECE 3130 or BME 3130.

ECE 6120 - Analog VLSI Design

Credits: (3)

Course Fee: \$100.00

Course Fee Purpose: Software licensing and maintenance of laboratory equipment.

Description:

Design of analog VLSI systems. Course includes design, modeling, and verification of analog circuits in large-scale systems. Students will develop custom analog system designs utilizing CAD programs.

Pre-requisite(s): ECE 3120.

ECE 6130 - Advanced Semiconductor Devices

Credits: (3)

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: Introduction to advanced semiconductor physics and devices. Topics include carrier transport theory, energy band diagrams, PN junctions, metal-semiconductor junctions, BJTs and MOSFETs. Study of current semiconductor process technologies and discussion of off-roadmap technologies.

Pre-requisite(s): PHYS 2220 and either ECE 3110 and ECE 3130 or BME 3130.

ECE 6140 - Sensors and Instrumentation

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: This course introduces a host of sensor technologies from both theoretical and practical perspectives.

A study of the electronics for sensor signal conditioning will be complemented by lectures on the principles and operation of various sensor modalities including pressure, thermal, strain, displacement, inertial, magnetic field, optical, coustic, and/or bio-medical. Students will be introduced to precision analog circuit architectures, noise analysis, and signal processing algorithms commonly used in data acquisition systems.

Pre-requisite(s): ECE 3210 and either ECE 3110 or ECE 3130 or BME 3130.

ECE 6150 - Thin Film Engineering

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Thin films are shaping the future of electronic devices. Understanding how materials are grown and characterized is vital to understanding and mitigating limitations in device design. This course focuses on the materials used to create state of the art ultra-thin device quality layers and coatings as well as how they are grown, characterized, and then used in fabrication processes for electronic devices such as transistors.

Pre-requisite(s): PHYS 2220 and (MATH 3410 or ECE 3430)

ECE 6160 - Power Electronics

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: The fees associated with this course are used to provide electronic components and wire for students to build their circuits. Remaining funds, if any, are used to maintain the electronic equipment in the laboratory.

Description: Introduction to modern power conversion techniques and devices at a circuit level covering basic topologies of power converters and techniques of analyzing converter circuits. Students learn to analyze and design suitable circuits and subsystems for practical applications for AC/DC, DC/DC and DC/AC converters.

ECE 6170 - Advanced Materials Science and Engineering

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The fee associated with this course is used to provide consumable materials for students and to maintain and periodically replace lab equipment.

Description: This course delves into the advanced properties, processing, and applications of advanced materials in the context of electrical engineering. Students will explore the latest developments in materials science, including nanomaterials, semiconductors, biomaterials, and smart materials. The course combines theoretical knowledge with practical applications and research methodologies.

ECE 6210 - Digital Signal Processing

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: Theory, application, and implementation of digital signal processing (DSP) concepts, from the design and implementation perspective. Topics include: Fast Fourier transforms, adaptive filters, state-space algorithms, random signals, and spectral estimation.

Pre-requisite(s): ECE 3210.

ECE 6220 - Image Processing

Credits: (3)

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: Advanced image processing theory and methods. Topics include digital image formation, transformation, filtering, enhancements, segmentation and morphological processing. Lectures, computer assignments and project (including term paper).

Pre-requisite(s): ECE 3210.

ECE 6230 - Engineering Applications in Deep Learning

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course covers deep learning architectures with a focus on learning end-to-end models for these tasks, particularly image and signal processing. Students will learn to implement, train and debug their own deep neural networks and gain a detailed understanding of cutting-edge research in this field. Strong emphasis will be placed on real-world applications for both solving engineering problems using these methods as well as practical techniques for training and fine-tuning the networks. Case studies will be drawn from medical imaging, semiconductors, and audio signal processing.

Pre-requisite(s): ECE 3210, either ECE 3430 or MATH 3410, and either ENGR 2240 or MATH 2250 or MATH 2270.

ECE 6310 - Electromagnetics II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: A study of intermediate electromagnetic issues common to circuits, systems, and communication networks.

Pre-requisite(s): ECE 3310.

ECE 6320 - Antennas and Wave Propagation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Behavior of radiated electromagnetic waves in atmosphere, space, urban and indoor environments; path, frequency and antenna selection for practical communication systems; propagation prediction.

Pre-requisite(s): ECE 3310.

ECE 6410 - Communication Circuits and Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: A study of communication circuits, modulation and decoding theory, spectrum usage, networks, and protocols.

Pre-requisite(s): ECE 3210 and either ECE 3430 or MATH 3410.

ECE 6420 - Digital Communication

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: This course provides in-depth coverage of the theory, analysis, and design of digital communications systems with an emphasis on advanced topics related to wired and wireless data communication. Students will develop computer models to emulate the concepts. The course is particularly beneficial to students interested in doing work/research in fields related to communications and networking.

Pre-requisite(s): ECE 3210 and either ECE 3430 or MATH 3410.

ECE 6440 - Optical Communication Systems

Credits: (3)

Description: This course covers the fundamentals of optical communication. Topics include wave propagation in fiber optics, optical transmitters and receivers, system design and performance, multichannel lightwave systems, optical losses and loss management, fiber dispersion and dispersion management.

Pre-requisite(s): ECE 3310.

ECE 6510 - Advanced Power Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: This course will explore advanced power systems concepts.

Pre-requisite(s): ECE 3510.

ECE 6620 - Digital System Testing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Fundamentals of testing digital circuits and memory devices, including fault modeling, test pattern generation, and test coverage. Introduction to design for test and built-in self-test. Laboratory activities include performing bench and automated testing of digital and memory chips, and generating test patterns for fault detection.
Pre-requisite(s): ECE 3610.

ECE 6640 - Model-Based Systems Engineering

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is an introduction to the use of formal models to describe complex electrical systems. Topics include modeling tools, design, verification and testing of model-based systems, model validation and verification, and the use of state-machines in models.

Pre-requisite(s): ECE 3610.

ECE 6710 - Real-Time Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Maintenance of laboratory equipment.

Description: An advanced course on real-time system design. Topics include task concurrency, scheduling paradigms, synchronization, resource access control, and inter-process communication. Lecture and Lab combination.

Pre-requisite(s): ECE 3710 or CS 3100.

ECE 6730 - Robotics

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Robotic hardware design and control principles. Topics include selection and design of sensors, motor and actuator types and control, computer vision for navigation and tasks and hardware interfaces to sensors. Use of the Robot Operating System to interface and fuse data from various sensors such as LIDAR, Inertial measurement units, compass and physical and visual odometry for navigation and control. Use of the Gazebo simulation environment to validate designs before implementation.

Pre-requisite(s): ECE 3730 and ECE 4100.

ECE 6750 - Quantum Computer Engineering

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Overview of quantum computer engineering. How quantum computers are fundamentally different from classical computers. Key applications of quantum computers. Topics include qubits, entanglement, EPR paradox, Bell's theorem, Bloch sphere, single-qubit gates, multi-qubit gates, Shor's algorithm, Simon's algorithm. Also covers physical realizations of a quantum computer: photons, polarization, and decoherence.

Pre-requisite(s): ECE 3610, ECE 2700, PHYS 2220, either ECE 3430 or MATH 3410, and either ENGR 2240 or MATH 2250 or MATH 2270, MATH 3410.

ECE 6800 - Individual Studies

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students taking this course will receive credit for approved, mentored studies in the Master of Science in Electrical Engineering (MSEE) and Master of Science in Computer Engineering (MSCE) programs. A maximum of three credits may be counted toward graduation.

Pre-requisite(s): Permission from the department.

ECE 6900 - Special Topics

Credits: (1-4)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A one-time special study course designed to introduce a new relevant topic that is not covered in the Electrical & Computer Engineering programs. Lecture or lecture and lab combination. Laboratory activities support the selected course topic.

May be repeated 10 times and up to 12 credit hours.

ECED 2110 - Self-Compassion for Sustaining Work with Children

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: This course examines ways to cultivate and sustain capacity for responding to the strengths and needs of all children, particularly those experiencing difficult circumstances and trauma, while attending to the physical, emotional, and mental stress professionals may be experiencing.

ECED 2500 - Development of the Child

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course examines contemporary theory and research of growth and development from conception through childhood, studied in the context of family, gender, culture, language, disability, socioeconomics, and society.

ECED 2600 - Introduction to Early Childhood Education & Care

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Course Fee: \$50.00

Course Fee Purpose: This course fee will be used to provide coaching support for field experiences associated with this course.

Description: This course examines the historical philosophical, ethical and cultural roots and contemporary early childhood education practice with children birth-8 years.

3 hours lecture per week and 12 hours field observation.

ECED 2610 - Child Guidance

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$50.00

Course Fee Purpose: This course fee will be used to provide coaching support for field experiences associated with

this course.

Description: This course focuses on the understanding and use of developmentally, culturally, and linguistically appropriate guidance practices to make evidence-based, data-informed decisions that support each child. Students complete a minimum of 24 hours of field experience observing and practicing in an early learning setting serving diverse populations of children 0-8 years.

Pre-requisite/Co-requisite: CHF 1500.

ECED 2620 - Planning Creative Experiences for Young Children

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$50.00

Course Fee Purpose: This course fee will be used to provide coaching support for field experiences associated with this course.

Description: Development of attitudes, materials, and skills needed to plan and teach age, individually, and culturally appropriate curriculum for young children. Students complete a minimum of 24 hours practicum arranged by the instructor.

Pre-requisite(s): CHF 1500 and ECED 2610.

Pre-requisite/Co-requisite: ECED 2500, ECED 2600.

ECED 2640 - Collaborating with Families of Young Children.

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course explores culturally sustaining philosophies, processes, and methods of relational ethical practice for collaborating with families of young children birth to age 8.

Pre-requisite(s): CHF 1500.

ECED 2670 - Early Childhood Integrated Curriculum and Assessment

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Course Fee: \$50.00

Course Fee Purpose: This course fee will be used to provide coaching support for field experiences associated with this course.

Description: The purpose of this course is to build on a foundation of knowledge of developmentally appropriate practice for teaching integrated content across content disciplines. Students will design meaningful curriculum content for children (birth through age 8) based on accepted learning standards in each content area.

Pre-requisite(s): ECED 2600.

ECED 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ECED 2830 - Directed Readings

Credits: (1-3)**Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** Individually chosen readings on specialized topics supervised by a faculty member.**Pre-requisite(s):** Consent of faculty supervisor prior to registration.

May be repeated up to 3 credit hours.

ECED 2850 - Child Development Associate Training**Credits: (2)****Description:** Understanding child development concepts and applying them to teaching situations with young children. The Professional Resource File in preparation for National Child Development Associate Credential (CDA) is compiled during the course.

Note: This course is not currently offered.

ECED 2860 INT - Practicum in Early Childhood**Credits: (1-6)****Typically Taught Fall Semester:** *Full Sem-Online***Typically Taught Spring Semester:** *Full Sem-Online***Course Fee:** \$50.00**Course Fee Purpose:** This course fee will be used to provide coaching support for field experiences associated with this course.**Description:** Students apply professional knowledge, skills, and competencies needed to work with young children birth to 8 years old and their families. Students complete a minimum of 45 hours/credit supervised in an early childhood setting that must be approved by the instructor.**Pre-requisite(s):** For Early Childhood majors: CHF 1500, ECED 2500, ECED 2600, ECED 2610, ECED 2620, or consent of faculty advisor prior to registration.**Co-Requisite(s):** ECED 2990.**Pre-requisite/Co-requisite:** ECED 2670, ECED 2640.

May be repeated up to 6 credit hours.

ECED 2890 INT - Internship in Early Childhood**Credits: (1-6)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$50.00**Course Fee Purpose:** This course fee will be used to provide coaching support for field experiences associated with this course.**Description:** Provides academic credit for on-the-job learning experience as a bridge to becoming a professional in the early childhood field. Ethical conduct related to working with children and families will be studied. Professional activities will include goal setting, strategies, and documentation for progress are including in a final Professional Development Integrated Statement. Students arrange their own field placement in a professional setting with the help of the instructor. 120 field experience hours are required for 3 credits (40 hours/credit). Prior consent of the faculty instructor is required. A background check will be required for work in most early childhood settings.**Pre-requisite(s):** Consent of faculty advisor.**ECED 2910 - Children & Families: Variable Titles****Credits: (1-3)****Variable Title**

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: An examination of the conceptual knowledge, research, theory and applied skills on specific topics for early childhood and family life educators such as, becoming a teacher leader, observation and assessment, children's health and well-being, infant mental health, or trauma informed care and teaching.

Suggested Requisite(s): ECED 2500, ECED 2600, ECED 2610, ECED 2620.

ECED 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is taught as needed.

ECED 2990 - Seminar in Early Childhood Education

Credits: (1)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: Students synthesize, document, and evaluate professional competencies in their career portfolio, create a resume, practice professional skill articulation, and complete career readiness professional development.

Pre-requisite(s): CHF 1500, ECED 2500, ECED 2600, ECED 2610, and ECED 2620.

Pre-requisite/Co-requisite: ECED 2860.

ECED 3145 - Educational Psychology, Child Development, and Classroom Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course examines historical and contemporary perspectives in educational psychology, child development and guidance, and classroom management for kindergarten through 8th grade, with a focus on translating theory to practice within diverse communities of learners. It is part of Elementary Education Level I and includes an integrated field experience.

ECED 3500 - Young Children: Adversity and Resilience

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course examines varying perspectives on the contexts and systems that effect the potential advantages or adversities experienced by young children in a diverse society. Students develop an awareness of opportunities and resources for children and families that support well-being and nurture resilience. Students explore current topics of interest to find their passion and voice to advocate for children and families.

ECED 3570 - Infants and Toddlers: Development and Practice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an in-depth study of physical, cognitive, language, social, and emotional

development from prenatal period through toddlerhood. Practical application and assessment play an integral part of the course. Students will be introduced to observation, early intervention, and relationship-based care in diverse settings. Students complete a minimum of 24 hours practicum arranged by the instructor.

Pre-requisite(s): CHF 1500.

ECED 3620 - Curriculum Planning for Kindergarten

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to planning curriculum in kindergarten with an emphasis on design of learning environments and curriculum that are developmentally appropriate and evidence based. Students complete a minimum of 24 hours practicum. Student are required to complete a background check by the beginning of the semester.

Pre-requisite(s): CHF 1500; ECED 2500; ECED 2610.

ECED 3640 - Collaborating with Families of Young Children

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course explores culturally sustaining philosophies, processes, and methods of relational ethical practice for collaborating with diverse families of young children.

Pre-requisite(s): CHF 1500.

Suggested Requisite(s): Pre-requisite: ECED 2610 and ECED 3500. Co-requisite: ECED 4710 and ECED 4720.

ECED 3680 - Teaching Experience in the Preschool

Credits: (3)

Description: Provides students an opportunity to be an assistant teacher, to observe and interact with children on an individual and group basis; plan, develop, and implement activities for children.

Pre-requisite(s): CHF 1500, ECED 2610 and ECED 2620, or consent of instructor.

Note: This course is not currently offered.

ECED 4110 - Self-Compassion for Sustaining Work with Children

Credits: (2)

Typically Taught Fall Semester: *Full Sem-Online*

Description: This course examines ways to cultivate and sustain capacity for responding to the strengths and needs of all children, particularly those experiencing diverse circumstances and trauma, while attending to the physical, emotional, and mental stress professionals may be experiencing.

ECED 4130 - Language Development and Emergent Literacy in Early Childhood

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course explores current theory, research, and evidence based practices for promoting early language and emergent literacy development (birth 8 years) in home, child care, prekindergarten, and primary education environments through collaborative practices between early childhood professionals and parents.

Pre-requisite(s): CHF 1500.

ECED 4201 - Coaching EC/ECE Professionals: Foundation & Organization of Coaching Application: Organization & Self Reflection

Credits: (3)**Typically Taught Spring Semester:** *Full Sem odd years*

Description: Educator coaching is an evidence-based strategy to increase program quality and teacher effectiveness in early childhood/early childhood education classrooms, programs, and home delivery systems. This course will train EC/ECE coaches using material from research-based sources and program experiences. Participants will learn recommended practices in coaching related to early childhood and develop a systematic, individualized approach to effective coaching. Participants will learn practical strategies for coaching early childhood staff of diverse backgrounds and varying adult learning styles. Materials and discussions will include interpersonal communication skills and a systematic approach to more intentional coaching. Students will apply these strategies to Case Studies and field work experiences throughout the course and will participate in hands-on activities in class to apply new skills. Coaching skills will apply to any EC/ECE curriculum or model. This is course 1 in a three course series for the Utah Coaching Credential.

ECED 4202 - Coaching EC/ECE Professionals: Connecting Awareness with Application & Deepening of Practice**Credits: (3)****Typically Taught Summer Semester:** *Full Sem*

Description: Becoming an effective coach is a result of introspection, thoughtful planning, application of coaching skills and knowledge, and continuous self-improvement. This course will identify effective ongoing support strategies for individuals providing coaching. Participants will integrate skills with effective application in real life coaching experiences. Discussions will include self-reflective practices, self-directed action, planning and goal setting, and managing progress and accountability. Students will apply these strategies to case studies and real life experiences throughout the course. Students will be encouraged to engage in self-reflection and share ideas, successes, and challenges with other students in this course. This is course 2 in a three course series for the Utah Coaching Credential.

Pre-requisite(s): ECED 4201/GSE 6201 or instructor permission.

ECED 4203 - Coaching EC/ECE Professionals: Attuning for Personal and Organizational Change**Credits: (3)****Typically Taught Fall Semester:** *Full Sem*

Description: The success of the educator coaching relationship has been based on the trusting relationship between two peers, coach, and adult learner, through a collaborative process of co-learning. The opportunity for the adult learner to self-monitor, self-analyze, and self-modify enhances the adult learner's own resourcefulness and alters his/her own personal understanding. In addition, when the act of coaching is a collaborative process, the coach is also allowed the same opportunity to reflect on self as part of their learning. This course is designed to support the coach in creating a social learning climate where a synergy of shared learning and reflective dialogue about practice are examined, analyzed and refined. Participants will integrate skills from Course 1 and 2 with opportunities to engage in conducting and constructing ongoing support strategies the coach can apply, refine and alter based on the adult learners' needs, readiness, and values about practice. Using strategies and protocols, coaching for organizational change in diverse settings (home-based programming, early care settings, classrooms, and school districts, etc.), and identifying effective ongoing personal supports will also be addressed. Students will apply these strategies to case studies and real life experiences throughout the course. This is course 3 of a three course series for the Utah Coaching Credential.

Pre-requisite(s): ECED 4201/GSE 6201 and ECED 4202/GSE 6202 or instructor permission.

ECED 4220 - Understanding Children Beyond Behavior**Credits: (3)****Typically Taught Fall Semester:** *Full Sem*

Description: This course provides a foundation for understanding and engaging with children's behavior and needs in school, home, and community settings, toward new and relational understandings of children, child development, and difference. While studying theories and research from fields of neuroscience, psychoanalysis, Disability Studies in

Education, and critical perspectives in early childhood education, students will practice therapeutic techniques for observation and engagement with children and families.

ECED 4230 - Observing and Assessing Children in Context

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course provides students with knowledge and skills to use observation, documentation, and assessment tools to inform instruction, planning, and intervention programs for young children birth through eight years. Special attention is given to contextualized assessment practices that are responsive to children's strengths, needs, cultures, races, languages, and family experiences.

Suggested Requisite(s): Prerequisite ECED 2500, ECED 2610, ECED 2620; Corequisite ECED 4710, ECED 4720.

ECED 4250 - Inclusive Early Childhood Intervention and Special Education

Credits: (3)

Typically Taught Summer Semester: *1st Block, 1st Block Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: Students will explore and apply current theory and practice in critical special education, Disability Studies in Education, and infant and child mental health for supporting young children (birth-age 8) with disabilities by supporting caregiver-child relationships in family, early childhood community and classroom environments. Students will gain an understanding of applicable history, laws and policies around inclusive education and special education service provision to effectively and equitably collaborate with children, families, and service providers in public and private settings in ways that sustain the rights and cultures of individual children and families, and of disability communities.

ECED 4260 - Inclusive Early Childhood Curriculum

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Critical issues, theories, research, and practice in curriculum for inclusive early childhood education. The goal of this course is to assist students in planning, implementing, and evaluating curriculum that is accessible and culturally sustaining for diverse children and families. Students will be challenged to develop and articulate their own philosophies on what should be taught to young children and why.

ECED 4270 - Young Children's Play

Credits: (3)

Typically Taught Summer Semester: *1st Block, 1st Block Online*

Description: This course focuses on the active joyful nature of young children's play, therapeutic and educational value, and how play may vary for children experiencing diverse abilities, circumstances and cultural backgrounds. Students will gain practical strategies for supporting the play of all children.

ECED 4510 - Contemporary Issues in Planning for Children

Credits: (1-3)

Variable Title

Description: An in-depth study of a contemporary issue in childhood. In some cases, this course may substitute for one of the minor requirements when it has received prior approval from a department advisor.

May be repeated up to 3 credit hours.

Note: This course is not currently offered.

ECED 4670 - STEM in Early Childhood

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: This course fee will be used to provide coaching support for field experiences associated with this course.

Description: The purpose of this course is to build on a foundation of knowledge of developmentally appropriate practice for teaching integrated content in the disciplines of science, technology, engineering, and math (STEM) in early childhood settings. Fundamental approaches to learning will be employed to integrate learning across these disciplines. Students will develop meaningful curriculum content through hands-on learning experiences designed for children (birth through age 8) based on accepted learning standards in each content area.

Pre-requisite(s): ECED 2600, ECED 2610.

Pre-requisite/Co-requisite: ECED 2620.

ECED 4710 - Advanced Guidance and Planning for Early Childhood Education

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A synthesis of guidance and planning with an emphasis on assessment, appropriate objectives and strategies for individual and specific groups of children. Requires both lecture and lab time.

Pre-requisite(s): CHF 1500, ECED 2500, ECED 2600, ECED 2610, and ECED 2620.

Co-Requisite(s): Students majoring in EC, ECE, or taking an early childhood specialization with their K-6 license will register for the section that is offered the first 5 weeks of the semester, and take it concurrently with ECED 4720.

Pre-requisite/Co-requisite: ECED 3640.

ECED 4720 INT - Student Teaching Birth-5

Credits: (6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Student teaching provides a full-time 16-week, immersion experience. Students are placed in the Weber State University Melba S. Lehner Children's School or an approved off-campus pre-kindergarten classroom and spend the entire semester there. The focus is the study of developmentally appropriate practices using NAEYC professional standards for children birth to 5 years. During student teaching, students steadily increase their leadership in classroom responsibilities including curriculum development in math, science, language arts, and social studies; classroom design; child guidance; assessment; family involvement; health and safety; and the development of a professional role in the pre-K early childhood classroom. Supervision is provided by university supervisor and field-based professionals.

Pre-requisite(s): CHF 1500, ECED 2500, ECED 2600, ECED 2610, and ECED 2620.

Co-Requisite(s): To be taken concurrently with ECED 4710.

Pre-requisite/Co-requisite: ECED 3640.

Suggested Requisite(s): Search

May be repeated 2 times up to 9 credit hours.

ECED 4721 INT - Student Teaching K-3

Credits: (3-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: Student teaching supervision stipend and mileage.

Description: Students are placed in a public school K-3 classroom to teach a minimum of 60 contract days. The focus is to meet expectations of the Utah Effective Teaching Standards (UETS) and the NAEYC Professional Standards and Competencies for Early Childhood Educators. During student teaching, students steadily increase their leadership in classroom responsibilities including curriculum development in math, science, language arts, and social studies; classroom design; child guidance; assessment; family involvement; health and safety; and the development of a professional role in the public school early childhood classroom. Supervision is provided by university supervisors and field-based professionals to support mastery of knowledge, skills, and dispositions required for Utah Educator License in Early Childhood Education (Pre-Kindergarten - Grade 3).

Pre-requisite(s): ECED 4720.

May be repeated two times for a total of 6 credits.

ECED 4730 - Early Childhood/Early Childhood Education Program Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course prepares students with skills specific to leadership roles in early childhood education programs including: professional ethics, ensuring the health and safety of children, ongoing quality improvement, program leadership, planning, and management. Content and skills focus on practices endorsed by the National Association for the Education of Young Children (NAEYC) and are aligned with the NAEYC Standards for Early Childhood Professional Preparation Programs.

Pre-requisite(s): ECED 2600, ECED 2610, ECED 2620, or consent of the instructor, and concurrent or prior enrollment in ECED 4710 and ECED 4720.

ECED 4800 - Individual Research

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Supervised projects and primary research in various areas of Child and Family Studies. Limited to advanced students upon consent of faculty supervisor.

May be repeated up to 6 credit hours.

ECED 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ECED 4820 - Child Observation Seminar

Credits: (1)

Typically Taught Summer Semester: *1st Block Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The Child Observation Seminar is a small group reflective practice seminar. Students meet weekly to view and discuss video clips from work with young children in school, home, or community settings. Groups are facilitated to support early childhood professionals in feeling and awareness in their subjective emotional present, toward new experiences of themselves with children, families, and fellow early childhood professionals that may transform their work.

ECED 4830 - Directed Readings

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individually chosen readings on specialized topics supervised by a faculty member. Credit for this course towards a Child and Family Studies major or minor will only be accepted when the course is completed with a grade of B- or better.

Pre-requisite(s): Consent of faculty supervisor prior to registration.

May be repeated up to 3 credit hours.

ECED 4850 - Integrated ECE K-3 Student Teaching Seminar and Sythesis

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course will provide preparation and support for your pedagogical practice. Collaborative and topical seminars will emphasize on-going discussions and support on the pedagogical practice assessment, as well as topics such as classroom management, student engagement, ethics, and preparing a professional career file.

Pre-requisite(s): EDUC 3240.

Co-Requisite(s): ECED 4721.

ECED 4860 INT - Practicum in Early Childhood

Credits: (1-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students apply knowledge, skills, and competencies needed to plan and teach a culturally appropriate curriculum for young children. The practicum requires 45 field experience hours for each credit hour registered. A background check is required for all early childhood field experiences. Consent of instructor or faculty advisor is required prior to registration.

Pre-requisite(s): CHF 1500, ECED 2500, ECED 2600, ECED 2610, ECED 2620 and ECED 3640.

Suggested Requisite(s): Can be taken concurrently with ECED 4710 and ECED 4720.

May be repeated up to 6 credit hours.

ECED 4861 INT - Practicum in K-3

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: This course fee will be used to cover costs for providing coaching support for field experiences associated with this course including onsite classroom observations.

Description: The purpose of this practicum is to provide students with opportunities to design and implement integrated instruction in the early elementary grades (K-3) working with an experienced teacher. Students will focus on integrating pedagogical approaches and discipline specific content related to the courses taken concurrently with the practicum. *In ECE Block 1 students are required to complete 30 field experience/practicum hours in an early elementary classroom (K-3, preferably K or 1st) for 1 credit. In ECE Block 2 students are required to complete 60 field experience/practicum hours in an early elementary classroom (K-3, preferably 2nd or 3rd) for 2 credits.*

Pre-requisite(s): ECED 2620.

ECED 4890 INT - Internship in Early Childhood

Credits: (1-6)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$50.00**Course Fee Purpose:** This course fee will be used to provide coaching support for field experiences associated with this course.**Description:** Provides academic credit for on-the-job learning experience as a bridge to becoming a professional in the early childhood field. Ethical conduct related to working with children and families will be studied. Professional activities will include goal setting, strategies, and documentation of progress are included in a final Professional Development Integrated Statement. Students arrange their own field placement in a professional setting with the help of the instructor. 120 field experience hours are required for 3 credits (40 hours/credit). Prior consent of the faculty instructor is required. A background check will be required for work in most early childhood settings. 3-credits are required for Early Childhood BS majors.**Pre-requisite(s):** For Early Childhood BS majors: ECED 4710 and ECED 4720, or consent of faculty supervisor.**ECED 4900 - Career Strategy Seminar****Credits: (1)****Description:** Open to first semester Juniors through first semester Seniors in all academic schools. Course objectives are to help students develop a career strategy to meet expected career goals, i.e., acquire a career position or successfully prepare for graduate school acceptance.

Note: This course is not currently offered.

ECED 4910 - Children & Families: Variable Titles**Credits: (1-3)****Variable****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** An in-depth examination of the conceptual knowledge, research, theory and applied skills investigating specific topics for early childhood and family life educators such as becoming a teacher leader, observation and assessment, children's health and well-being, infant mental health, or trauma informed care and teaching.**ECED 4920 - Short Courses, Workshops, Institutes, and Special Programs****Credits: (1-6)****Workshop****Description:** Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is taught as needed.

ECED 4980 - Early Childhood Senior Synthesis Seminar**Credits: (1)****Description:** Synthesis of Early Childhood/Elementary Education program of study with specific emphasis on beginning a professional career in teaching. Senior project not required.**Suggested Requisite(s):** To be taken concurrently with student teaching.

Note: This course is not currently offered.

ECED 4990 - Seminar in Early Childhood Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is an Early Childhood Education capstone course in which students synthesize and demonstrate learning outcomes expected for all ECE professional standards and competencies.

Pre-requisite(s): ECED 2500, ECED 2600, and ECED 3500 or instructor's consent.

Pre-requisite/Co-requisite: ECED 3640, ECED 4710, and ECED 4720.

ECON 1010 SS - Economics as a Social Science

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to basic economic institutions and principles of economics for non-business and non-economics majors. The primary objective of the course is to provide a framework of economic approaches useful in the analysis of social problems. Topics include poverty, economic systems, crime, pollution, health, discrimination, unemployment, inflation, and the role of government in the economy.

ECON 1100 SS - Environmental Issues and Economic Policy

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An analysis of policies which affect environmental resources. Emphasis on economic analysis of renewable and nonrenewable resources, pollution, and public policy. This course demonstrates economic solutions to environmental problems, and the role economics plays in designing environmental policy.

Note: Check with department for course availability.

ECON 1740 AI - Economic History of the United States

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A critical study of the history of the American Economy, significant events, fundamental principles of a market economy, interactions between government and the market economy, and the evolution of fundamental economic institutions.

ECON 2010 SS - Principles of Microeconomics

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$4.00

Course Fee Purpose: Helps fund the GSBE Peer Tutoring Center. Paying wages for tutors and replacement of equipment and furniture.

Description: The application of economic concepts to the analysis of scarcity of individual, firm, and organizational behavior. Topic coverage includes the theories of how consumers and firms make choices, and how various rules guide their respective decisions. The course also explores the theory of market structures, such as perfect and imperfect competition, as well as monopoly.

Pre-requisite(s): Earn a "C" or better in MATH 1010, MATH 1050, MATH 1080, MATH 1090, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1010, MATH 1050, MATH 1080, or MATH 1090 is a

prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 23 or higher on Math ACT or; score of 55 or higher on ALEKS.

ECON 2020 SS - Principles of Macroeconomics

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: Help fund the GSBE Peer Tutoring Center, paying for wages for tutors and replacement of equipment and furniture.

Description: Analyzes human behavior and choices as they relate to the entire economy, with specific focus on national income measurement, unemployment, inflation, business cycles, global trade, and economic growth. Implications of different government policies, e.g., changes in taxation, government spending, money supply or interest rates for a stable economy and steady growth are explored.

Pre-requisite(s): Earn a "C" or better in ECON 1010, MATH 1010, MATH 1050, MATH 1080, MATH 1090, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1010, MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 23 or higher on Math ACT or; score of 55 or higher on ALEKS.

ECON 2899 - Economics Foundations Check

Credits: (0)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Completion of ECON 2899 is required of all non-business Economics students pursuing any Bachelor of Science, Associate of Science, or minors awarded by the John B. Goddard School of Business & Economics. The course checks if you have declared a major in GSBE, if you have passed ENGL 2010 or ENGL 2015, MATH 1050 or MATH 1090 (or their equivalent), and all Business Foundations courses with a C or higher, and if you are in good academic standing. *Credit/No credit.*

Pre-requisite(s): Earn a "C" or better in MATH 1050, MATH 1080, MATH 1090, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS.

Pre-requisite/Co-requisite: (ENGL 2015 or ENGL 2015) and ECON 2010 and ECON 2020 and QUAN 2600.

Suggested Requisite(s): Students should register for this course concurrent with (same semester as) their last Economics Foundation course(s) ((ENGL 2015 or ENGL 2015) and ECON 2010 and ECON 2020 and QUAN 2600) or after the required Economics Foundation courses have been completed.

ECON 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

ECON 3030 - Managerial Economics

Credits: (3)

Description: This course uses the tools of differential calculus and regression theory to analyze the managerial decisions of individual firms.

Pre-requisite(s): MATH 1050, QUAN 2600, QUAN 3610.

Note: Course not currently being offered.

ECON 3090 - History of Economic Thought**Credits: (3)**

Description: This course covers the major concepts and contributions of the scholars of the past in economic doctrine and interpretations.

Pre-requisite(s): ECON 2010, ECON 2020, and MATH 1050 or MATH 1080 or MATH 1210.

Note: Course not currently being offered.

ECON 3110 - International Trade**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to the pure theory of trade, international trade agreements and negotiations (e.g., GATT, EU and NAFTA) and the institutions designed to encourage trade. Emphasis on the benefits of free trade as well as the reasons for the existence of trade barriers such as tariffs and quotas. Special topics include trade in agricultural products and international labor migration.

Pre-requisite(s): ECON 2010 and ECON 2020, and earn a "C" or better in MATH 1050, MATH 1080, MATH 1090, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS.

ECON 3120 GLB - International Finance and Monetary Systems**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Applications of the principle of economics to the international monetary system. Special emphasis on the way in which international monetary institutions can facilitate trade. Macroeconomic models of an open economy are used to examine the effect that international trade and financial ties have on the domestic economy. Special topics include institutions such as the World Bank and the IMF, along with regional monetary unification in Europe.

Pre-requisite(s): ECON 2010 and ECON 2020, and earn a "C" or better in MATH 1050, MATH 1080, MATH 1090, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS.

ECON 3150 - Business Studies Abroad-International Finance**Credits: (3)**

Description: This course studies the globalization of financial markets and the environment in which international finance takes place, e.g., the international monetary system. With this background, a global financial strategy design for corporations will be discussed. This course is taught at Fachhochschule Hof, Germany during each fall semester. Students enrolled in this course have to participate in the Study Abroad Program (Contact: Doris Geide-Stevenson, ext. 7634, dgsteven@weber.edu).

Note: Check with department for course availability.

ECON 3200 - Money and Banking

Credits: (3)**Typically Taught Spring Semester:** *Full Sem*

Description: This course presents a detailed description and economic analysis of the U.S. financial system which includes the banking industry, bond and stock markets, and the Federal Reserve system. This course serves as an extension to the material covered in an introductory macroeconomics course. The enhanced understanding of the workings of the financial system, including the determination of interest rates, will be used to trace out the channels of monetary policy as conducted by the Federal Reserve and the effect of monetary policy on financial markets, such as the stock market.

Pre-requisite(s): ECON 2010 and ECON 2020, and earn a "C" or better in MATH 1050, MATH 1080, MATH 1090, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS.

ECON 3300 - Environmental Economics**Credits: (3)****Typically Taught Spring Semester:** *-Every Other - Full Sem*

Description: Environmental Economics applies economic concepts to environmental and resource topics. We will use both standard economic and ecological analyses. Specific topics include externalities, public goods, environmental accounting, nonrenewable and renewable resource use, pollution, and climate change.

Pre-requisite(s): ECON 2010 and ECON 2020 and earn a "C" or better in MATH 1050, MATH 1080, MATH 1090, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS.

ECON 3400 - Labor Economics**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: The study of labor economics explores choices made by the two sides of the labor market, employers and workers and how these choices interact in determining wage and employment levels. Hence, an important part of the course consists of a detailed analysis of labor demand and supply. This analysis is followed by a discussion of why the labor market often does not clear, i.e., why we observe unemployment. The analysis focuses on special features of the labor market such as minimum wage, labor unions and efficiency wages. Other topics include the effect of education and training on earnings, the optimal incentive structure of an employment contract and determinants of income inequality.

Pre-requisite(s): ECON 2010, and earn a "C" or better in MATH 1050, MATH 1080, MATH 1090, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS.

ECON 3410 - Women in the World Economy**Credits: (3)**

Description: Applications of the principles of economics to the analysis of the economic status of women in the U.S. and elsewhere. The focus is on labor markets, income differentials, the tax system and household work. Special consideration is given to women in developing economies.

Pre-requisite(s): ECON 2010 and MATH 1050 or MATH 1080 or MATH 1210.

Note: Course not currently being offered.

ECON 4010 - Intermediate Microeconomic Theory

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The application of economic concepts to individual and firm behavior, consumer behavior, demand analysis, economics of the firm, and price theory.

Pre-requisite(s): ECON 2010 and ECON 2020 and earn a "C" or better in MATH 1050, MATH 1080, MATH 1090, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS.

ECON 4020 - Intermediate Macroeconomic Theory

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The building of standard models to test theories of long-run economic performance and short-term fluctuations in closed and open economies. Emphasis is placed on how fiscal and monetary policies encourage long-run growth while mitigating the negative effects of short-term fluctuations.

Pre-requisite(s): ECON 2010 and ECON 2020 and (QUAN 2400 or MATH 1210) and (BSAD 2899 or ECON 2899).

ECON 4170 - Economic Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The application of economic principles to the challenging problems of third world and developing nations including Africa, Asia, Latin America and the newly independent states of the Former Soviet Union and Eastern Europe.

Pre-requisite(s): ECON 2010 and ECON 2020 and earn a "C" or better in MATH 1050, MATH 1080, MATH 1090, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS*.

ECON 4320 - Industrial Organization

Credits: (3)

Description: The theory and performance of firms and industries in the context of substantial market power and market regulation. Emphasis on oligopoly, game theory, and theory of markets within the context of global market competition.

Pre-requisite(s): QUAN 2400 or ECON 3030, ECON 2010.

Note: Course not currently being offered.

ECON 4330 - Game Theory

Credits: (3)

Typically Taught Fall Semester: *Every Other - Full Sem*

Description: This course is an introduction to game theory, the study of strategic behavior among parties having opposed, mixed, or similar interests. This course will sharpen your understanding of strategic behavior in encounters with other individuals. You will learn how to recognize and model strategic situations, to predict when and how your actions will influence the decisions of others and to exploit strategic situations for your own benefit.

Pre-requisite(s): ECON 2010 and ECON 2020 and earn a "C" or better in MATH 1050, MATH 1080, MATH 1090, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS*.

ECON 4520 - Public Finance

Credits: (3)

Description: This course covers the aspects of economic policy that arise in the operations of a public budget. Topics addressed include economic theories of bureaucracy, public expenditures, and taxation.

Pre-requisite(s): ECON 2010, ECON 2020 and MATH 1050 or MATH 1080 or MATH 1210.

Note: Course not currently being offered.

ECON 4550 - Introduction to Econometrics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Advanced Regression Analysis. Topics include ordinary least squares, generalized least squares, nonlinear regression, dummy variables, autocorrelation, heteroskedasticity, and serial correlation. Computers used extensively.

Pre-requisite(s): ECON 2010, ECON 2020, QUAN 2400, and QUAN 3610.

ECON 4560 - Mathematical Economics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Advanced application of mathematical modeling techniques to selected economic issues.

Pre-requisite(s): ECON 4010, ECON 4020, QUAN 2400 or MATH 1210, and QUAN 3610.

ECON 4800 - Independent Research

Credits: (1-3)

Description: Individual work or work in small groups, by arrangement, in special topics not included in the announced course offerings.

Pre-requisite(s): QUAN 3610 and approval of instructor.

May be repeated twice with a maximum of 3 credit hours.

Note: This course is offered as needed.

ECON 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

ECON 4850 - Economics Study Abroad

Credits: (1-3)

Description: This course is designed for students who will study economics at one of the international partner universities of the Goddard School of Business and Economics as part of an extended study abroad visit. Students

will explore the international economic institutions, business culture, and applications of economic theory to countries outside of the US. Students will study international economics as offered through a partner university (or other university with department chair approval).

Pre-requisite(s): ECON 2899 and BSAD 2899.

May be repeated once up to 6 credits.

Note: This course is offered as needed.

ECON 4860 INT - Economics Internship

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A structured professional-level field experience. The student will be counseled and supervised as he/she applies and integrates the knowledge and skills obtained through the Business Economics or International Business Economics program courses.

Pre-requisite(s): BSAD 2899; Instructor approval.

ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

ECON 4970 - Introduction to Research Methods

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course prepares students for ECON 4980 Research Methods. Students will study the research process and the scientific method as it applies to economics. Students will have an opportunity to explore various fields and literature in order to design a thesis project for ECON 4980.

Pre-requisite(s): ECON 2899 or BSAD 2899.

ECON 4980 CRE - Research Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A course designed for senior economics majors which requires the completion of an extensive thesis project. This course will focus on the formulation of hypotheses, review of relevant literature, and either theoretical or empirical analysis.

Pre-requisite(s): ECON 4970, BSAD 2899 or ECON 2899, QUAN 3610, ECON 4010 or ECON 4020.

ECON 6330 - Game Theory

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is an introduction to game theory, the study of strategic behavior among parties having opposed, mixed, or similar interests. This course will sharpen your understanding of strategic behavior in encounters

with other individuals. You will learn how to recognize and model strategic situations, to predict when and how your actions will influence the decisions of others and to exploit strategic situations for your own benefit. The graduate version of the course includes advanced readings from academic literature and other assignments for a more in-depth review of game theory concepts.

Pre-requisite(s): Admission to the MA in Peace, Development, and Social Transformation and the leveling requirements associated with admission to that program, and ECON 2010 Principles of Microeconomics

ECON 6550 - Econometrics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Regression Analysis. Topics include ordinary least squares, dummy variables, autocorrelation, heteroskedasticity, and serial correlation. Computers used extensively. By the end of the course, students will be able to: Develop a multiple regression model, understand the assumptions of multiple regression and recognize the consequences when they are not satisfied, test for statistical significance in a multiple regression setting, use dummy variables as independent and dependent variables, recognize endogenous regressors, and simulate key econometric principles.

Pre-requisite(s): Admission to the Master of Science in Data Science and the leveling courses associated with those requirements.

ECON 6900 - Special Topics in Economics

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course explores new or otherwise relevant economics topics that are not covered in a regularly offered course. Each offering will have a specific title and authorized credit that will appear on students' transcripts. Course may be repeated for credit under different titles. Lecture or Lecture/Lab combination. May be taken twice up to 6 credits.

Pre-requisite(s): Instructor Permission.

EDUC 1010 CEL - Exploring Teaching

Credits: (3)

Description: Students will explore the exciting world of teaching, examine what it means to be a teacher, and participate in field observations. This course is designed to introduce students to personal and professional experiences within the educational community.

Pre-requisite(s): This course or an equivalent approved course is a prerequisite to all licensure programs in the Department of Teacher Education.

EDUC 1210 - Learning and Engagement for Adult Learners

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Block*

Typically Taught Fall Semester: *Full Sem, 1st Block*

Typically Taught Spring Semester: *Full Sem, 1st Block*

Description: This course focuses on helping teachers of adult learners create an inclusive learning environment by incorporating effective learning strategies and skills in an engaging, well-managed classroom.

EDUC 1220 - Instructional Planning and Assessment for Adult Learners

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 2nd Block*

Typically Taught Fall Semester: *Full Sem, 2nd Block*

Typically Taught Spring Semester: *Full Sem, 2nd Block*

Description: This course focuses on the identification or creation of instructional learning objectives, selecting and/or designing aligned assessments, planning engaging instructional activities, and enactment and reflection of instruction to meet the needs of all adult learners.

Pre-requisite/Co-requisite: EDUC 1210.

EDUC 2000 - Social Studies Concepts for Elementary Teachers

Credits: (3)

Description: Fundamental concepts from the social sciences commonly found in elementary social studies curriculum.

Note: This course is not currently offered.

EDUC 2010 CEL - Human Exceptionality and Assistive Technology

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Spring Semester: *Full Sem*

Description: This course will introduce students to the characteristics of exceptional children with emphasis on the educational and psychological and technology implications of disabilities to the development of the child. A minimum grade of C is required in this course.

EDUC 2210 - Designing Hybrid Courses for Adult Learners

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Block*

Typically Taught Fall Semester: *Full Sem, 1st Block*

Typically Taught Spring Semester: *Full Sem, 1st Block*

Description: This course is on the design of hybrid courses for adult learners. Students will practice designing a course using a Learning Management System, graphic design and tools for designing instructional material. They will learn about basic principles for integrating technology and supporting interaction. Special emphasis in this course will be given to course accessibility.

EDUC 2220 - Program Planning and Evaluation

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 2nd Block*

Typically Taught Fall Semester: *Full Sem, 2nd Block*

Typically Taught Spring Semester: *Full Sem, 2nd Block*

Description: This course focuses on the creation and evaluation of competency-based programs for adult learners including the development of program scope and sequence, program-level outcomes, program assessment plans, and program evaluation reporting.

Pre-requisite/Co-requisite: EDUC 1220.

EDUC 2300 GLB - Global Perspectives on Education and Learning

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course begins by introducing perspectives on globalization and how the globalization process impacts educational policies and practices. We will then discuss three major topics from an international and

comparative perspective. These three topics are: 1) educational policies and practices; 2) pedagogies and classroom practices; 3) individual experiences of learning. Case studies will be used to demonstrate different ways to examine how schools teach, as well as how students learn, in various social contexts. Towards the end of the course, students will learn to develop age appropriate pedagogical tools by incorporating global learning perspectives that can be used in K-12 classrooms.

EDUC 2604 - Information Resources in Education

Credits: (1)

Description: Intended for students interested in education, this one-credit hour course will assist in developing information literacy and academic research skills, and an understanding of academic integrity issues unique to the field of education. Students will develop skills in identifying, locating, retrieving, documenting, and critically evaluating both electronic and print resources that are appropriate for undergraduate research, with emphasis in education and related disciplines.

Cross-Listed with LIBS 2604.

EDUC 2800 - Instruction, Technology, Assessment, and Planning

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to prepare paraeducators with a foundation in supporting instructional planning, presenting instruction, using technology in the classroom, and using teacher selected assessment to determine student learning.

EDUC 2820 - Creating a Learning Environment

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course explores methods for designing positive K-12 learning environments. Students will be provided with a framework for supporting a positive learning environment including classroom spaces, and consider a wide range of strategies, techniques, and factors in supporting a positive learning environment for all learners.

EDUC 2890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: For students not yet accepted to the Teacher Education Program who meet the minimum cooperative work experience requirements of the department. Provides academic credit for on-the-job experience. Amount of credit will be determined by the department. Fingerprinting/ background check must be completed prior to working in the schools.

May be repeated up to 6 credit hours.

EDUC 2900 - Career Planning and Exploration

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course provides a comprehensive approach to career development, planning, preparation, and selection. It is designed to assist students as they develop their future goals through assessment of personal strengths, values, interests, and abilities. Students will learn valuable decision-making skills required for choosing a major and career path. The course provides strategies for successfully entering the job market through resume creation, interview preparation, and exploration of labor market information. This class requires the completion of online career assessments for a total cost of \$10. To access online course materials, please go to your student portal, log into eWeber, and click on WSU Online-Canvas.

EDUC 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: May be taken on a Credit/No Credit basis.

EDUC 3100 - Instructional Planning & Assessment

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces the basic concepts of lesson and unit design, planning and assessment based on student needs. May include field experiences that involve travel to local schools or other relevant destinations.

Pre-requisite(s): Completion of Elementary Education Level 1 courses with a grade of B- or better.

Suggested Requisite(s): This course should be taken with other courses in Elementary Education Level 2.

EDUC 3110 - Instructional Technology

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course allows students to apply existing technology literacy into educational environments to promote enhanced learning. The curriculum is based on teacher skills required to teach Utah State Educational Technology Standards for students in K-8 settings. The course focuses on providing teacher licensure candidates with basic technology proficiencies for teaching with technology.

Pre-requisite(s): Completion of the computer and information literacy requirements.

EDUC 3115 - Media Integration in Elementary Education Settings

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on how to create media to support and apply research-based principles for learning into educational environments. The course content is based on Utah core curriculum skills for students in the K-8 setting. The course provides students with technology proficiencies for integrating technology into teaching.

Pre-requisite(s): Admission to Teacher Education.

Suggested Requisite(s): Should be taken with other courses in Level 1.

EDUC 3117 - Media Integration in Elementary Education Settings 2

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on integrating media and technology to support and apply research-based principles for learning in educational environments for traditional, blended, and online instruction. Students will continue to develop their skills and knowledge about how to incorporate technology into the curriculum to support meaningful instruction. A variety of technologies will be utilized for designing digital curriculum and developing 21st century standards. The course content is based on Utah core curriculum skills for students in the K-8 setting. May include field experiences that involve travel to local schools or other relevant destinations.

Pre-requisite(s): Successful completion (B- or better) of Elementary/Early Childhood Level 1.

EDUC 3120 - Reading Instruction in the Primary Grades

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to familiarize the teacher candidate with current knowledge and practices as they relate to teaching literacy (reading, writing, listening, and speaking) in the primary grades (K-2). The focus of this course will be how to apply current literacy research in a primary grade classroom.

Pre-requisite(s): Admission to Teacher Education.

Co-Requisite(s): EDUC 3210.

EDUC 3130 - Curriculum, Instructional Planning, and Assessment

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces the basic concepts of lesson and unit design, planning, and assessment based on student needs.

Pre-requisite(s): Elementary Level 1

Co-Requisite(s): Elementary Level 2

Note: Program of Study Code

EDUC 3140 - Educational Psychology, Interpersonal Skills and Classroom Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The focus of this course is the fundamental theories and philosophies, concepts, processes, and applications related to human behavior, teaching and learning, interpersonal relationships, and classroom management.

Pre-requisite(s): Admission to Teacher Education.

Suggested Requisite(s): This course is part of Elementary Education Level 1 and should be taken with EDUC 3120, EDUC 3205, EDUC 3270, EDUC 4550.

EDUC 3145 - Educational Psychology and Child and Adolescent Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course examines historical and contemporary perspectives in educational psychology, child and adolescent development and guidance, for kindergarten through 8th grade, with a focus on translating theory to

practice within diverse communities of learners. It is part of an integrated field experience.
Note: Program of Study Code

EDUC 3205 - Culturally and Linguistically Responsive Teaching

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Rationales, concepts, practices provide a scope of understanding and awareness regarding the role of cultural and language pluralism in school and society. Foundations and theories on the role of family and community influence on student values are also explored. Experiences are provided intended to develop basic skills in personal interaction and adaptation to teaching diverse populations.

Pre-requisite(s): Admission to Teacher Education.

Suggested Requisite(s): Should be taken with other courses in Level 1.

EDUC 3210 INT - Practicum in Elementary Education

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Practicum fees are to cover our faculties mileage associated with the observation/supervision of the students.

Description: The purpose of this practicum is to provide students with opportunities to design and implement integrated instruction in the elementary grades. Students are required to spend at least 40 hours in an assigned classroom.

Pre-requisite(s): Admission to Teacher Education.

Suggested Requisite(s): This course is part of Elementary Education Level 2 and should be taken with EDUC 3100, EDUC 3240, EDUC 4345, PEP 3620.

EDUC 3220 - Foundations of Diversity

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Rationales, concepts, practice provide a scope of understanding and awareness regarding the role of cultural and language pluralism in school and society. Foundations and theories on the role of family and community influence on student values. Experiences intended to develop basic skills in personal interaction and adaptation to teaching diverse populations.

Pre-requisite(s): Admission to Teacher Education.

Suggested Requisite(s): This course is part of the professional core courses and should be taken with EDUC 3265, EDUC 3315, EDUC 3900, EDUC 3910, and EDUC 3935.

EDUC 3230 - Media and Data Science for Elementary Settings

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course supports students to utilize a range of technology tools to present teaching content, analyze student achievement data, calculate basic statistics, develop personalized learning activities, and facilitate creative content creation.

The course builds upon and will use content learned in MATH 2010, MATH 2015, and MATH 2020. The course content is based on Utah core curriculum skills for students in the K-8 settings. and may include field experiences that involve travel to local schools or other relevant destinations.

Pre-requisite(s): MATH 2015.

EDUC 3240 - Reading Instruction in the Intermediate Grades

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will provide theories, methods, and assessments for reading in the elementary school, Grades 3-6. Students will understand reading instruction in relation to the wider processes of literacy and language development to guide elementary students to effectively communicate through oral and written languages for different contexts, which includes text-based and digital environments. The course will also include the contemporary issues on elementary reading instruction. May include field experiences that involve travel to local schools or other relevant destinations.

Pre-requisite(s): EDUC 3120.

Co-Requisite(s): EDUC 4680A or EDUC 4840A.

EDUC 3265 - The Exceptional Student

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students will learn about the learning and social characteristics of young people with exceptionalities- that is, disabilities (physical, mental, learning) or giftedness-and about public policy and services available to them. As future teachers, they will learn about how such individuals are identified and served by the school system, what strategies are effective for instructing them, and roles and responsibilities of school personnel in providing appropriate educational experiences for all students in an inclusive classroom.

Pre-requisite(s): Admission to Teacher Education.

Suggested Requisite(s): This course is part of the professional core courses and should be taken with EDUC 3220, EDUC 3900, EDUC 3315, EDUC 3935, EDUC 3910.

EDUC 3270 - Addressing Differentiation, Collaboration and IEPs for Inclusive Teaching

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The Individuals with Disabilities Education Improvement Act of 2004 (IDEA-04) mandates that students with disabilities be educated "to the maximum extent appropriate with children who are not disabled." The expectation is that students with disabilities will have access to, and make adequate progress in, the general curriculum. Therefore, it is essential for general educators and special educators to work collaboratively. This course is designed to provide preservice teachers with the knowledge and skills of effective inclusive teaching practices.

Pre-requisite(s): Admission to Teacher Education and EDUC 2010.

Suggested Requisite(s): Should be taken with other courses in Level 1.

EDUC 3280 - Elementary Social Studies Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on the place of social studies in the elementary school curriculum, the scope and rationale of the social studies curriculum, connections with other subject areas, teaching and assessment strategies,

and building classroom community.

Co-Requisite(s): EDUC 4680A or EDUC 4840A or EDUC 3210.

EDUC 3300 - Introduction to International Education: Case Studies

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course uses case studies of education systems and practices from Japan, China, South Korea, Finland, Cuba, Germany, Poland, and the U.S. to demonstrate the interactions of social-cultural contexts, school policies and practices, as well as the individuals' learning processes. Theories of and perspectives on examining educational policies and practices will be introduced throughout the class along with case studies covering a diverse range of contexts. The class will be a mix of lectures, discussions, and in-class demonstrations, so students will have many opportunities to actively engage with the material in multiple ways. Students will also have opportunities to discuss educational issues with college students from China, Japan, India and Singapore via a virtual platform.

EDUC 3315 - Media Integration in the Secondary School Setting

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on how to create media to support and apply research-based principles for learning into the educational environments. The curriculum is based on Core Curriculum skills for students in grades 9-12. The course content provides teacher licensure candidates with technology proficiencies for integrating technology into teaching.

Pre-requisite(s): Admission to Teacher Education. Verification of technology literacy training (through coursework or job experience) within the past five years. Completion of the computer and information literacy requirements.

Suggested Requisite(s): This course is part of the professional core courses and should be taken with EDUC 3220, EDUC 3265, EDUC 3900, EDUC 3910, EDUC 3935.

EDUC 3370 - Advanced Instructional Technology

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course allows students to apply existing technology literacy into educational environments to promote advanced use of educational technology in learning environments. The curriculum is based on teacher skills required to teach Utah State Educational Technology Standards for students in K-6 settings. The course focuses on providing teacher licensure candidates with advanced technology proficiencies for teaching with technology.

Pre-requisite(s): Verification of technology literacy training (through coursework or job experience) within the past five years. Completion of the computer and information literacy requirements.

EDUC 3371 - Assistive Technology

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides students with an understanding of the use of assistive technology for students with disabilities. Students will learn to assess student assistive technology needs, identify assistive technology used to provide students access to educational opportunities, and application of assistive technology in instructional programs, career tasks, and life skills for individuals with disabilities.

EDUC 3375 - Foundations of Dual Immersion or Immersion Education

Credits: (3)

Description: The course examines the background, underlying theory, and research foundations that support dual language and immersion education practices. Issues for teachers and administrators will be addressed. Practices and principles that inform language attentive curriculum will be a focus of the course.

EDUC 3390 - Literacy in the Primary Grades

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Analysis of developmental reading skills with emphasis on readiness for reading, phonic and structural analysis, word recognition, use of the basal reader, and reading for various purposes.

EDUC 3430 - Creative Processes in the Elementary School

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: A \$15 fee is associated with this course. A ukulele will be available for you to borrow during the semester. Art supplies for projects completed in the classroom will be supplied.

Description: This course focuses on the development of attitudes, methods, and skills in creative teaching, including an exploration of using music, art, dance, and drama in the elementary classroom. Graduate students will also explore philosophy, research, and theories that support arts integration, and development of teaching strategies and materials for use in the elementary classroom.

EDUC 3545 - Universal Positive Behavior Support Strategies for Teachers

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to teach teacher candidates validated classroom management strategies and level one behavioral intervention strategies. This course focuses on techniques and methods for preventative classroom student management. The course will assist candidates in writing effective classroom management plans. Candidates will be introduced to the process of Functional Behavior Assessments and Behavior Intervention Plans.

Pre-requisite(s): Completion of Education Level 1 courses with a grade of B- or better.

EDUC 3565 - Elementary English Language Arts: Evaluation, Remediation and Supports

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to teach teacher candidates validated evaluation and remediation strategies for K-5 students struggling in English Language Arts, focusing on techniques in elementary reading, writing, speaking, listening, and language. Candidates will be introduced to the process of identifying reading and writing difficulties, selecting evidence-based interventions, implementing instruction, and using the data-based instructional decision model to monitor students' ELA progress and intervention effectiveness.

Pre-requisite(s): Completion of Education Level 1 courses with a grade of B- or better.

Co-Requisite(s): This course is part of Special Education Block 2 courses and should be taken with EDUC 3545, EDUC 4515, EDUC 4521, EDUC 4530.

EDUC 3575 - Special Education Math Methods for students on IEPs

Credits: (2)**Typically Taught Spring Semester:** *Full Sem*

Description: This course is designed to teach students validated evaluation and remediation strategies for K-12 students struggling in math. This course focuses on techniques in teaching mathematics. The course will assist students in designing evidence-based remediation plans for students struggling with math skills. Students will be introduced to the process of identifying math difficulties, selecting evidence-based interventions, implementing instruction, and using the data-based instructional decision model to monitor students' progress and intervention effectiveness.

Pre-requisite(s): MATH 2010. Completion of Education Level 1 courses with a grade of B- or better.

Co-Requisite(s): This course is part of Special Education Block 2 courses and should be taken with EDUC 3545, EDUC 3565, EDUC 4515, EDUC 4521, EDUC 4530.

EDUC 3585 - Working with Students with ELA or Math Disabilities in Inclusion Settings**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This course is designed to teach pre-service teachers validated accommodations and supports for K-12 students with disabilities struggling in English Language Arts (ELA) and/or Math in inclusive settings, specifically focusing on reading, writing, speaking, listening, language, and math.

Pre-requisite(s): MATH 2010, successful completion of Education Level 1.

EDUC 3590 - Working with Students with ELA or Math Disabilities in Resource Settings**Credits: (3)****Typically Taught Fall Semester:** *Full Sem*

Description: This course is designed to teach pre-service teachers validated evaluation and remediation strategies for K-12 students with disabilities in English Language Arts and/or math, focusing on identifying deficits and designing and disseminating evidence-based remediation plans.

Pre-requisite(s): MATH 2020, successful completion of Level 2.

EDUC 3860 - Practicum In Special Education**Credits: (1-3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:**

The purpose of this practicum is to provide teacher candidates with opportunities to implement content-specific instruction and demonstrate quality inclusion strategies while working with students in special education. Teacher candidates are required to spend at least 30 (1cr)-60(3cr) (1cr), or 45(2 cr) or 60(3cr) hours in an assigned classroom.

Pre-requisite(s): Admission to Teacher Education

Co-Requisite(s): EDUC 6565 and EDUC 3270.

EDUC 3900 - Preparing, Teaching, and Assessing Instruction**Credits: (2)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This integrated course will focus on lesson planning, teaching, and assessment through the application of the Teacher Work Sample (TWS) using lesson plan formats taught in the content areas. A variety of instructional strategies effective for use at the secondary level will be taught and modeled.

Pre-requisite(s): Admission to Teacher Education.

Suggested Requisite(s): This course is part of the professional core courses and should be taken with EDUC 3220, EDUC 3315, EDUC 3265, EDUC 3910, and EDUC 3935.

EDUC 3910 INT - Secondary Education Practicum

Credits: (2)

Course Fee: \$50.00

Course Fee Purpose: Practicum fees are to cover our faculties mileage associated with the observation/supervision of the students.

Description: The purpose of this practicum is to provide students with opportunities to design and implement content-specific instruction at the secondary level. Students are required to spend at least 40 hours in an assigned classroom.

Pre-requisite(s): Admission to Teacher Education.

Suggested Requisite(s): This course is part of the professional core courses and should be taken with EDUC 3220, EDUC 3265, EDUC 3315, EDUC 3900, EDUC 3935.

EDUC 3935 - Reading and Writing Across the Secondary Curriculum

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will focus on assessment of reading comprehension of students, and decisions teachers make concerning methods, materials and procedures based on those assessments. Teacher candidates will integrate literacy skills (vocabulary, study skills, comprehension development and writing) within their respective content areas and teach sample lessons to secondary students.

Pre-requisite(s): Admission to Teacher Education.

Suggested Requisite(s): This course is part of the professional core courses and should be taken with EDUC 3220, EDUC 3265, EDUC 3315, EDUC 3900, EDUC 3910.

EDUC 4210 INT - Elementary Level III Practicum

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Course fees are used to pay for mileage of supervisors.

Description: The purpose of this practicum is to provide students with opportunities to design and implement integrated instruction in the elementary grades. Instruction will focus on instruction of core subjects including language arts, mathematics, science, and social studies. Students are required to spend at least 60 hours in an assigned classroom.

Pre-requisite(s): Admission to Teacher Education. Completion of Elementary Education Level 2 courses with a grade of B- or better.

Suggested Requisite(s): This course is part of Elementary Education Level 3 and should be taken with EDUC 3115, EDUC 3280, EDUC 4300, EDUC 4320, EDUC 4330.

EDUC 4250 - Second Language Acquisition: Theories and Implementation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course explores second language acquisition processes, current theories, and effective strategies as a knowledge base in planning appropriate curriculum and instruction for English language learners.

EDUC 4270 - Literacy Strategies for Teaching English Language Learners

Credits: (3)**Typically Taught Spring Semester:** *Full Sem*

Description: This course will examine literacy strategies for English Language Learners. Teacher candidates will learn how to apply literacy strategies to teach reading, writing, listening and speaking skills, while including culture, to scaffold language development in both the second language and mainstream classrooms.

EDUC 4300 - Elementary Mathematics Methods**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$3.00

Course Fee Purpose: Practicum fees are to cover our faculties mileage associated with the observation/supervision of the students.

Description: This course includes the study of mathematics methods appropriate for elementary school curriculum with specific emphasis on developmental strategies including the concrete-representational-abstract instructional model. Connections to other subject areas, problem solving, critical thinking skills and real-life situations are stressed.

Pre-requisite(s): Completion of Elementary Education Level 2 courses with a grade of B- or better.

Suggested Requisite(s): This course is part of Elementary Education Level 3 and should be taken with EDUC 3115, EDUC 3280, EDUC 4210, EDUC 4320, EDUC 4330.

EDUC 4310 - Foundations of Cooperative Learning**Credits: (2)**

Description: This course examines the rational, principles, skills and interaction strategies necessary before implementing Cooperative Learning in the classroom. Emphasis will be upon the basic components of Cooperative Learning, team building, and simple teamwork. Methods and strategies will be demonstrated and will involve active student group participation.

EDUC 4320 - Elementary Language Arts Methods**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This course focuses on methods for language arts instruction in the elementary setting with specific emphasis on writing strategies. Particular emphasis is given to models of research-based instruction of core curriculum in language art.

Pre-requisite(s): EDUC 3120 and EDUC 3240.

Co-Requisite(s): EDUC 4680A or EDUC 4840A.

EDUC 4330 - Elementary Science Methods**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$3.00

Course Fee Purpose: Course fees are used to purchase items used in science demonstrations and labs.

Description: This course focuses on methods and materials for teaching hands-on guided discovery science with an emphasis on concepts included in the Utah core curriculum.

Co-Requisite(s): EDUC 4680A or EDUC 4840A.

Suggested Requisite(s): This course is part of Elementary Education Level 3 and should be taken with EDUC 3115, EDUC 3280, EDUC 4210, EDUC 4300, EDUC 4320.

EDUC 4345 - Elementary Integrated Arts Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: A fifteen dollar fee is associated with this course in order to replenish equipment and supplies. Art and other supplies are required for some assignments and meetings. If you are completing portions of the course remotely, you may need to purchase some supplies, or you can come to campus to pick up anything that is needed (by appointment).

Description: This course is designed to prepare students to successfully teach art and music in the elementary classroom. Students are expected to design, prepare and teach lessons to engage elementary students in art and music activities. May include field experiences that involve travel to local schools or other relevant destinations.

Pre-requisite(s): EDUC 3240 and EDUC 3120.

Co-Requisite(s): EDUC 4680A or EDUC 4840A.

EDUC 4350 - Elementary Mathematics Pedagogy

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$3.00

Course Fee Purpose: This course has a fee that covers the purchase and replacement of mathematics manipulatives used by students.

Description: This course will focus on the study of appropriate mathematics teaching methods for the Utah core curriculum. Emphasis will be on teaching mathematics for deep conceptual understanding and connections to other subject areas and real life situations. Students will practice teaching mathematics using content from the K-8 Utah Mathematics Core.

Pre-requisite(s): EDUC 3230.

Pre-requisite/Co-requisite: ECED 4670.

EDUC 4380A - Student Teaching in Elementary Education

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Student teaching experience in elementary public school setting plus weekly seminar on campus. Offered CR/NC only. Can be repeated one time.

Pre-requisite(s): EDUC Level 3 (EDUC 3117, EDUC 3280, EDUC 4210, EDUC 4300, EDUC 4320, EDUC 4330) and permission of Field Experience Director.

Suggested Requisite(s): Should be taken concurrently with EDUC 4950 the first time.

EDUC 4380B - Student Teaching in Elementary Education

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Student teaching experience in elementary public school setting plus weekly seminar on campus. Offered CR/NC only. Can be repeated one time.

Pre-requisite(s): EDUC Level 3 (EDUC 3117, EDUC 3280, EDUC 4210, EDUC 4300, EDUC 4320, EDUC 4330) and permission of Field Experience Director.

Suggested Requisite(s): Should be taken concurrently with EDUC 4950 the first time.

EDUC 4400 - International Education Experiences: Study Abroad

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is a study abroad course led by two faculty members from Moyes College of Education. The class will visit various kinds of schools, interview teachers, students and parents, as well as study the socio-cultural contexts of a certain country or region. We expect the learning to occur during the lectures conducted by WSU faculty, the observations of the classes in the schools, visits to the schools and other educational/cultural sites, communications between students and school teachers and administrators in a certain country, as well as reflection sessions led by WSU faculty. The country covered by this course may change from year to year. Examples of countries include Nordic countries (Finland, Sweden, and Estonia) or selected South Asian countries (Singapore and Vietnam).

EDUC 4415 - Content-Based Second Language Curriculum, Instruction and Assessment

Credits: (3)

Description: Participants in this course learn to plan curriculum and instruction for dual language and immersion classrooms that combine language and content goals using standards-based and backwards design approaches. They also learn a range of classroom-based strategies for assessing language and content.

EDUC 4420 - Foundations of Education of the Gifted

Credits: (2)

Description: An overview of education for the gifted and talented; historical and philosophical background; characteristics, needs, and developmental patterns of the gifted; issues in identification, differentiating curriculum, and educational program options; special populations of gifted students.

Note: This course is not currently offered.

EDUC 4450 - Creativity and Applied Imagination in the K-12 Classroom

Credits: (2)

Description: Exploration and development of readily available personal and community resources to encourage creative thinking, classroom involvement, and transfer of learning.

Note: This course is not currently offered.

EDUC 4470 - Teaching for Thinking

Credits: (2)

Description: Theory and practice for teaching thinking skills in elementary, middle, and high school classrooms.

Pre-requisite(s): Admission to Teacher Education and EDUC 3140 or equivalent.

Note: This course is not currently offered.

EDUC 4480 - Differentiated Curriculum for the Gifted and Talented

Credits: (3)

Description: Curriculum theories and educational strategies for educating gifted and talented students. A practical course, with special attention to the development of instructional materials appropriate for use by gifted students in special programs as well as in the regular classroom.

Note: This course is not currently offered.

EDUC 4490 - Assessment and Evaluation in Education of the Gifted

Credits: (3)

Description: Principles of assessment applied to: identification of gifted and talented students including identification of gifted in minority populations, diagnosis of student learning needs, learning styles, evaluation of student progress, and evaluation of program effectiveness.

Note: This course is not currently offered.

EDUC 4510 - Foundations in Special Education Practice and Law

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course will introduce students to the philosophical, historical, legal and ethical foundations of special education. Students will examine in depth the characteristics of exceptional learners.

Pre-requisite(s): Admission to Teacher Education, EDUC 2010.

EDUC 4515 - Special Education Law and Transition

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course provides students with a broad knowledge and understanding of a wide range of legal issues concerning the provision of special education services to students with disabilities, including those in the transition process. A review of pertinent legislation concerning human and constitutional rights related to persons with disabilities will be addressed. Teachers' specific responsibilities and liabilities are described and related to current requirements for development of appropriate educational programs including transition plans and services.

EDUC 4520 - Collaboration, Consultation, and IEP Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Roles of the special educator and families. IEP development, Least Restrictive environment, managing multidisciplinary team activities and techniques of collaboration and consultation.

Pre-requisite(s): Admission to Teacher Education.

EDUC 4521 - Practicum in Special Education A

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this practicum is to provide teacher candidates with opportunities to implement content-specific instruction and demonstrate quality inclusion strategies while working with students in special education. Teacher candidates are required to spend at least 60 hours in an assigned classroom.

Pre-requisite(s): Completion of Special Education Block 1 Foundation courses with a grade of B- or better.

EDUC 4530 - Principles of Assessment and IEP Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: This course is designed to provide students with knowledge of the basic terminology of test measurements, criterion referenced assessments, curriculum based assessments and data collection. The fees in this course are used for purchasing assessment instruments used in schools.

Description: This course is designed to provide students with knowledge of the basic terminology of statistics, tests,

measurements, criterion-referenced assessment, curriculum-based assessment, and data collection. Students will learn the basic processes of statistical applications for formal and informal assessment. Students will learn to develop, administer, and interpret assessment data for formal and informal assessments to determine eligibility develop appropriate IEPs.

Co-Requisite(s): EDUC 3210 or EDUC 4680A or EDUC 4840A.

EDUC 4535 - Strategic Plan for Disability

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description:

This course is designed to instruct students in methods to successfully facilitate the inclusion of students with disabilities in the general education classroom. Strategies will be given for how to initiate, grow, and sustain, effective collaborative educational environments, utilize specifically designed instruction, and develop targeted accommodations and modifications that can be efficiently delivered in general education environments to create meaningful access for students with disabilities.

Pre-requisite(s): Completion of Education Level 1 courses with a grade of B- or better.

EDUC 4540 - Managing Student Behavior

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Current issues, practices, and application of a variety of approaches for behavior change, discipline and management of the classroom environment, and the teaching of appropriate social skills.

Suggested Requisite(s): This course is part of Special Education Block 1 courses and should be taken with EDUC 4521, EDUC 4530, EDUC 4550, EDUC 4560.

EDUC 4545 - Individualized Behavioral Strategies Using Applied Behavior Analysis

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is designed to teach teacher candidates validated individual behavioral intervention strategies, particularly those designed to meet the needs of students with severe behavioral and social skill deficits. This course will address the needs of those candidates using Applied Behavior Analysis. Candidates will conduct functional assessments and write and implement a function-based behavior intervention plan.

Pre-requisite(s): EDUC 3545.

Co-Requisite(s): EDUC 4680A or EDUC 4840A.

EDUC 4550 - Instructional Planning and Learning Environments for Special Education Students

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Instructional programming and modification of curriculum for students with disabilities served by teachers with Mild/Moderate Endorsements.

Pre-requisite(s): Admission to Teacher Education.

Suggested Requisite(s): This course is part of Elementary Education Level 1 and should be taken with EDUC 3120, EDUC 3140, EDUC 3205, EDUC 3270.

EDUC 4555 - Validated Instructional Methods: Reading

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to introduce principles and validated strategies for teaching reading to students with mild/moderate disabilities. The course will cover student characteristics and school setting demands that contribute to lack of success in reading.

Pre-requisite(s): Completion of Special Education Block 2 Integrated Methods courses with a grade of B- or better.

Suggested Requisite(s): This course is part of Special Education Block 3 Advanced Methods courses and should be taken with EDUC 4570, EDUC 4580, EDUC 4581.

EDUC 4560 - Validated Instructional Methods: Mathematics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to introduce principles and techniques for diagnosis and remediation of mathematics problems. The course will cover student characteristics and school setting demands that contribute to lack of success in mathematics classrooms.

Pre-requisite(s): Completion of Special Education Block 1 Foundation courses with a grade of B- or better.

Suggested Requisite(s): This course is part of Special Education Block 2 Integrated Methods courses and should be taken with EDUC 4521, EDUC 4530, EDUC 4540, EDUC 4550.

EDUC 4570 - Validated Instructional Methods: Written Expression

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to introduce principles and validated strategies for teaching written expression to students with mild/moderate disabilities. The course will cover student characteristics and school setting demands that contribute to lack of success in written expression.

Pre-requisite(s): EDUC 4530.

Co-Requisite(s): EDUC 4581.

Suggested Requisite(s): This course is part of Special Education Block 3 Advanced Methods courses and should be taken with EDUC 4555, EDUC 4580, EDUC 4581.

EDUC 4580 - Instructional and Transition Planning for Special Education Students

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$7.00

Course Fee Purpose: The course fees in this course will be used to buy consumable assessment protocols and to purchase non-consumable assessment kits as new versions are made available.

Description: Instructional programming and modification of curriculum for students with disabilities served by teachers with Mild/Moderate Endorsements.

Pre-requisite(s): Completion of Education Level 1 courses with a grade of B- or better.

EDUC 4581 - Pre-Student Teaching in Special Education: Assessment, Behavior Management, Instruction

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of Pre-Student Teaching is to continue field experience in a supportive and professional

manner. The student will have the opportunity to experience teaching and the responsibilities that it entails under the direct guidance of the Cooperating Teacher and the Course Instructor. This course is designed to provide students with practical experiences in the areas of: a) literacy curriculum and instruction for students K-12, and (b) planning and developing post-secondary transition plans. Practical experience in assessment and behavior management are continued.

Pre-requisite(s): Completion of Special Education Block 2 Integrated Methods courses with a grade of B- or better.

Suggested Requisite(s): This course is part of Special Education Block 3 Advanced Methods courses and should be taken with EDUC 4555, EDUC 4570, EDUC 4580.

EDUC 4582 INT - Practicum in Special Education B

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Mileage fee for supervision

Description: The purpose of this practicum is to provide teacher candidates with opportunities to implement content-specific instruction and demonstrate quality instruction while working in special education and/or general education classrooms.

Pre-requisite(s): Completion of Education Level 2 courses with a grade of B- or better.

EDUC 4640 - Validated Instructional Methods: Mathematics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to introduce principles and techniques for diagnosis and remediation of mathematics problems. The course will cover student characteristics and school setting demands that contribute to lack of success in mathematics classrooms.

EDUC 4650 - Validated Instructional Methods: Reading

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to introduce principles and validated strategies for teaching reading to students with mild/moderate disabilities. The course will cover student characteristics and school setting demands that contribute to lack of success in reading.

EDUC 4660 - Validated Instructional Methods: Written Expression

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to introduce principles and validated strategies for teaching written expression to students with mild/moderate disabilities. The course will cover student characteristics and school setting demands that contribute to lack of success in written expression.

EDUC 4670A - Special Education Student Teaching

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: The course fee pays for student teaching supervisor visits.

Description: Supervised teaching in selected special education programs in an elementary or secondary school. Available on a CR/NC basis only.

Pre-requisite(s): Successful completion of mild/moderate licensure course work and permission of the Field Experience Director. Can be repeated one time.

Suggested Requisite(s): Should be taken concurrently with EDUC 4686 the first time.

EDUC 4670B - Special Education Student Teaching

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: The course fee pays for student teaching supervisor visits.

Description: Supervised teaching in selected special education programs in an elementary or secondary school. Available on a CR/NC basis only.

Pre-requisite(s): Successful completion of mild/moderate licensure course work and permission of the Field Experience Director. Can be repeated one time.

Suggested Requisite(s): Should be taken concurrently with EDUC 4686 the first time.

EDUC 4680A INT - Special Education Student Teaching

Credits: (3-8)

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$200.00

Course Fee Purpose: Supervision stipend and mileage reimbursement.

Description: This course is designed to provide with multiple opportunities to practice implementing effective planning, instruction, management, and assessment techniques in real-world elementary, middle, or high school special education classroom settings under the supervision of a university supervisor and mentor teacher. Available on a CR/NC basis only.

Pre-requisite(s): EDUC 3210 with a B- or better.

EDUC 4680B INT - Special Education Student Teaching

Credits: (8)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: Supervisor stipend and mileage reimbursement (remote location).

Description: Supervised clinical practice in an elementary or secondary school at which candidates teach pupils with mild/moderate disabilities. Available on a CR/NC basis only.

Pre-requisite(s): Successful completion of Special Education levels 1-3 with B- or above.

Co-Requisite(s): Must be taken concurrently with EDUC 4686.

EDUC 4685 - Special Education Student Teaching Seminar and Synthesis

Credits: (1)

Description: The Seminar and Synthesis will support student teaching through regular meetings.

Pre-requisite(s): Successful completion of Special Education Licensure requirements.

Co-Requisite(s): Must be taken concurrently with EDUC 4670A.

Note: This course is available to non-majors.

EDUC 4686 - Special Education Student Teaching Seminar & Synthesis for Special Education Majors

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The Seminar and Synthesis will support student teaching through regular meetings on campus.

Pre-requisite(s): SPED Levels 1-3 and approval by student teaching director.

EDUC 4700 - Learning in the Schools

Credits: (2)

Description: Principles of learning and management and their application to the school situation.

Pre-requisite(s): Student teaching.

EDUC 4740 - Building School Partnerships with ESL/Bilingual Families

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course prepares students to be advocates and practitioners of family involvement in education. Goals and benefits of family involvement will be explored along with specific strategies for developing a partnership within the education system. Components of family structure, economics, cultural diversity, second-language learners, communication skills and resources are integrated into the student experience.

EDUC 4820E - Managing Diverse Classrooms

Credits: (3)

Description: Current issues, methodology and application of a variety of approaches for behavioral change, discipline and management of diverse learners in the context of classroom environments.

Pre-requisite(s): Teacher Education Level 3 Elementary (EDUC 4300, EDUC 4320 or EDUC 4350 if previously taken, EDUC 4330, EDUC 4345).

Suggested Requisite(s): Should be taken concurrently with the other courses in Teacher Education Level 4 Elementary (EDUC 4840A, EDUC 4860).

Note: This course is not currently offered.

EDUC 4820S - Managing Diverse Classrooms

Credits: (3)

Description: Current issues, methodology and application of a variety of approaches for behavioral change, discipline and management of diverse learners in the context of classroom environments.

Pre-requisite(s): Secondary Teacher Education Core (EDUC 3220, EDUC 3900, and EDUC 3935).

Note: This course is not currently offered.

EDUC 4830 - Individually Prescribed Program

Credits: (1-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Designed primarily for individual needs.

May be repeated up to 6 credit hours.

EDUC 4840A INT - Student Teaching in Elementary Education

Credits: (3-8)**Typically Taught Fall Semester:** *Full Sem, 1st Blk, 2nd Blk***Typically Taught Spring Semester:** *Full Sem, 1stBlk, 2nd Blk***Course Fee:** \$200.00**Course Fee Purpose:** Student teaching supervision stipend and mileage.**Description:** This course is designed to provide with multiple opportunities to practice implementing effective planning, instruction, management, and assessment techniques in real-world elementary classroom settings under the supervision of a university supervisor and mentor teacher. Available on a CR/NC basis only.**Pre-requisite(s):** EDUC 3210 with a B- or Better.**EDUC 4840B INT - Student Teaching in Elementary Education****Credits: (8)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$200.00**Course Fee Purpose:** Stipend and mileage for instructor supervision (remote location).**Description:** Student teaching experience in a public school to synthesize theory and practice. Support seminars held on campus. Available on a CR/NC basis only.**Pre-requisite(s):** EDUC Levels 1-3 and permission of the Field Experience Director.**Co-Requisite(s):** Should be taken concurrently with EDUC 4850.**EDUC 4850 - Integrated Elementary Education Student Teaching Seminar and Synthesis****Credits: (4)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** This course will help prepare teacher candidates for student teaching and ultimately licensure with two different types of activities. First, are weekly, 3-hour collaboration and topical seminars emphasizing on-going discussions and support on classroom management, preparing the TWS and INTASC portfolio, creating your career file, and other education issues. Second, is a two-day workshop to synthesize the semester and have your INTASC portfolio assessed.**Pre-requisite(s):** Satisfactory completion of Levels 1-3.**Suggested Requisite(s):** Should be taken concurrently with EDUC 4840A/B.**EDUC 4860 - Elementary Senior Synthesis Seminar****Credits: (1)****Description:** Synthesis of the TREC model for elementary programs with specific emphasis on beginning a professional career in teaching. Senior project is required. To be taken for CR/NC only.**Pre-requisite(s):** Teacher Education Level 3 Elementary (EDUC 4300, EDUC 4320 or EDUC 4350 if previously taken, EDUC 4330, EDUC 4345).**Suggested Requisite(s):** Should be taken concurrently with the other courses in Teacher Education Level 4 Elementary (EDUC 4820E , EDUC 4840A).

Note: This course is not currently offered.

EDUC 4870 - Directed Experiences with Students**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** Directed experiences with elementary and secondary school students in cooperating schools. Students may register for one unit of credit per semester for a maximum of three semester hours.

EDUC 4890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: For students accepted to the Teacher Education Program who meet the minimum cooperative work experience requirements of the department. Provides academic credit for on-the-job experience. Amount of credit will be determined by the department. Fingerprinting/background check must be completed prior to working in the schools.

May be repeated up to 6 credit hours.

EDUC 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Available on CR/NC basis.

EDUC 4930A - Student Teaching in Secondary Education

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Student teaching experience in secondary public school setting plus weekly seminar on campus. Offered CR/NC only.

Pre-requisite(s): Secondary Teacher Education Core (EDUC 3220, EDUC 3265, EDUC 3315, EDUC 3900, EDUC 3910, EDUC 3935) and permission of the Field Experience Director. Can be repeated one time.

Suggested Requisite(s): Should be taken concurrently with EDUC 4950 the first time.

EDUC 4930B - Student Teaching in Secondary Education

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: Stipend and mileage for instructor supervision.

Description: Student teaching experience in secondary public school setting plus weekly seminar on campus. Offered CR/NC only.

Pre-requisite(s): Secondary Teacher Education Core (EDUC 3220, EDUC 3265, EDUC 3900, EDUC 3910, EDUC 3935) and permission of the Field Experience Director. Can be repeated one time.

Suggested Requisite(s): Should be taken concurrently with EDUC 4950 the first time.

EDUC 4940A INT - Student Teaching in Secondary Education

Credits: (8)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: Stipend and mileage for instructor supervision.

Description: Student teaching experience in a public school to synthesize theory and practice. Support seminars held on campus. Available on a CR/NC basis only.

Pre-requisite(s): Secondary Teacher Education Core (EDUC 3220, EDUC 3265, EDUC 3315, EDUC 3900, EDUC 3910, EDUC 3935).

Suggested Requisite(s): Should be taken concurrently with EDUC 4950 Integrated Secondary Student Teaching Seminar.

EDUC 4940B INT - Student Teaching in Secondary Education

Credits: (8)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: Stipend and mileage for instructor supervision (remote location).

Description: Student teaching experience in a public school to synthesize theory and practice. Support seminars held on campus. Available on a CR/NC basis only.

Pre-requisite(s): Secondary Teacher Education Core (EDUC 3220, EDUC 3265, EDUC 3315, EDUC 3900, EDUC 3910, EDUC 3935).

Suggested Requisite(s): Should be taken concurrently with EDUC 4950 - Integrated Secondary Student Teaching Seminar.

EDUC 4950 - Integrated Secondary Student Teaching Seminar

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Preparation and support for secondary clinical practice. Collaborative and topical seminars will emphasize on-going discussions and support on classroom management, ethics, preparing the TWS and INTASC portfolio, creating a career file, and secondary school issues.

Pre-requisite(s): Completion of Secondary Teacher Education Core (EDUC 3220, EDUC 3265, EDUC 3315, EDUC 3900, EDUC 3910, EDUC 3935).

Suggested Requisite(s): Should be taken concurrently with Student Teaching in Secondary Education (EDUC 4930A or EDUC 4940A).

EDUC 4960 - Secondary Senior Synthesis Seminar

Credits: (1)

Description: Synthesis of the TREC Model for elementary and secondary programs with specific emphasis on beginning a professional career in teaching. Senior Project is required.

Suggested Requisite(s): Should be taken concurrently with EDUC 4820S and EDUC 4840A.

Note: This course is not currently offered.

EDUC 5050 - Action Research in the Classroom

Credits: (2)

Description: Students will explore effective classroom-based research techniques, complete a classroom-based case study, and promote the ongoing application of research to the improvement of teaching practice. This course is designed for cooperating teachers in the site-based teacher education program, and is graded CR/NC.

Note: This course is offered as needed.

EDUC 5060 - Effective Mentoring in the Classroom

Credits: (2)

Description: Course covers strategies for effectively mentoring student teachers and novice teachers by expert

teachers. Expectations for the course include journal keeping, writing assignments, and mentoring project.
Note: This course is offered as needed.

EDUC 5110 - Advanced Multicultural/Bilingual Education

Credits: (3)

Description: Provides a knowledge base concerning the curricular issues and need for multicultural education, and explores various curriculum models and approaches for successful implementation of multicultural education across the curriculum.

EDUC 5120 - Culture and Language

Credits: (3)

Description: Examines the effects and impact of historical, political, social, and economic issues which affect teaching and learning for students from diverse cultural and ethnic groups.

EDUC 5320 - Reading in the Content Areas

Credits: (3)

Description: Use of reading as an effective means to help students comprehend their course material. Explores how to incorporate these skills into the curriculum of the content areas.

EDUC 5330 - Using Children's Literature in the Classroom

Credits: (2)

Description: This course will provide a broad basis for using children's literature for instructional purposes in elementary classrooms to enhance literacy development.

EDUC 5340 - Assessment and Corrective Procedures in Reading

Credits: (3)

Description: Assessment of reading problems and corrective procedures for remediation in elementary classrooms.

EDUC 5360 - Literacy in the Elementary School

Credits: (3)

Description: An exploration of current reading, oral and written language theories, and their applications for the improvement of literacy practices in schools.

EDUC 5770 INT - Field Experience in ESL/Bilingual Education

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students will gain experience in teaching and working with ESL/bilingual students and apply what they have learned from relevant courses.

EDUC 5920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offerings under this number. The specific title and

credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.
Note: Available on CR/NC basis.

EDUC 5920G - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated up to 18 credit hours.

Note: Available on CR/NC basis. For graduate students.

EDUC 6020 - Promoting Success for K-12 Learners

Credits: (2)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Description: This course is designed to integrate classical and contemporary education theory and practice as a way to understand the nature and scope of how success manifests itself in an ever-changing society. Students will apply their understanding of promoting success in learners as they critically reflect, empirically investigate, and apply their knowledge as skillful transformative educational leaders.

EDUC 6050 - Curriculum Design, Evaluation & Assessment

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: An overview of the theories of curriculum development as well as a practical appraisal of curriculum design, implementation, evaluation and assessment.

EDUC 6060 - Instructional Strategies

Credits: (2)

Description: This methods course will include organizing and universal teaching strategies that can accommodate the variety of learning contexts and content that is taught to a diverse audience of learners.

EDUC 6110 - Introduction to Classroom Management

Credits: (3)

Description: The focus will be on current issues, methodology, and application of a variety of approaches for behavior change, discipline, and management of diverse learners in the context of classroom environments. Classroom management as a function of good teaching will be examined.

Note: This course or MED 6120 is required for licensure.

EDUC 6229 - Instructional Technology for Pre-service Teachers

Credits: (2)

Description: This course allows students to apply existing technology literacy into educational environments to promote use of technology for teaching and instructional support in learning environments. The curriculum is based on teacher skills required to teach Utah State Educational Technology Standards.

EDUC 6240 - Foundations of Teaching for Cultural and Language Differences

Credits: (2)

Description: This course will address the nature of pluralism in American Society, including but not limited to exploration of multiculturalism, bilingualism, first and second language acquisition and instructional strategies. Establishes the core foundations for valuing diversity.

EDUC 6250 - Second Language Acquisition: Theories and Implementation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course explores second language acquisition processes, current theories, and effective strategies as a knowledge base in planning appropriate curriculum and instruction for English language learners.

EDUC 6265 - Foundations of Inclusive Teaching

Credits: (2)

Description: This course, designed for non-special education teacher candidates, will introduce candidates to the legal, philosophical, historical, and ethical foundations of special education. An emphasis is placed on strategies and methods for instructing students with exceptionalities in the general education setting and the expanded roles and responsibilities of school personnel for providing appropriate educational experiences for all students.

EDUC 6270 - Literacy Strategies for Teaching English Language Learners

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Spring Semester: *Full Sem*

Description: This course will examine literacy strategies for English Language Learners. Teacher candidates will learn how to apply literacy strategies to teach reading, writing, listening and speaking skills, while including culture, to scaffold language development in both the second language and mainstream classrooms.

EDUC 6311 - Content Instruction in the Elementary School: Science

Credits: (2)

Description: Explores new concepts in curriculum and methods of science instruction in the elementary schools.
Note: This course is required for elementary licensure.

EDUC 6312 - Content Instruction in the Elementary School: Mathematics

Credits: (2)

Description: Explores new concepts in curriculum and methods of mathematics instruction in the elementary schools.
Note: This course is required for elementary licensure.

EDUC 6313 - Content Instruction in the Elementary School: Social Studies

Credits: (2)

Description: Explores new concepts in curriculum and methods of social studies instruction in the elementary schools.
Note: This course is required for elementary licensure.

EDUC 6314 - Reading Instruction in Elementary Schools

Credits: (3)

Description: An exploration of current research theories and their pedagogical implications related to teaching vocabulary, reading comprehension, fluency, phonics, and phonemic awareness in elementary school classrooms. The course will focus on the science of reading as defined by the Utah State Board of Education.

Note: This course is required for elementary licensure.

EDUC 6316 - Language Arts Instruction in Elementary Schools**Credits: (2)**

Description: Students will explore theory, instructional methodology, and activities for supporting students in developing expertise in the essential skills of communication: listening, speaking, reading, writing, viewing, and visually representing.

Note: This course is required for elementary licensure.

EDUC 6317 - Arts Integration for Elementary Teachers**Credits: (2)**

Description: This course is designed to prepare students to successfully teach the arts in the elementary classroom. Students are expected to design, prepare, and teach lessons to engage elementary students in arts and music activities. State curriculum guidelines will be reviewed and discussed.

EDUC 6320 - Content Area Literacy Instruction**Credits: (3)**

Description: Use of reading as an effective means to help students comprehend their course material. Explores how to incorporate these skills into the curriculum of the content areas.

Note: This course is required for secondary licensure.

EDUC 6375 - Foundations of Dual Immersion and Immersion Education**Credits: (3)**

Description: The course examines the background, underlying theory, and research foundations that support dual language and immersion education practices. Issues for teachers and administrators will be addressed. Practices and principles that inform language attentive curriculum will be a focus of the course.

EDUC 6415 - Content-based Language Curriculum, Instruction and Assessment**Credits: (3)**

Description: Participants in this course learn to plan curriculum and instruction for dual language and immersion classrooms that combine language and content goals using standards-based and backwards design approaches. They also learn a range of classroom-based strategies for assessing language and content.

EDUC 6500 - Curriculum Planning and Evaluation for Special Education Students**Credits: (3)**

Description: Effective teaching methods, instructional programming and modification of curriculum for students with disabilities. A direct instruction model is emphasized.

EDUC 6515 - Foundations in Special Education: Law and Practice**Credits: (3)**

Description: This course will introduce students to the philosophical, historical, legal, and ethical foundations of

special education. Students will examine in depth the laws and practices related to special education and how those laws are influencing children with special needs today. Students will also learn about individuals with special needs as they are identified and served in our school system.

EDUC 6529 - Assistive Technology

Credits: (2)

Description: This course provides students with the knowledge and skills needed to successfully determine the assistive technology needs of students with disabilities. The curriculum is based on the Utah Effective Teaching standards addressing technology and CEC standards for teacher preparation.

EDUC 6530 - Principles and Applications of Special Education Assessment

Credits: (3)

Description: Administer, score, and interpret norm-referenced assessment instruments, analyze in combination with data from other assessment processes, and use to determine eligibility and develop educational programs.

EDUC 6540 - Advanced Managing Student Behavior

Credits: (3)

Description: This course will address current issues, practices, and application of a variety of approaches for behavior change. It is designed to teach students validated classroom management strategies, behavioral intervention strategies and techniques for use with students who have behavioral and social skill deficits. The primary goal of this course is for each student to conduct a functional assessment and implement and evaluate a behavior intervention plan.

EDUC 6565 - Advanced Instructional Methods and Practices: English Language Arts

Credits: (3)

Description: The purpose of this course is to prepare teacher candidates to teach English Language Arts to elementary and secondary students. Teacher candidates learn to identify reading and writing difficulties, using evidence-based interventions. They will also learn how to implement effective instruction, using data-based instructional decision model to monitor students' ELA progress.

EDUC 6575 - Advanced Instructional Methods and Practices: Mathematics

Credits: (3)

Description: The purpose of this course is to prepare teacher candidates to teach mathematics to Tier 2 and 3 students in elementary and secondary classrooms. Teacher candidates will acquire a set of skills that will enable them to determine what math concepts to teach to pupils and effective instructional methods to aid in the teaching of these concepts.

EDUC 6580 - Advanced Learning Strategies and Transition for Special Education Students

Credits: (3)

Description: Effective teaching methods, strategies, and practices for secondary age level students with disabilities. A cognitive learning strategies approach is emphasized.

EDUC 6860 INT - Practicum in Education

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Mileage fees for supervision

Description: Practical synthesis and application of knowledge and skills gained in previous education courses. Students must have approval from the program director, and should follow specific post baccalaureate certificate in teaching program guidelines for prerequisites and other requirements.

EDUC 6870 INT - Student Teaching and Seminar in Elementary Education

Credits: (6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: Stipend and mileage for instructor supervision

Description: The student teaching experience is the culminating learning experience for the elementary licensure graduate certificate. Students must apply for student teaching the semester prior to registration. Student teaching is a time for developing one's classroom management style, instructional design, and collaborating with a mentor teacher. Student teaching is a rigorous experience, which is carefully planned, guided, assessed, and evaluated. It includes an orientation meeting and assignments to support key competencies. Offered CR/NC only; this course does not grant credit towards the GSE degree but is required for a teaching license in the state of Utah.

EDUC 6880 INT - Student Teaching and Seminar in Secondary Education

Credits: (6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: Stipend and mileage for instructor supervision

Description: The student teaching experience is the culminating learning experience for the elementary licensure graduate certificate. Students must apply for student teaching the semester prior to registration. Student teaching is a time for developing one's classroom management style, instructional design, and collaborating with a mentor teacher. Student teaching is a rigorous experience, which is carefully planned, guided, assessed, and evaluated. It includes an orientation meeting and assignments to support key competencies. Offered CR/NC only; this course does not grant credit towards the GSE degree but is required for a teaching license in the state of Utah.

EDUC 6890 INT - Student Teaching and Seminar in Special Education

Credits: (6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: Supervision stipend and mileage fees

Description: The student teaching experience is the culminating learning experience for the special education licensure track. Student teaching is a time for developing one's classroom management style, instructional design, and collaborating with a mentor teacher. Student teaching is a rigorous experience, which is carefully planned, guided, assessed, and evaluated. It includes an orientation meeting and assignments to support key competencies. Offered CR/NC only; this course does not grant credit towards the MED degree but is required for a teaching license in the state of Utah.

Pre-requisite(s): EDUC 6860.

EEN 1200 - Introduction to Energy Engineering

Credits: (2)

Description: Introduction to the field of energy engineering. Energy sources, electrical power generation, renewable and non-renewable energy, environmental and economic issues, the energy future.

Pre-requisite(s): ENGR 1000 and PHYS 2210.

EEN 2600 - Engineering Economics**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Emphasizes the systematic evaluation of the costs and benefits of engineering solutions. Topics include equivalence, simple and compound interest, cash flow diagrams, present worth, equivalent uniform annual worth, rate of return, payback period, depreciation, income taxes, and inflation.

Pre-requisite(s): MATH 1050 or equivalent placement.

EEN 3000 - Design, Ethics & Entrepreneurship**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Fundamentals of the engineering design process. Design modeling, simulation, documentation and communication. Engineering ethics and entrepreneurship.

Pre-requisite(s): EEN 1200.

EEN 3200 - Sustainable Energy**Credits: (3)**

Description: Introduction to sustainable energy. Energy conservation and efficiency. Renewable energy systems and energy storage. Economic, societal and environmental aspects of sustainable energy.

Pre-requisite(s): EEN 1200.

EEN 4100 - Senior Project I**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An energy engineering project will be selected for team participation. Team assignments will lead to the completion of a preliminary design phase which includes concept generation, engineering analysis and design, prototype testing, and preliminary economic analyses. Senior Project I culminates in a preliminary design review based on formal student presentations of documented engineering drawings of the proposed design.

Pre-requisite(s): Departmental permission.

EEN 4200 - Senior Project II**Credits: (3)**

Description: Continuation of EEN 4100. Team assignments will lead to the construction, testing and optimization of the design. This includes detailed engineering analysis and testing of prototypes, final parameter and tolerance design, and economic analysis of the project. Senior Project II culminates in a final design review based on formal student presentations of the documented final product and verification that the final product meets all requirements.

Pre-requisite(s): EEN 4100.

EEN 4300 - Energy Auditing

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introduction to energy auditing of buildings and industrial processes. Energy assessment, conservation, efficiency, and cost analysis of energy systems.

Pre-requisite(s): EEN 2600 and ME 4000.

EEN 4420 - Renewable Energy Systems Design I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introduction to renewable energy systems. In-depth coverage of the analysis and design of solar and wind energy systems.

Pre-requisite(s): EEN 3200 and ME 4000.

EEN 4430 SUS - Renewable Energy Systems Design II

Credits: (3)

Description: Follow-on course to EEN 4420. Analysis and design of hydroelectric, geothermal, marine, and biomass energy systems. Environmental and economic impacts of these renewable energy technologies.

Pre-requisite(s): EEN 4420.

EEN 4440 - Introduction to Energy Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introduction to systems engineering as applied to the energy industry. Systems definition, attributes and properties. Command and control, mission modeling, verification and validation, documentation.

Pre-requisite(s): EEN 3000.

EEN 4450 - Electric Vehicles Engineering

Credits: (3)

Description: Introduction to electric and hybrid-electric vehicles. Alternative fuels, powertrains, battery technologies, vehicle dynamics, propulsion, energy management, braking and controls.

Pre-requisite(s): EEN 3200.

EEN 4460 - Energy Management

Credits: (3)

Description: Energy management design, utility rates, economic analyses, mechanical and electrical systems, safety, green technologies and sustainability.

Pre-requisite(s): EEN 3000.

EEN 4470 SUS - Energy and Environmental Issues

Credits: (3)

Description: Environmental impacts of energy systems, fossil fuels, renewable and green technologies, nuclear energy, energy conservation and climate change.

Pre-requisite(s): EEN 3200.

EEN 4480 - Energy and Legal Issues

Credits: (3)

Description: Legal issues of energy systems, regulations, case law pertaining to development and implementation of energy systems, climate change, political influences.

Pre-requisite(s): EEN 3000.

EET 1110 - Basic Electronics

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Introduction to the concepts and fundamentals of electronic devices, circuits and systems. An electronics overview course for technology majors. Topics include direct current electricity, alternating current electricity, transistors and integrated circuits, amplifiers and oscillators, transmitters and receivers, digital logic circuits, electronic memory, and computers.

Pre-requisite(s): Credit for or concurrent enrollment in MATH 1010 or higher.

EET 1130 - Digital Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: Introduction to digital electronics, integrated circuits, numbering systems, Boolean algebra, gates, flip-flops, multiplexers, sequential circuits, combinational circuits, programmable logic devices, and computer architecture.

Lecture and lab combination. Laboratory activities to include the design, construction, analysis, and measurement of basic digital systems.

Pre-requisite/Co-requisite: Prerequisite: Credit for or concurrent enrollment in MATH 1010 or equivalent or any higher math.

EET 1140 - DC Circuits

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Introduction to DC circuit fundamentals, analysis, theorems, laws, components, measuring devices, and equipment. The introduction and use of measuring instruments and power supplies. Lecture and lab combination. Laboratory activities to include circuit design, construction, and analysis of DC circuits.

Pre-requisite/Co-requisite: Prerequisite: EET 1110 and credit for or concurrent enrollment in MATH 1060 or MATH 1080 or any higher math.

EET 1850 - Industrial Electronics

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Industrial electronics course for Mechanical and Manufacturing Engineering Technology majors. Introduction to DC and AC circuits, machines, and power systems.

Lecture and lab combination. Laboratory activities to include the design, construction, and analysis of DC/AC circuits and machinery.

Pre-requisite(s): MATH 1010 or equivalent or any higher math.

EET 2010 - AC Circuits

Credits: (3)

Description: The course serves as an extension of circuit analysis methods taught in EET 1140 to AC networks. The introduction of complex numbers and phasor notation at the beginning of the course is followed by AC circuit analysis techniques and the determination of the frequency response for passive AC networks. The course is a combination of lecture and laboratory formats. Laboratory activities will include the design, computer simulation, validation and analysis of passive AC networks.

Pre-requisite(s): EET 1140 and credit for MATH 1060 or MATH 1080.

EET 2130 - PC Board Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: An introduction to the design of printed circuit boards and packaging with emphasis on the design, simulation, analysis and packaging of circuits.

Lecture and lab combination. Laboratory activities include the design, construction, and testing of prototype circuit boards. CAD programs will be used for the design and layout of circuit boards.

Pre-requisite(s): AVET 2110.

EET 2150 - Embedded Controllers

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: A study of microprocessors, embedded controllers, operational characteristics, computer architecture, machine code programming, memory devices, and interfacing.

Lecture and lab combination. Laboratory activities include the design, construction, and analysis of microprocessor based systems. Analysis techniques include the use of assemblers, cross-assemblers, and emulators.

Pre-requisite(s): Credit for or Current Enrollment in AVET 2110.

EET 2180 - Solar PV Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is for each student to learn the fundamental knowledge and technology of solar PV (Photovoltaic) systems. This course discusses the limitation and the impacts of using fossil fuel energy and its possible impact on global climate change. Solar energy can provide a long term solution and minimize climate change. This course will enable students to build an essential foundation towards how to design the solar PV systems for various applications. The topics in this course include PV markets and applications, electricity basics, safety basics, the fundamentals of solar PV energy, PV system components, grid-tied and battery-based systems, load analysis and PV system sizing, PV system electrical and mechanical designs, National Electric Code (NEC) applied to PV systems, commissioning and decommissioning, performance analysis, maintenance and troubleshooting. Incentives, rebates and policies from federal, state and local power company will also be addressed in the class. The students will learn how to acquire professional certifications if they are interested in developing a career in solar PV industry.

Pre-requisite(s): EET 1140 or EET 1850.

EET 2190 - Solar PV Technical Assessments

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to educate each student how to be a solar electric professional with demonstrated expertise in the siting, design, analysis and performance of PV systems from site specific information, analyzes customer needs and energy usage for the purpose of advising and providing customers with the most appropriate solution for their situation. Each student will also learn the fundamental knowledge and technology of solar PV (Photovoltaic) systems. The topics in this course include PV markets and applications, electricity basics, safety basics, the fundamentals of solar PV energy, PV system components and configurations, grid-tied and battery-based systems, load analysis, qualifying the customer, site analysis, conceptual PV system design, financial costs, incentives and savings, financial benefit analysis and financing, non-financial benefit analysis, performance analysis, prepare proposals, and professional sales skills. The students will learn how to acquire professional certifications if they are interested in developing a career in solar PV industry.

Pre-requisite(s): EET 1140 or EET 1850.

EET 3020 - Active Filters

Credits: (4)

Description: Continuation of Circuit Analysis, AVET 3010. Topics include active and passive filters, Pole-zero analysis, stability, Bode diagrams, frequency response, and applications.

Lecture and lab combination. Laboratory activities include circuit design, construction, computer simulation, and analysis.

Pre-requisite(s): AVET 3010.

EET 3030 - FPGA and ASIC Design

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Introduction to field programmable gate arrays (FPGA) and application specific integrated circuit (ASIC) design.

Lecture and lab combination. Laboratory activities to include the use of computer design tools to design, model, simulate, and program gate arrays and application specific integrated circuits.

Pre-requisite(s): EET 2150.

EET 3040 - Instrumentation and Measurements

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Introduction to electronic data acquisition, data analysis, error analysis, signal measurement, and automatic testing techniques.

Lecture and lab combination. Laboratory activities to include the design, construction, and analysis of measurement circuits, data acquisition circuits, instrumentation devices, and automatic testing.

Pre-requisite(s): AVET 2110, AVET 2170.

EET 3050 - Microprocessor Systems

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Microprocessor system development using modern software design principles and high level programming languages. Topics include peripheral interfacing, real-time operating systems and debugging techniques.

Lecture and lab combination. Laboratory activities to include design, simulation, computer programming, analysis, and troubleshooting.

Pre-requisite(s): EET 2150 and either CS 1410 or CS 2250.

EET 3060 - Real-Time Embedded Controllers

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: An introduction to real-time kernels and operating systems. Priority-based pre-emptive scheduling, intertask communication, and intertask synchronization will be studied. Other topics include priority inversions, semaphores, mutexes, context switches, rate monotonic analysis (RMA), various kernel services, finite state machines, and nested state machines.

Pre-requisite(s): EET 2150.

EET 3070 - Engineering Technology Research

Credits: (3)

Description: Engineering problem solving using the Internet, professional journals, and human networking. Three styles of writing emphasized; technical descriptions, historical perspectives of technology, and technical defensible arguments.

Pre-requisite(s): AAS degree in CET or EET.

EET 3080 - Embedded Networks

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: This course provides an in-depth study of several serial communication standards and how to implement them in embedded systems. The standards addressed in this class include RS232, RS485, Controller Area Network (CAN), and Ethernet. Emphasis will be placed on utilizing the stacks and protocols for each standard. The channel bandwidth, noise, and data error rate will be addressed. Wireless methods of serial communication will be surveyed.

Pre-requisite(s): EET 2150.

EET 3090 - Project Management

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: EET 3090 Project Management course is designed to prepare students for the senior capstone project. The course will include development of a contract, goal setting, time management, budgeting, project funding, project leadership and team building principles. Engineering economics, team work, quality statistics and continuous improvement will also be discussed. Other topics include project life cycles, organization and risk management.

Pre-requisite(s): EET 1110, and EET 1140, and EET 2010.

EET 3100 - Renewable Energy

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of the EET 3100 Renewable Energy course is for each student to learn the fundamental knowledge and technology of various types of renewable energy including solar energy, wind power, hydroelectric, geothermal energy, biomass and ocean energy. This course discusses the limitations and the impacts of using fossil fuel energy and its possible impact on global climate change. This course will enable students to build an essential foundation towards the specific applications of renewable energy such as solar PV (Photovoltaic) systems, wind turbine systems and micro-hydro systems. Incentives, rebates and policies from federal, state and local power companies will also be addressed in the class. The students will learn how to acquire professional certifications if they are interested in developing a career in the area of renewable energy.

Pre-requisite(s): EET 1110 or EET 1850.

EET 3180 - Advanced Solar PV Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is for each student to learn the advanced knowledge and technology of solar PV (Photovoltaic) systems. This course will enable students to verify system design, manage project, install electrical and mechanical components, complete system installation, and conduct maintenance and troubleshooting. The topics in this course includes PV markets and applications, safety requirements, the advanced technology of solar PV systems, PV system components, grid-tied and battery-based systems, load analysis and PV system sizing, PV system electrical and mechanical designs, National Electric Code (NEC) applied to PV systems, commissioning and decommissioning, performance analysis, maintenance and troubleshooting, and CAD software for PV system design. Incentives, rebates and policies from federal, state and local power company will also be addressed in the class. The students will learn how to acquire professional certifications if they are interested in developing a career in solar PV industry.

Pre-requisite(s): EET 2180.

EET 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

EET 4010 - Senior Project I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Students will work on teams to design, construct, test, and install a significant engineering project. The course includes selecting a team, selecting a project, writing a contract, maintaining a logbook, creating and following project milestones, setting and completing weekly goals, writing a manual, and making a final presentation to students, faculty, and industry advisers.

Pre-requisite(s): EET 3090.

EET 4020 - Senior Project II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: A continuation of EET 4010 Senior Project I. Students will work on teams to design, construct, test, and install a significant engineering project. The course includes selecting a team, selecting a project, writing a contract, maintaining a logbook, creating and following project milestones, setting and completing weekly goals, writing a manual, and making a final presentation to students, faculty, and industry advisers.

Pre-requisite(s): EET 4010.

EET 4060 - Advanced Communications

Credits: (4)

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: Introduction to satellite communications, spread spectrum techniques, digital satellite communications, antennas, small signal amplifiers, Smith charts, and "S" parameter analysis.

Lecture and lab combination. Laboratory activities to include the design, construction, computer simulation and analysis of wireless communications circuits and systems.

Pre-requisite(s): AVET 3010.

EET 4090 - Systems Design and Integration

Credits: (3)

Course Fee: \$5.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: An introduction to the fundamentals of large-scale systems. The first part deals with systems analysis, design and integration with emphasis on input/output models, transfer functions, and interface issues. The second part discusses a variety of systems design and management approaches, particularly those concerned with system requirements, interface control, evaluation, quality assurance through configuration management, audits and reviews, and the human role in systems.

Pre-requisite(s): EET 3090.

EET 4800 - Individual Studies

Credits: (1-4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Course fees are used for lab equipment replacement and maintenance, electronic components used in labs, lab computers, software licensing, and printer paper. Small purchases of equipment and components required for projects may be covered by course fees.

Description: The student will receive credit for approved studies in an area not covered in the EET program. A maximum of four credits can be counted as electives for EET majors.

EET 4890 INT - Cooperative Work Experience

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The student will receive credit for approved electronics industrial experience. Professional development activities will include resume writing, goal setting, progress reports, and a supervisor's evaluation.

Pre-requisite(s): Permission from the department.

The course can be taken a maximum of three times for a total of 6 credits.

EET 4900 - Special Topics

Credits: (1-4)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Course fees are used for lab equipment replacement and maintenance, electronic components used in labs, lab computers, software licensing, and printer paper. Small purchases of equipment and components required for projects may be covered by course fees.

Description: A one-time special study course designed to introduce a new relevant topic that is not covered in the EET program.

Lecture and lab combination. Laboratory activities to support the selected course topic.

May be repeated four times for a maximum of seven credit hours.

Note: A maximum of four credits can be counted for EET majors.

ENGL 0900 ND - Fundamentals of College Reading and Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to help students develop fundamental reading, writing, grammar, and thinking skills. Students in this course may work closely with Writing Center tutors in one-to-one settings. Students with ACT scores in either English or Reading of 12 and below are required to take ENGL 0900 ND. Students without ACT scores are also placed in this course unless they are otherwise placed by Accuplacer. Students must complete this course with a grade of C or better before enrolling in ENGL 1005 or ENGL 1006. For optimal learning, students are strongly encouraged to enroll in ENGL 1000 (College Reading) or ENGL 1001 (College Reading for Multilingual Learners) while taking ENGL 0900.

Note: ND (non-degree) do not count toward hours required for graduation.

ENGL 0955 ND - Developmental College Reading and Writing

Credits: (6)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: A course to help students develop reading, writing, and critical thinking skills prerequisite for entry-level college courses. Students in this course are supported by the Skills Enhancement Center. Students who pass ENGL 0900 with a grade of C or better, whose ACT scores in English or Reading run from 13 to 16, or who are placed by Accuplacer are placed in ENGL ND0955. Students must complete ENGL ND0955 with a grade of C or better before enrolling in ENGL 1010.

Note: ND (non-degree) do not count toward hours required for graduation.

ENGL 1000 - College Reading

Credits: (1-3)

Description: The objective of ENGL 1000 is to improve students' skills for successful college-level reading, emphasizing proven literacy strategies. This goal is accomplished by providing a variety of active reading and thinking approaches, as applied to college-level texts.

May be repeated 4 times up to 6 credit hours.

Note: Check with Department for course availability.

ENGL 1001 - College Reading for Multilingual Learners

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: English 1001 is primarily designed for bilingual or multilingual learners. This course focuses on support for language acquisition, focusing on reading, understanding, and engaging with academic topics. Through a guided approach, the students will improve reading comprehension and thereby improve writing, listening, and speaking skills. The course will also include exposure to university culture and language development.

ENGL 1002 - College Reading 2

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The objective of ENGL 1002 is to deepen students' skills for successful college-level reading, emphasizing advanced literacy strategies. This goal is accomplished by building on the foundations of ENGL 1000/ENGL 1001 using active reading and thinking approaches as applied to college-level texts.

Pre-requisite(s): ENGL 1000 or ENGL 1001 with a grade of "C" or better.

Suggested Requisite(s): ENGL 1005 or ENGL 1007.

ENGL 1005 EN1 - College Reading and Introductory Writing

Credits: (6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: English 1005 introduces students to the habits and practices necessary for reading and writing at the college level. Students will focus on the writing process, writing for specific audiences, collaboration with peers, grammatical and mechanical correctness, improving reading comprehension, and the interrelationship between reading and writing. Students who have placed into ENGL 0955 (Level 2) may choose to take this accelerated course, which will satisfy the requirements for ENGL 0955 and ENGL 1010. Students must complete ENGL 1010 satisfactorily (a grade of "D-" or better) before enrolling in ENGL 2010 or ENGL 2015.

Pre-requisite(s): Level 2 placement or ENGL 0900 with a grade of C or better.

ENGL 1006 - College Reading and Introductory Writing, Part A

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: English 1006 introduces students to the habits and practices necessary for writing at the college level. Students will focus on the writing process, writing for specific audiences, collaboration with peers, grammatical and mechanical correctness, and reading comprehension. Students who have placed into ENGL 0955 (Level 2) may choose to take the two-semester course sequence of ENGL 1006 and ENGL 1007, which will satisfy the requirements for ENGL 0955 and ENGL 1010. Students must complete both ENGL 1006 and ENGL 1007 satisfactorily (with a grade of C or better) before enrolling in ENGL 2010 or ENGL 2015.

Pre-requisite(s): Level 2 English placement or completion of ENGL 0900 with a grade of C or better.

Suggested Requisite(s): For optimal learning, students are strongly encouraged to take this course along with ENGL 1000 (College Reading) or ENGL 1001 (College Reading for Multilingual Learners) in the same semester.

ENGL 1007 - College Reading and Introductory Writing, Part B

Credits: (3)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: English 1007 builds upon the foundational habits and practices necessary for writing at the college level established in ENGL 1006. Students will learn practices of successful university-level writing across multiple genres, focusing on the writing process, writing for specific audiences, collaboration with peers, the interrelationship between reading and writing, and applying literacy techniques learned to college-level texts. The course applies advanced reading comprehension practices. Students who have placed into ENGL 0955 (Level 2) may choose to take the two-semester course sequence of ENGL 1006 and ENGL 1007, which will satisfy the requirements for ENGL 0955 and ENGL 1010.

Pre-requisite(s): ENGL 1006 with a grade of "D-" or better.

Suggested Requisite(s): For optimal learning, students are strongly encouraged to take this course along with either ENGL 1001 (College Reading for Multilingual Learners) or ENGL 1002 (College Reading 2) in the same semester.

Note: Students who have placed into ENGL 0955 (Level 2) may choose to take the two-semester course sequence of ENGL 1006 and ENGL 1007, which will satisfy the requirements for ENGL 0955 and ENGL 1010.

ENGL 1010 EN1 - Introductory College Writing**Credits: (3)****Typically Taught Summer Semester:** *Full Sem, Full Sem - Online***Typically Taught Fall Semester:** *Full Sem, Full Sem - Online, 1st Block, 1st Blk Online, 2nd Block***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online, 1st Block*

Description: Students will learn practices of successful university-level writing across multiple genres. Students will focus on the writing process, writing for specific audiences, collaboration with peers, and on the interrelationship between reading and writing.

Pre-requisite(s): To enter 1010 the student must have 17 or higher on both ACT English and Reading, or equivalent. Students must complete ENGL 1010 satisfactorily (a grade of "D-" or better) before enrolling in ENGL 2010 or ENGL 2015.

ENGL 2010 EN2 - Intermediate College Writing**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This course will focus on writing researched arguments, discerning, engaging with, and documenting sources, and writing with rhetorical awareness and persuasive force. Students will continue to learn practices of successful academic writing including the writing process, writing for specific audiences, and collaboration with peers.

Pre-requisite(s): Level 4 placement, passing ENGL 1005 or ENGL 1006 and ENGL 1007 or ENGL 1010 with "D-" grade or better, AP Language and Composition or Literature and Composition examination with a score of 3 or better, ACT English and Reading score of 29 or better, CLEP with essay test with a score of 50 or better, or articulated transfer credit from another regionally accredited college or university.

ENGL 2015 EN2 - Intermediate College Writing & Research**Credits: (4)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Intermediate College Writing & Research focuses on combining writing and research skills. It will focus on writing arguments, conducting research, and documenting sources. Students will continue to learn practices of successful academic writing including the writing process, writing for specific audiences, and collaboration with peers. Students completing this course will be able to use an academic library and the Internet to successfully identify, access, evaluate and use information resources to support academic success and lifelong learning. This course will

fulfill both the English Composition and the Information Literacy General Education core requirements.

Pre-requisite(s): Level 4 placement, passing ENGL 1005 or ENGL 1010 or *both* ENGL 1006 and ENGL 1007, with a grade of "D-" or better, passing the AP Language and Composition or Literature and Composition examination with a score of 3 or better, achieving an ACT English and Reading score of 29 or better, a CLEP with essay test with a score of 50 or better, or an articulated transfer credit from another regionally accredited college or university.

ENGL 2100 - Technical Writing

Credits: (3)

Typically Taught Summer Semester: *Check with department for course availability.*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: This course prepares students for on-the-job writing and emphasizes the importance of audience analysis, graphics, and document design. Students study and practice writing and designing a variety of technical documents as they learn to write clearly, concisely, and persuasively to a specific audience for a specific purpose.

Pre-requisite/Co-requisite: ENGL 1010 or ENGL 2010 or ENGL 2015.

ENGL 2120 - Introduction to Writing and Document Design

Credits: (3)

Typically Taught Fall Semester: *Check with department*

Typically Taught Spring Semester: *Full Sem*

Description: Through literary texts, including fiction, non-fiction and poetry as well as film and other digital mediums, this course will introduce students to the ways writing fits into various types of organizations, which are increasingly focused around knowledge work, or work that analyzes and communicates rather than manufactures products. Within the framework of writing, students will learn how organizations are networked and situated, and how collaboration, systems of power, organizational structures, and various audiences and stakeholders function.

ENGL 2130 - Media and Technology in Texts

Credits: (3)

Typically Taught Fall Semester: *Check with department*

Typically Taught Spring Semester: *Full Sem*

Description: Through the study of literary texts such as fiction, poetry, nonfiction, and film, students will gain an understanding of key concepts in the study of media and technology, including historical and forward-looking perspectives. These might include such topics as the impact of technology on society and culture, how new technologies shape information and how new media forms affect reading, writing and analysis.

ENGL 2140 - Introduction to Professional and Technical Editing

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem-Online*

Description: This course focuses on basic editing in the workplace. We examine genres, electronic editing, version control, collaboration, synchronous and asynchronous writing/editing, and literature related to editing.

ENGL 2150 - Gender and Culture in Workplace Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Check with department for course availability.*

Description: Gender and culture affect professional and technical writing and an understanding of the many roles we encounter and play through gender and culture is essential for writers. This course will overview for students the

many ways gender and culture can be applied to and explored in professional and technical writing and provide practice identifying and analyzing such issues through literature.

ENGL 2160 - Introduction to Web-Based Technical Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Check with department for course availability.*

Description: This course will first cover how organizations create and share information on the web and social media, and how the differences in reader expectation and reading behavior between printed and online texts help shape the information. The course will then focus on characteristics of good online content, analysis of audience and purpose, and strategies for writing and designing content to meet the needs and expectations of the readers. Throughout the semester, students will practice, individually and collaboratively, good writing and designing skills in learning to become effective writers of a workplace.

ENGL 2200 HU/CC - Introduction to Literature

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This foundational course examines literary form and genre. Studying literature written by a diverse range of authors from various cultures and historical periods, students will be introduced to three major literary modes: fiction, drama and poetry. Students will learn how to read literary texts closely and critically. They will learn how forms adapt over time. Course includes relevant practice in the principles of successful writing, including drafting, revising, and editing.

ENGL 2210 - Introduction to Film Theory and Criticism

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces students to the theory and practice of critically analyzing film. We will survey the international development of film from its origins to the present. Our focus will be on the history and methods of narrative film, including the development of film and digital technology, and on the modern viewer's expected skill in "reading" film.

ENGL 2220 HU/CC - Introduction to Fiction

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: An introduction to short stories, novellas, and novels, selected from a diverse range of authors from various cultures and historical periods. Students will learn how to read fiction carefully and critically, and how fiction can have a meaningful part in their daily lives. Course includes relevant practice in the principles of successful writing, including drafting, revising, and editing.

ENGL 2230 HU/CC - Introduction to Drama

Credits: (3)

Typically Taught Fall Semester: *Check with Department*

Typically Taught Spring Semester: *Check with Department*

Description: An introduction to drama from around the globe, selected from a diverse range of authors from various cultures and historical periods. Students will develop the critical and interpretive skills necessary to analyze

and appreciate plays and to recognize their contemporary relevance. Course includes relevant practice in the principles of successful writing, including drafting, revising, and editing.

ENGL 2240 HU/CC - Introduction to Poetry

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: An introduction to poetry written in English, selected from a diverse range of authors from various cultures and historical periods. Students will develop the critical and interpretive skills necessary to appreciate the craft of poetry as a valid and important way of talking about human experiences. Course includes relevant practice in the principles of successful writing, including drafting, revising, and editing.

ENGL 2250 CA/CC - CW: Introduction to Creative Writing

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online, 1st Block, 2nd Block*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: In this introductory course students will write original pieces in three genres that may include flash fiction, short stories, poetry, creative non-fiction, plays, and graphic novels. Students will read exemplary pieces from each genre in order to build a vocabulary base. Through writing exercises, students will generate original writing and refine oral and communicative skills. Students will critique and be critiqued in order to revise early drafts.

Pre-requisite(s): ENGL 1005 or ENGL 1006 and ENGL 1007 or ENGL 1010 or ENGL 2010 or ENGL 2015 with a grade of "C" or better.

ENGL 2260 CA/CC - CW: Introduction to Writing Short Fiction

Credits: (3)

Typically Taught Summer Semester: *1st Blk Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This intermediate course introduces students to short fiction writing in a workshop setting. This course is a writing laboratory where students will experiment with various types of short fictions. Students will read canonical and contemporary stories with an eye toward elements of craft as they discover, write, workshop, and revise.

Pre-requisite(s): ENGL 1005 or ENGL 1006 and ENGL 1007 or ENGL 1010 or ENGL 2010 or ENGL 2015 with a grade of "C" or better.

ENGL 2270 CA/CC - CW: Introduction to Writing Poetry

Credits: (3)

Typically Taught Summer Semester: *1st Block*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This intermediate course introduces students to poetry writing in a workshop setting. This course is a writing laboratory where students will experiment with various types of poetry. Students will read canonical and contemporary poems with an eye toward elements of craft as they discover, write, workshop, and revise.

Pre-requisite(s): ENGL 1005 or ENGL 1006 and ENGL 1007 or ENGL 1010 or ENGL 2010 or ENGL 2015 with a grade of "C" or better.

ENGL 2280 CA - CW: Introduction to Writing Creative Nonfiction

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: In this introductory course, students will learn the basics of writing creative nonfiction, including how to shape personal experiences into dynamic art through study, practice, and play. Students will be introduced to a variety of narrative strategies such as braided, hybrid, and lyric essays. Ultimately, students will deepen their self-understanding while refining and expanding their storytelling skillset.

Pre-requisite(s): ENGL 1005 or ENGL 1010 or ENGL 2010 or ENGL 2015.

ENGL 2295 - CW: Introduction to Screenwriting

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: In this introductory course, students will learn the basics of screenwriting, including how to use action and dialogue to convey character and establish tension. Additionally, students will begin working with screenwriting software to develop an understanding of the formatting conventions of the genre.

Pre-requisite(s): ENGL 1005 or ENGL 1010 or ENGL 2010 or ENGL 2015.

ENGL 2420 - Young Adult Literature

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Young Adult Literature will introduce students to a variety of literary works within this popular and compelling genre. Through close reading, we will examine various features, themes, and representations of adolescence and adulthood. We will also consider different pedagogical approaches to these texts to uncover broader literary and sociocultural dimensions.

Pre-requisite(s): ENGL 2010 or ENGL 2015, or equivalent.

ENGL 2501 HU/CC - Literature Today

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem, Full Sem-ONL*

Typically Taught Spring Semester: *Full Sem, Full Sem-ONL*

Description: Why and how do writing and reading still matter? This course explores writing since the year 2000, by writers from around the world whose work - directly and indirectly - addresses the urgent issues of today, including but not limited to economic disruption, technological innovation, exclusionary and divisive politics, social alienation, racism, misogyny, colonialism. The course is geared towards students in their first and second year, and includes opportunities to learn more about the Department of English Language and Literature and its programs.

ENGL 2700 - Introduction to Critical Theory

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem, Full Sem-ONL*

Typically Taught Spring Semester: *Full Sem, Full Sem-ONL*

Description: Students will study and practice critical approaches to literature. This course introduces theories,

interpretive frameworks, and central questions about literature and literary media. What do we mean by "literature" itself? How might we compare and evaluate literary interpretations? Why do we read? What assumptions do we take for granted when we read? How does the historical, social and cultural context of a text shape its meanings and its effects? Combining major critical and theoretical writings with literary works, the course investigates how textual production and interpretation are informed by philosophical and aesthetic traditions, gender and sexuality, race and ethnicity, national and postcolonial identities, and the material forms in which literature circulates. Students will not only learn the theoretical premises behind these theories, but also practice explicating various texts from a particular critical perspective.

ENGL 2710 HU/CC - Perspectives on Women's Literature

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Check with Department*

Description: The purpose of this class is to introduce students to the rich contributions of women to the field of literature. The course will cover a variety of women writers that may range from the medieval period to the present and will feature literary genres such as fiction, poetry, drama, non-fiction, and journals/diaries. In discussing and writing about these works, students will consider why women were excluded or marginalized in the canon for such a large part of literary history and how society, family, and politics impacted the way these women wrote.

ENGL 2750 HU - Topics and Ideas in the Humanities

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This variable topics course focuses on topics and ideas in the humanities. The course may consider social, political, artistic, environmental, or philosophical themes across disciplines. Students will learn the critical skills necessary to identify the intellectual currents in the texts under consideration, to engage in focused discussion and to probe the various intentions of any act of writing.

May be taken twice for a total of 6 credits.

ENGL 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ENGL 2830 - Directed Readings

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual readings supervised by a faculty member.

Pre-requisite(s): ENGL 2010, ENGL 2015, or equivalent.

May be repeated twice up to 6 credit hours.

ENGL 2890 - Cooperative Work Experience

Credits: (1-6)

Description: Open to all students in the English Department who meet the minimum Cooperative Work Experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

Pre-requisite(s): ENGL 2010, ENGL 2015, or equivalent.

May be repeated 5 times up to 6 credit hours.

Note: Check with department for current course offerings.

ENGL 2920 - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): ENGL 1010 with a "C" grade or better or equivalent.

May be repeated for a total maximum of 6 credit hours.

Note: Check with department for current course offerings.

ENGL 2920S INT - Community Service**Credits: (3)**

Description: Students will receive an overview of community service and explore opportunities for service learning in the community. A weekly seminar with required readings and writings as necessary and 50 hours of community service.

Pre-requisite(s): ENGL 2010, ENGL 2015, or equivalent.

Note: Check with department for current course offerings.

ENGL 2999 INT - Capstone in Workplace Communication and Writing**Credits: (3)**

Description: This class provides an opportunity for students to synthesize and demonstrate their learning in the Associate of Workplace Communication program. The primary purpose of this course is to help students transition from earning an associate's degree to pursuing a job and/or continued education toward a bachelor's degree. The course will include employment-related content such as interviewing skills, job shadows, career research, portfolios, resumes, and cover letters. The course will also include a section on workplace ethics to develop responsible and productive professionals. Cross-listed with COMM 2999.

Pre-requisite(s): Permission of Instructor Required.

Note: Check with Department for course availability.

ENGL 3010 - Introduction to Linguistics**Credits: (3)**

Typically Taught Summer Semester: *Check with department for course availability.*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces students to the scientific study of language. It looks across languages to explore what they have in common, as well as what distinguishes them from one another. Students learn basic analytic techniques in articulatory phonetics, phonology, morphology, syntax, and semantics and apply them to data drawn from various languages. These core concepts may be applied to other areas, such as language acquisition, language history, language and culture, language and society, language and thought, or language and literary expression.

Pre-requisite(s): ENGL 2010, ENGL 2015, or equivalent.

Note: Students in English, foreign languages, anthropology, philosophy, psychology, and history are encouraged to take this course.

ENGL 3020 - Teaching English/Language Arts

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is designed for English teaching majors and minors. Students in the course will study a variety of literary works to better understand the ways that literature engages interest and promotes deep learning. Students in the course will study pedagogical practices that support the effective and equitable teaching of literature in diverse and inclusive classrooms. Students will develop curriculum that is aligned with the Utah State Core Standards and that is rationalized in current research.

Pre-requisite(s): ENGL 2010, ENGL 2015 or equivalent and admitted to Secondary Education program.

Pre-requisite/Co-requisite: ENGL 2420.

ENGL 3030 - Structure of English

Credits: (3)

Typically Taught Summer Semester: *Check with department for course availability.*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course presents the major parts of speech, grammatical functions, and constructions of Standard English. Its purpose is to show that English, like any human language, is an intricate and rule-governed system. To this end, it draws on the terminology of traditional grammar and the analytical techniques of structural and transformational grammar, including contextual definitions and tree diagramming. The course is directed toward departmental English majors, teaching majors, advanced ESL students, and students majoring in foreign language teaching.

Pre-requisite(s): ENGL 2010 or ENGL 2015, or equivalent.

ENGL 3040 - History of the English Language

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course begins by introducing the elementary vocabulary and concepts of linguistic theory as these pertain to historical linguistics. It then traces the prehistory of English from its beginnings in Indo-European, through its place in the Germanic branch, to its historical phases of Old, Middle, and Early Modern English. Attention may also be given to national varieties of English and the development of English as a world language.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 3050 - Grammar, Style, and Usage for Advanced Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course presents the concepts and nomenclature of traditional grammar as a context for students wishing to increase their control of punctuation, style, and usage in order to become more proficient writers. Its purpose is to offer practical guidance in how grammatical concepts can be applied to revising and editing one's own or others' writing to more effectively express one's intended meaning. The course is offered to all English majors and minors as a means of fulfilling the language requirement for the major, especially those in technical writing or creative writing. Students in communication, pre-law, and criminal justice may also find the class meets requirements.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 3080 - Critical Approaches to Literature

Credits: (3)

Typically Taught Summer Semester: *Check with Department*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: Students will study and practice critical approaches to literature. The course will begin with New Criticism and proceed to study more resistant reading strategies such as feminism, Marxism, and deconstruction. Students will not only learn the theoretical premises behind these theories, but also practice explicating various texts from a particular critical perspective. Primarily for English majors and minors. Recommended to take early in major.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

Suggested Requisite(s): ENGL 2200, ENGL 2220, ENGL 2230, or ENGL 2240.

ENGL 3100 - Professional and Technical Writing**Credits: (3)**

Typically Taught Summer Semester: *Full Sem Online, Check with department for course availability.*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course introduces students to the basic theories and practices of technical communication. Using audience, purpose, and context as their guides, students create various professional and technical documents, such as formal and informal reports, instructions, proposals, job application materials, brochures, web media, and presentations. Working both individually, and in collaboration, students analyze their rhetorical situation as they create usable and appropriate professional documents. This course provides the practical and theoretical basis for the minor and emphasis in Professional and Technical Writing.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3120 - Foundations in Professional & Technical Writing**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: This course provides the theoretical and rhetorical knowledge that underpins the practice of technical and professional writing. Students will learn about rhetorical theories, research methods, social justice initiatives, technological theories, and ethics. The course will prepare students for understanding why technical and professional writers make the choices they do and empower students to explain the exigence of their field of study.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3130 - Digital Writing Technologies**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: This course will introduce students to the tools/software that technical writers and other professionals use in the workplace. Topics include, but are not limited to, Advanced Features in MS Word (styles, macros), the Adobe Suite, Advanced Features of online collaborative tools (the Google Suite among others), the suite of Apple products. This instruction prepares students, not just English majors, for the necessary skills to enter into the workforce prepared to succeed.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3140 - Professional and Technical Editing**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: Building on the knowledge of technical writing genres and the writing strengths developed in ENGL 3100, this course introduces students to copyediting, comprehensive editing, and the basics of collaborative editing and document management. Technical editing is designed to strengthen students' writing, editing, and visual design

skills through attention to detail and application of style, grammar, and usage principles. Additionally, this course focuses on hard copy and soft copy editing principles.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3160 CEL - Grant Writing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This class introduces you to the grant writing process and provides you with experience writing actual grant applications in collaboration with a local non-profit organization. By the end of the class you will know the basic elements of grant writing and be able to identify organizational needs; research appropriate funding sources; plan, develop, and write grant proposals.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3190 CEL - Document Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course teaches a rhetorical approach to document design. Using the rhetorical principles of audience, purpose, and context, students will discuss sample documents, analyze the layout of documents (both professional documents and ones students create in class), and articulate what makes an effective layout and design (regarding arrangement, emphasis, clarity, conciseness, tone, and ethos). Throughout the course, students will create (both individually and collaboratively) documents that meet client specifications thereby providing practical experience and generating material for their professional portfolios.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3210 - Advanced College Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Basic expository techniques combined with other forms of discourse. Emphasis on originality, clarity and practical application for other courses as well as vocation.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3240 - CW: Writing Creative Nonfiction

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This advanced course is designed for students who wish to increase their aptitude in the art of creative nonfiction writing, including lyric essay, personal essay, and memoir. Students will write, revise, and workshop in order to produce publishable material.

Pre-requisite(s): ENGL 2250 or ENGL 2260 or ENGL 2270 or ENGL 2280 or ENGL 2295.

ENGL 3250 - CW: Advanced Fiction Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: Students will learn advanced fiction writing skills. Whether they plan to write novels or short fiction, this class will develop their use of plot, character, point of view, narrative structure, setting, image, wordplay and syntax. Students will write, revise, and workshop in order to produce publishable material.

Pre-requisite(s): ENGL 2250 or ENGL 2260 or ENGL 2270 or ENGL 2280 or ENGL 2295.

ENGL 3260 - CW: Advanced Poetry Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This advanced course is designed for students who wish to increase their aptitude in the art of poetry writing. Students will read contemporary and canonical poems with an eye toward line, stanza breaks, imagery, sound, rhythm, and structure. Students will write, revise, and workshop in order to produce publishable material.

Pre-requisite(s): ENGL 2250 or ENGL 2260 or ENGL 2270 or ENGL 2280 or ENGL 2295.

Note: This course is taught every other Spring.

ENGL 3280 - Biographical Writing

Credits: (3)

Typically Taught Fall Semester: *Check with department for course availability.*

Typically Taught Spring Semester: *Full Sem*

Description: Includes autobiographical writing and is oriented strongly toward personal and familial interests. Written assignments include the personal narrative, character sketch, as told to, and conclude with a chapter or two on a projected book-length project. Extensive written and oral input on each assignment from professor and class. Strong emphasis is placed on techniques of research including interviewing, effective characterization, narration and description. Prior experience in imaginative writing and other areas of literature is recommended.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 3290 - CW: Advanced Screenwriting

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: In this advanced course, students will enhance their understanding of screenwriting by studying produced films and workshoping their own original work. We will focus on developing complex characters through action and dialogue, studying and applying the movement of the three-act structure, and creating scenes driven by desire and the obstacles to those desires. In short, students will build on the basics that they have already begun to master and will apply those towards creating more sophisticated work.

Pre-requisite(s): ENGL 2240 or ENGL 2250 or ENGL 2260 or ENGL 2270 or ENGL 2280 or ENGL 2295.

ENGL 3300 - Children's Literature

Credits: (3)

Typically Taught Summer Semester: *Check with department for course availability.*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students will study the principles of literature for children with special emphasis on evaluation and selection, classroom and library use, ethnic and cultural diversity, and the development of literacy. Designed to meet the needs of teachers, those preparing to teach and those who work with children in various settings.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 3350 - CW: Studies in Literary Genres

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This variable topics course introduces students to the historical and cultural origins of literary genres,

their distinguishing features, and the dynamics of literary development. Genres may include the novel, drama, poetry, creative non-fiction, bildungsroman, the diary, biography, autobiography, satire, and others. It may be taken more than once with different designations.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

May be repeated once for a total of six credit hours.

ENGL 3352 - Studies in World Literary Genres

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This variable topics course introduces students to familiar and unfamiliar world literary genres, exploring their distinctive features and their interactions with the cultures and histories they represent. Genres might include poetry and prose, fiction and non-fiction, satire and fable, tragedy and ballad, biography and autobiography, and many others.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

It may be taken a total of 3 times (for a maximum of 9 credits) with different designations.

ENGL 3353 - Genres in Cultural and Media Studies

Credits: (3)

Variable Title

Typically Taught Summer Semester: *Check with department for course availability.*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This variable topics course introduces students to genres in cultural and media studies, their distinguishing features, and the dynamics of their development. Genres may include the novel, digital novel, film, television, social media, advertising, music, and the internet.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

It may be taken a total of 3 times (for a maximum of 9 credits) with different designations.

ENGL 3354 - Genres in Writing and Interdisciplinary Studies

Credits: (3)

Variable Title

Typically Taught Summer Semester: *Check with department for course availability.*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This variable topics course introduces students to interdisciplinary genres, new directions in transcending disciplinary boundaries, or issues in writing and rhetoric. Genres may include various forms of narrative as they intersect with the sciences, social sciences, arts and humanities, health professions, business and economics, applied science and technology, and others.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

It may be taken a total of 3 times (for a maximum of 9 credits) with different designations.

ENGL 3355 - CW: Creative Nonfiction Forms and Craft

Credits: (3)

Description: This class asks students to experiment with form and structure within the genre of creative nonfiction writing to understand how narrative shape affects the reader's experience.

Pre-requisite(s): ENGL 2250 or ENGL 2260 or ENGL 2270 or ENGL 2280 or ENGL 2295.

ENGL 3360 - CW: Short Story Forms and Craft

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Description: This class asks students to experiment with form and story structure within the genre of fiction writing, to understand how narrative shape affects the reader's experience.

Pre-requisite(s): ENGL 2250, ENGL 2260, ENGL 2270, ENGL 2280, or ENGL 2295.

ENGL 3365 - CW: Novel Forms and Craft

Credits: (3)

Typically Taught Summer Semester: *Check with Department*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This class asks students to experiment with form and structure within the genre of novel writing to understand how narrative shape affects the reader's experience.

Pre-requisite(s): Any one of the following: ENGL 2250, ENGL 2260, or ENGL 2270.

ENGL 3370 - CW: Poetic Forms and Craft

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This class asks students to experiment with form and structure within the genre of poetry writing to understand how prosody affects the reader's experience.

Pre-requisite(s): ENGL 2250 or ENGL 2260 or ENGL 2270 or ENGL 2280 or ENGL 2295.

ENGL 3375 - CW: Notebooks and Journals Forms and Craft

Credits: (3)

Description: This class examines the writer's notebook, reading examples and studying possibilities. Students will keep a writer's notebook inspired by those examples.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 3380 - CW: Screenwriting Forms and Craft

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem*

Description: This class asks students to experiment with form and structure within the genre of screenwriting to understand how dialogue and scene affects the reader's experience.

Pre-requisite(s): ENGL 2250 or ENGL 2260 or ENGL 2270 or ENGL 2280 or ENGL 2295.

ENGL 3410 INT - The Teaching of Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is designed for English Teaching majors and minors. Students in the course will study pedagogical practices that support the effective and equitable teaching of writing in diverse and inclusive classrooms. Students will develop curriculum that is aligned with the Utah State Core Standards and that is rationalized in current research.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent, and admitted to Secondary Education program.

Co-Requisite(s): ENGL 3020.

Pre-requisite/Co-requisite: ENGL 2420.

ENGL 3500 HU - Introduction to Shakespeare

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Even Years, Full Sem - Online Odd Years*

Description: This class is an introduction designed to foster a critical appreciation of the plays of Shakespeare. The class is intended for all who wish to gain a greater appreciation for Shakespeare and his work. Students can expect to study a varied selection of Shakespeare's plays and poems, as well as historical, cultural, critical, and performance contexts.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 3510 HU/CC - World Literature

Credits: (3)

Typically Taught Summer Semester: *Check with Department*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This is a selection of masterworks from a variety of authors, regions, and eras - expressly to introduce diverse literatures other than British and American. The required readings may vary considerably from semester to semester, according to the instructors' expertise.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 3520 HU - Literature of the Natural World

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Check with department for course availability.*

Description: This course engages literary texts that focus on humans in relation to their natural environment. Conceived as a survey course, it attempts to delineate the various traditions of environmental concern, from the ancient past to the present, and to draw attention to the ongoing relevance of such texts. Students will learn how to read closely and carefully, and how to make such literature meaningful for their own daily lives.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 3530 - The Literature of Business and Economics

Credits: (3)

Typically Taught Fall Semester: *Check with Department*

Typically Taught Spring Semester: *Check with Department*

Description: This course examines historical and contemporary issues in the world of business and economics through literature, film, and essays. The course will explore concepts such as private property, commodities and natural resources, wage labor, capital, public lands, and globalization. Students will investigate pertinent moral and ethical questions connected with these concepts from both historical and contemporary perspectives, such as the distribution of wealth and poverty, consumption and resource management, competition and conflict, and social (in)stability. The course is designed to improve writing skills, specifically the ability to express complex ideas from a variety of perspectives and to improve critical and creative thinking skills while stressing the importance of learning through writing.

ENGL 3540 - Adaptation Studies

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course focuses on the process by which literary works and other texts are adapted into other forms and media, and on the product of that adaptive process. Works may include traditional text-to-film

adaptations, as well as more non-traditional forms such as graphic novels, music, television, the Internet, and more.
Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3551 - Queer Literature

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem-Online*

Typically Taught Spring Semester: *Full Sem, Full Sem-Online*

Description: This course examines literature that centers queer perspectives—that is, the identities and experiences of people who are lesbian, gay, bisexual, pansexual, transgender, intersex, non-binary, two-spirit, asexual, or otherwise queer. We will study significant work by writers from diverse backgrounds and different historical periods. The class will cover themes that have been of central importance to queer literature. These include questions about identity and what it means to be queer; representations of love, from queer tragedy to queer joy; chosen family; political liberation; and how queerness intersects with class, race, and other identity categories. We will discuss how queer theory can illuminate this literature. No background in LGBTQIA+ literature, theory, or history is required to participate in this course.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3610 - American Literature I

Credits: (3)

Typically Taught Summer Semester: *Check with department for course availability.*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will introduce students to the study of American Literature from its earliest known works to those produced prior to the American Civil War. We will examine its history, major works, and literary concepts.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3620 - American Literature II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will introduce students to the study of American Literature from the American Civil War to the contemporary period. We will examine its history, major works, and literary concepts.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3650 - British Literature I

Credits: (3)

Typically Taught Summer Semester: *Check with Department*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online Even Years*

Typically Taught Spring Semester: *Full Sem*

Description: This course will introduce students to the study of British Literature from its earliest known works to those produced in the eighteenth century. We will examine its history, major works, and literary concepts.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3660 - British Literature II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will introduce students to the study of British Literature from the eighteenth century to the

contemporary period. We will examine its history, major works, and literary concepts.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 3730 - Literatures of Cultures and Places

Credits: (3)

Variable Title

Description: This variable topics course examines literatures, cultures, and nations beyond England and America. Students will be introduced to the ways in which texts are closely tied to geographical place and cultural space as well as the historical movement from which they emerge. The course may focus on a single national culture or, alternately, offer representative works from various cultures.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

It may be repeated 3 times with different designations.

ENGL 3750 HU - Topics and Ideas in Literature

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This variable topics course focuses on the various social, philosophical, and political themes emerging in literary texts. Students will learn the critical skills necessary to identify the intellectual currents in the texts under consideration, to engage in focused discussion, and to probe the various intentions of any act of writing.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

It may be repeated 3 times with different designations.

ENGL 3752 - Topics and Ideas in World Literature and Language

Credits: (3)

Variable Title

Typically Taught Summer Semester: *Check with Department*

Typically Taught Fall Semester: *Check with Department*

Typically Taught Spring Semester: *Check with Department*

Description: This variable topics course focuses on the various social, philosophical, and political themes emerging in literary texts from around the world. Students will learn the critical skills necessary to identify the intellectual currents in the texts under consideration, to engage in focused discussion, and to probe the various intentions of any act of writing.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

It may be taken a total of 3 times (for a maximum of 9 credits) with different designations.

Note: Check with Department for course availability.

ENGL 3753 - Topics and Ideas in Cultural and Media Studies

Credits: (3)

Variable Title

Typically Taught Summer Semester: *Check with Department*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Check with Department*

Description: This variable topics course focuses on various themes in cultural and media studies. Students will learn the critical skills necessary to identify the intellectual currents in the texts under consideration, to engage in focused discussion, and to probe the various intentions of any text. It may be taken a total of 3 times (for a maximum of 9 credits) with different designations.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 3754 - Topics and Ideas in Writing and Interdisciplinary Studies

Credits: (3)

Variable Title

Typically Taught Summer Semester: *Check with department for course availability.*

Typically Taught Fall Semester: *Check with department for course availability.*

Typically Taught Spring Semester: *Full Sem*

Description: This variable topics course focuses on themes manifest in the field of writing and in interdisciplinary studies. This course may focus on issues in writing, rhetoric, and other disciplines as they intersect with English. Students will learn the critical skills necessary to identify the intellectual currents in the texts under consideration, to engage in focused discussion, and to probe the various intentions of any text.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

It may be taken a total of 3 times (for a maximum of 9 credits) with different designations.

ENGL 3755 - Teaching Language in the Secondary Schools

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Description: This course focuses on teaching language in the secondary schools. The course considers social, political, artistic, environmental, or philosophical themes in relationship to English teaching. Students in the class will learn to translate intellectual movements to pedagogical practices and approaches. May be taken twice for a total of 6 credits.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent and admitted to Secondary Education program.

ENGL 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ENGL 3840 - Methods and Practice in Tutoring Writers

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Description: Controlled experience in tutoring student writers in all disciplines. This course is only for people who are actually employed as a tutor.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 3850 INT - Methods and Practice in Tutoring and Mentoring ESL Students

Credits: (1-3)

Description: This course trains students who are native speakers of English or who are second language learners of English at native or near native levels of proficiency to work or volunteer in the ESL Program as tutors, classroom aides, mentors, and as language informants leading conversation groups.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

Note: Check with Department for course availability.

ENGL 3880 - Philosophy and Literature

Credits: (3)

Typically Taught Spring Semester: *Check with Department*

Description: A study of the interrelationships between ideas that shape the course of history and the poetry, prose, and/or drama of the periods that produce these ideas.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 4010 - Topics in Language Study

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Check with Department*

Typically Taught Spring Semester: *Check with Department*

Description: This variable topics course explores areas of study such as advanced grammar, sociolinguistics, language and the law, linguistics and composition, linguistics and language acquisition, or linguistics and literature, among others, as determined by the instructor. A previous language course or consultation with the instructor is recommended before enrolling.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

It may be taken more than once with different designations.

Note: Check with Department for course availability.

ENGL 4100 - Issues in Professional and Technical Writing

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Description: This variable topics course focuses on specific issues in the ever-evolving field of professional and technical writing. Recent issues include indexing, professionalization, theoretical approaches, and discipline-specific emphases such as writing in the sciences and writing for the Web.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

It may be taken up to four times (for a total of 12 credit hours) with different designations to fulfill electives and must be pre-approved by an advisor.

ENGL 4110 - Content Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This class teaches the theory and application of content management. Students will learn how to evaluate content, divide content into reusable elements, label these elements, and then re-configure them into usable structures. Using the principles of single sourcing, modular writing, and structured authoring, students will map content for reuse, evaluate available authoring tools, implement state-of-the-art technologies, and develop project strategies.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

ENGL 4120 CEL/INT - Seminar and Practicum in Professional and Technical Writing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course serves as a capstone for the minor and emphasis, preparing students for immediate job placement. In the seminar, students review issues and strategies of professional and technical writing and prepare portfolios for job interviews. The practicum is based on an internship or cooperative work experience in the community, with industry, or with an on-campus organization. The internship is the most time-intensive aspect of the course.

Pre-requisite(s): ENGL 2010 or ENGL 2015.

Suggested Requisite(s): ENGL 3100.

ENGL 4410 - Strategies and Methodology of Teaching ESL/Bilingual

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: This course emphasizes practical strategies and methods of teaching ESL/Bilingual in the public school systems of this country.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 4420 - English Phonology and Syntax for ESL/Bilingual Teachers

Credits: (3)

Typically Taught Summer Semester: *Odd-numbered years*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides the essential foundation for ESL/Bilingual teachers in the workings of the English language: pronunciation and spelling systems, word-forming strategies and sentence structure patterns.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 4450 - ESL/Bilingual Assessment: Theory, Methods, and Practices

Credits: (3)

Typically Taught Summer Semester: *Full Sem - even-numbered years*

Typically Taught Fall Semester: *Full Sem*

Description: This course explores how to effectively evaluate and implement assessment processes for ESL/Bilingual pupils in public schools. Students will gain experience with both standardized tests and authentic assessment.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

ENGL 4520 - American Literature: Early and Romantic

Credits: (3)

Description: This historical survey follows waves of European immigration and chronicles the effects of those on the American natives. The class then moves through the Revolutionary War and finishes with the relatively short but intense age of American Romanticism, which occurred in the decades just before the Civil War. The diverse writers in this period include such figures as Columbus, William Bradford, Anne Bradstreet, Benjamin Franklin, Washington Irving, Nathaniel Hawthorne, Edgar Allan Poe, Harriet Beecher Stowe, Henry David Thoreau, Frederick Douglass, Herman Melville, and Walt Whitman.

Pre-requisite/Co-requisite: ENGL 2700.

Note: Check with Department for course availability.

ENGL 4530 - American Literature: Realism and Naturalism

Credits: (3)

Description: This historical survey typically runs from the Civil War to WWI - emphasizing reconstruction, laissez-faire economics, growing imperialism, and universal suffrage. The diverse writers in this survey include such figures as Mark Twain, W. D. Howells, Sarah Orne Jewett, Henry James, Kate Chopin, Booker T. Washington, W. E. B. Du Bois, Stephen Crane, Jack London, Frank Norris, Theodore Dreiser, Mary Austin, and Henry Adams.

Pre-requisite/Co-requisite: ENGL 2700.

Note: Check with Department for course availability.

ENGL 4540 - American Literature: Modern

Credits: (3)**Typically Taught Fall Semester:** *Full Sem*

Description: This historical survey focuses on the first half of the 20th century, when the United States went through a series of profound political and social changes, such as its entry into World War I and II, Prohibition, The Red Scare, Suffrage, the advent of the mass media, and Progressivism. Drawing on a variety of genres and media (including painting and film), the course will study developments in the New Negro Renaissance, Greenwich Village bohemianism, the Provincetown Players, "high" modernism, and the Lost Generation. Representative writers of the period include: Langston Hughes, Zora Neale Hurston, Nella Larsen, Edna St. Vincent Millay, Mina Loy, Eugene O'Neill, Susan Glaspell, Ezra Pound, John Dos Passos, Amy Lowell, William Carlos Williams, Gertrude Stein, Ernest Hemingway, and e.e. cummings.

Pre-requisite/Co-requisite: ENGL 2700.

Note: Check with Department for course availability.

ENGL 4545 - American Literature - World War II to 2001**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This course focuses on American literature from World War II to 2001 within the context of the dramatic political and cultural changes that have shaped contemporary American culture, such as the Cold War, Vietnam, the Civil Rights movement, feminism, and multiculturalism. Like its modernist predecessor, it ranges across genres and media to survey various emergent traditions and tendencies in contemporary and postmodern US letters.

Pre-requisite/Co-requisite: ENGL 2700.**ENGL 4550 - American Literature: Contemporary****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This course focuses on American literature from 2001 to the present. Like its predecessor, English 4545, it ranges across genres and media to survey traditions and tendencies in contemporary US letters that continue to emerge and evolve. The literature produced during this open-ended period is often less burdened by the legacies of Euro-American literature or the politics of the late 20th century, and hence still fluid in terms of defining period markers. Often written within the wider context of 9/11, U.S. foreign policy, and the changing world order, such work often complicates the aesthetic sensibilities of high postmodernism while providing American literature with a more global set of historical and geographic referents.

Pre-requisite/Co-requisite: ENGL 2700.**ENGL 4560 - Contemporary Literature for Creative Writers****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This course introduces students to the work of contemporary writers through the study of literary journals and magazines, full-length books, collections, and individual pieces. Students will examine stylistic choices and the effects of those choices.

Pre-requisite/Co-requisite: ENGL 2700.**ENGL 4610 - British Literature: Medieval****Credits: (3)****Typically Taught Fall Semester:** *Check with Department***Typically Taught Spring Semester:** *Check with Department*

Description: This historical survey runs from the eighth century to the end of the fifteenth century - roughly from the reign of Alfred the Great to Henry VII. Some of the more recognizable works include Beowulf, The Wanderer, Geoffrey Chaucer's Canterbury Tales, early histories of King Arthur, Thomas Malory's Le Morte D'Arthur, Julian of Norwich's Showings, Everyman, and Gawain and the Green Knight. Works written in Anglo-Saxon English and northern medieval dialects will be read in modern translations.

Pre-requisite(s): ENGL 2700.

Pre-requisite/Co-requisite: ENGL 2700.

ENGL 4620 - British Literature: Renaissance

Credits: (3)

Typically Taught Fall Semester: *Check with Department*

Typically Taught Spring Semester: *Check with Department*

Description: This historical survey runs from just before the middle of the sixteenth century to just after the middle of the seventeenth - roughly from the reign of Henry VIII, through the reign of Elizabeth Tudor, to the restoration of Charles II. Some of the more recognizable figures of this study are Christopher Marlowe, John Donne, Ben Jonson, John Milton, Anne Askew, Aemilia Lanyer, Mary Wroth, and Robert Herrick.

Pre-requisite/Co-requisite: ENGL 2700.

Note: (Note: this survey does not typically try to do justice to its largest figure, Shakespeare - for whom the department has established ENGL 4730: Studies in Shakespeare.) Check with department for course availability.

ENGL 4630 - British Literature: Neoclassical and Romantic

Credits: (3)

Typically Taught Fall Semester: *Check with Department*

Typically Taught Spring Semester: *Check with Department*

Description: This historical survey links two periods: the first has frequently been referred to as the Enlightenment of the Eighteenth Century and includes such figures as Alexander Pope, Anne Finch, Mary Montagu, Jonathan Swift, and Samuel Johnson. The second period covers the relatively short but intense age of English Romanticism - popular because of such writers as William Blake, William Wordsworth, Samuel Coleridge, Lord Byron, Mary Shelley, Percy Bysshe Shelley, Mary Wollstonecraft, Sir Walter Scott, Thomas De Quincey, and John Keats.

Pre-requisite/Co-requisite: ENGL 2700.

ENGL 4640 - British Literature: Victorian

Credits: (3)

Typically Taught Fall Semester: *Check with Department*

Typically Taught Spring Semester: *Check with Department*

Description: This historical survey follows the long span of Queen Victoria's life: from about 1837 when she came to the throne to 1901 when her funeral widely symbolized the passing of the age. Not merely a placid time of Victorian propriety, this era was marked by such philosophical upheavals as that which followed Darwin's Origin of Species. Some of the notable writers are Elizabeth Gaskell, George Eliot, Lord Alfred Tennyson, Robert Browning, Emily Bronte, Charles Dickens, Matthew Arnold, and Thomas Carlyle. This era is marked by the Industrial Revolution, Utilitarianism (Mill), the rise of science and evolution theory (Darwin), socialism (Marx and Engels); Psychology (Freud), resurgence of art (the Pre-Raphaelites), and imperialism (Kipling). Notable writers include: Carlyle, Tennyson, the Brownings, Arnold, Wilde, Dickens, the Brontes, Eliot, and Hardy.

Pre-requisite/Co-requisite: ENGL 2700.

ENGL 4650 - British Literature: Modern

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Check with Department*

Description: This historical survey focuses on the first half of the twentieth century, a time of great social change for Great Britain and Ireland that led to a rich outpouring of traditional and experimental writing. A variety of writers will be studied in this course in connection with such key developments as the critique of Empire (Joseph Conrad, E.M. Forster); the Abbey Theatre and the Irish Literary Renaissance (Lady Gregory, W.B. Yeats); World War I (Siegfried Sassoon, Vera Brittain); High Modernism (T.S. Eliot, James Joyce, D.H. Lawrence, Virginia Woolf, Katherine Mansfield); divergent poetic world-views (W.H. Auden, Dylan Thomas); and World War II, the collapse of Empire, and dystopian visions (Evelyn Waugh and George Orwell).

Pre-requisite/Co-requisite: ENGL 2700.

ENGL 4655 - British Literature - World War II to 2001

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course examines British and Anglo-Irish literature from World War II to 2001 as Britain metamorphoses from world power to an integral member of the European Community. The course asks what it means to be a "British" writer in an era increasingly multicultural in outlook and studies a variety of British and Anglo-Irish writers in connection with such key developments as post-war disillusion. Absurdism and Postmodernism, neo-Romanticism, magical realism, innovative historical fiction, and legacies of Empire in a postcolonial world.

Pre-requisite/Co-requisite: ENGL 2700.

ENGL 4660 - British Literature: Contemporary

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on British literature from 2001 to the present. Like its predecessor, English 4655, it ranges across genres and media to survey traditions and tendencies in contemporary British and Anglo-Irish letters that continue to emerge and evolve as the UK attempts to define itself and Britishness in the wake of 9/11, a changing UK foreign and domestic policy, and Brexit.

Pre-requisite/Co-requisite: ENGL 2700.

Note: Check with Department for course availability.

ENGL 4710 - Eminent Authors

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Check with Department*

Typically Taught Spring Semester: *Check with Department*

Description: This variable topics course features a single author or several authors. Students may study authors such as Sir Arthur Conan Doyle, Ralph Waldo Emerson, Emily Dickinson, Walt Whitman, Virginia Woolf, or Toni Morrison, in order to gain a greater understanding of the social, cultural, and aesthetic significance of their work.

Pre-requisite/Co-requisite: ENGL 2700.

May be taken up to 3 times with different designations.

Note: Check with Department for course availability.

ENGL 4712 - Eminent World Authors

Credits: (3)

Variable Title

Description: This variable topics course features a single author or several authors. Students may study global anglophone writers and/or works in translation, by authors such as Derek Walcott, Arundhati Roy, Chinua Achebe,

Gabriel García Márquez, Nadine Gordimer, Margaret Atwood, Mo Yan, Fyodor Dostoevsky, Naguib Mahfouz, and Umberto Eco in order to gain a greater understanding of the social, cultural, and aesthetic significance of their work.

Pre-requisite/Co-requisite: ENGL 2700.

It may be taken a total of 3 times (for a maximum of 9 credits) with different designations.

Note: Check with Department for course availability.

ENGL 4713 - Eminent Authors in Cultural and Media Studies

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Check with Department*

Typically Taught Spring Semester: *Check with Department*

Description: This variable topics course features a single author or several authors. Students may study foundational and emerging authors in this dynamic and influential field in order to gain a greater understanding of the social, cultural, and aesthetic significance of their work.

Pre-requisite/Co-requisite: ENGL 2700.

It may be taken a total of 3 times (for a maximum of 9 credits) with different designations.

ENGL 4730 - Studies in Shakespeare

Credits: (3)

Typically Taught Fall Semester: *Check with Department*

Typically Taught Spring Semester: *Full Sem*

Description: This class is intended for English majors and minors seeking a deeper understanding of Shakespeare's work. Students can expect to do close readings of at least five plays and to study such secondary materials as literary criticism and historical background.

Pre-requisite/Co-requisite: ENGL 2700.

Note: Check with Department for course availability.

ENGL 4760 - Irish Literature

Credits: (3)

Typically Taught Fall Semester: *Check with Department*

Typically Taught Spring Semester: *Check with Department*

Description: This course examines the distinctive temperament and outlook of both the Gaelic and Anglo-Irish traditions in such writers as Aogán Ó Rathaille, Eibhlín Dubh Ní Chonaill, Jonathan Swift, Lady Gregory, Oscar Wilde, John Millington Synge, William Butler Yeats, James Joyce, George Bernard Shaw, Samuel Beckett, Seamus Heaney, Eavan Boland, and Nuala Ni Dhomhnaill. The first portion of the course studies the body of literature from the sixth century through 1900; the remainder of the course focuses on modern and contemporary texts. Key themes to be examined, always in the larger context of Irish history as a whole, include the Irish use of words as weapons, the place of gender in Irish writing, and the intriguing nature of Irish - particularly as opposed to English - identity.

Pre-requisite/Co-requisite: ENGL 2700.

ENGL 4801 - A&H Leadership Lecture Series

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: This one-credit elective course will give arts and humanities' majors the opportunity to interact with successful guest lecturers whose undergraduate backgrounds are in the arts and humanities. Lecturers will clarify how the talents and skills associated with their degrees have contributed to their pursuit of successful careers and lives.

ENGL 4830 - Directed Readings

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual readings supervised by a faculty member.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

Note: Check with Department for course availability.

ENGL 4890 - Cooperative Work Experience

Credits: (1-6)

Description: A continuation of ENGL 2890 Cooperative Work Experience. Open to all students.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent.

May be repeated 5 times with a maximum of 6 credit hours.

Note: Check with department for current course offerings.

ENGL 4900 INT - Internships in Literary and Textual Studies

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course allows students to receive academic credit for on-the-job learning in approved work environments and for approved projects. A maximum of 3 credit hours may be counted toward the major. Credit/No-Credit only.

Pre-requisite(s): English major with a Junior or Senior standing; ENGL 2010 or ENGL 2015, and ENGL 3080.

May be repeated for up to 6 credit hours.

ENGL 4910 - Capstone in English Teaching

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to synthesize a student's knowledge and training. The course will assist students in applying their content knowledge during the required teaching field experience. The course will also serve as a bridge to future employment by instructing students in portfolios, resumes, and recommendations. The class will underscore the acquisition of dispositional traits that produce responsible and effective teaching practices.

Pre-requisite(s): ENGL 2010 or ENGL 2015 or equivalent and admitted to Secondary Education program, ENGL 2420, ENGL 3410, ENGL 3020, and ENGL 3755.

ENGL 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): ENGL 1010 with a "C" grade or better or equivalent.

May be repeated for a total maximum of 6 credit hours.

Note: Check with Department for course availability.

ENGL 4930 - Visiting Writing Master Class

Credits: (1)**Typically Taught Fall Semester:** *1st Blk, 2nd Blk***Typically Taught Spring Semester:** *1st Blk, 2nd Blk***Description:** In this class, students will study the art and craft of creative writing, studying under the guidance of a nationally recognized visiting writer who will instruct them on writing theory and/or provide a short writing workshop of work from each student. Credit/No Credit grading.

May be repeated 3 times up to 4 credit hours.

ENGL 4940 - CW: Senior Project**Credits: (3)****Typically Taught Spring Semester:** *Full Sem***Description:** Students will assemble a capstone portfolio to prepare them for professional writing environments. Some of the many topics students will explore are revision strategies, publishing, literary citizenship, applying to graduate schools, community building, and learning to write daily without academic deadlines.**Pre-requisite(s):** ENGL 3250 or ENGL 3260 or ENGL 3280 or ENGL 3350.**ENGL 4960 INT - Metaphor: Editing the Student Literary Journal****Credits: (3)****Typically Taught Spring Semester:** *Full Sem***Description:** Designed for students selected as staff for Weber State's Literary Journal, Metaphor. Therefore, it is a hands-on workshop centering on all aspects of journal production: creating an editorial policy, advertisement, selection, layout, copy editing, preparing for print, marketing, distribution, etc. The journal itself is the final product. The staff supports writing and visual arts across campus through participation in several ancillary projects.**Pre-requisite(s):** ENGL 2010 or ENGL 2015 or equivalent.**ENGL 4990 - Senior Seminar****Credits: (3)****Typically Taught Spring Semester:** *Full Sem, Full Sem - Online***Description:** This course is about connecting your university education to your next steps, be they towards graduate school or a career. The course has three related components. First, it asks students to reflect on their academic career thus far. Second, it prompts students to consider where they might like to go next, and how they might get there. Third, the course offers guidance and training in career preparation. The course includes speakers, presentations and building a portfolio. It connects you with services on campus like Career Services. There is flexibility in this course for intellectual, professional and personal growth.**Pre-requisite(s):** ENGL 2010 or ENGL 2015 and ENGL 2700.**ENGR 1000 - Introduction to Engineering****Credits: (2)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$20.00**Course Fee Purpose:** Course fees are used to purchase design project parts**Description:** ENGR 1000 (2) Introduction to Engineering is a required course in the Pre-engineering and Mechanical Engineering programs. A major part of ENGR 1000 is a design project in which the students participate on a team basis. Costs for this design project fall into one category only, consumables, which are mechanical and electrical components for their projects. The project is called a Stop-Shoot Vehicle (SSV). The components and associated costs per student per semester are summarized below:**Pre-requisite/Co-requisite:** MATH 1060 or MATH 1080 or equivalent.

ENGR 1040 - Computer Aided Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces fundamental technical engineering drawings, practices, and standards used by various engineering and construction disciplines for the depiction of 2- and 3-D model designs and topographic mapping. It is designed to provide students with basic competency in computer-aided drafting in support of engineering and construction career paths.

ENGR 2010 - Statics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Vector mechanics, force and moment systems, equilibrium of particles and rigid bodies, friction and moments of inertia.

Pre-requisite(s): MATH 1210 and PHYS 2210.

ENGR 2030 - Dynamics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Fundamentals of position, velocity and acceleration. Kinematics and kinetics of particles. Newton's laws, conservation of momentum and energy. Dynamics of rigid bodies.

Pre-requisite(s): ENGR 2010 with a grade of "C" or higher.

ENGR 2140 - Mechanics of Materials

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Fundamentals of stress and strain, Hooke's law, torsion, bending of beams, combined stresses and design of members.

Pre-requisite(s): ENGR 2010 with a grade of "C" or higher.

ENGR 2160 - Materials Science and Engineering

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Course fee for replacement of lab equipment and consumable parts

Description: A lecture course that introduces the fundamentals of atomic and microscopic structure of metals, polymers, ceramics and composite materials, and how these structures affect mechanical, thermal, electrical and optical properties.

Pre-requisite(s): CHEM 1210.

Pre-requisite/Co-requisite: ENGR 2140.

ENGR 2165 - Materials Science and Engineering Laboratory

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Laboratory course to accompany ENGR 2160 Materials Science and Engineering. Fundamental concepts of mechanical measurement, reporting technical data, procedures for measuring material properties and measurement standards.

Co-Requisite(s): ENGR 2160.

ENGR 2230 - Introduction to Land Surveying

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course introduces students to land surveying practices and techniques. It is designed to provide students with basic competency in land surveying in support of engineering and construction career paths.

Pre-requisite(s): MATH 1060 or MATH 1080.

Pre-requisite/Co-requisite: ENGR 1040.

ENGR 2240 - Dynamic Systems Engineering

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to the modeling, analysis, and control of dynamic systems. Models of electrical, mechanical, electromechanical, and mass-transport systems in state-variable, input-output, and transfer function form. Topics include linear approximations of nonlinear systems, time domain and Laplace transform solutions, Block diagrams, feedback systems and large-scale linear systems analysis. Lecture and lab combination.

Pre-requisite(s): ECE 1400 and MATH 1210 and either ECE 1270 or ECE 2210.

ENGR 2300 - Thermodynamics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Thermodynamic properties, equations of state, first and second laws of thermodynamics. Analysis of open and closed systems, availability and irreversibility, power and refrigeration cycles.

Pre-requisite(s): MATH 1210 and PHYS 2210.

ENGR 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ENTR 1001 - Principles of Entrepreneurship

Credits: (1)

Description: This course explores the process and theory designed to help ideation become customer needs driven to buffer against startup failure. By the end of the course, students will have created, tested and updated a business model based entirely upon customer feedback and customer development methodologies as described in Business Model Generation and Start-up Owner's Manual textbooks.

Note: This course is not currently offered.

ENTR 1002 - Startup Innovation

Credits: (3)**Typically Taught Fall Semester:** *Full Sem - Online***Typically Taught Spring Semester:** *Full Sem - Online***Description:**

This course will present a broad overview of entrepreneurship and teach students how to identify and create valuable entrepreneurial opportunities. This is accomplished via proven process and theory designed to help ideation become customer needs driven instead of based on the instincts of the entrepreneur. Students will create, test and update a business model based entirely upon customer feedback and customer development methodologies as described in Business Model Generation and Startup Owners Manual textbooks. This class will also have students spending time 'out of the classroom'-learning about what customers want and will pay for through in-person prototype testing, iteration and feedback.

ENTR 1003 - Ideation and Customer Development: Testing Ideas with Customers**Credits: (1.5)**

Description: This course explores the process and theory designed to help ideation become customer needs driven to buffer against startup failure. By the end of the course, students will have created, tested and updated a business model based entirely upon customer feedback and customer development methodologies as described in Business Model Generation and Start-up Owner's Manual textbooks.

Pre-requisite(s): ENTR 1001, BSAD 2899 or ECON 2899.

Note: This course is not currently offered.

ENTR 1004 - Entrepreneurial Finance: Bootstrapping, Accounting & Survival Tactics**Credits: (3)****Typically Taught Fall Semester:** *1st Blk***Typically Taught Spring Semester:** *1st Blk*

Description: This course presents traditional and non-traditional financing techniques appropriate for the entrepreneurial business start-up. Students will explore the application of corporate finance tools to new venture and private equity transactions including forecast simulations and the application of real options. The course will view finance from the entrepreneur, lender and investor's perspectives. By the end of the course students will be able to evaluate and apply a range of financial techniques for business start-up purposes.

Pre-requisite(s): ENTR 1002.

ENTR 2001 - Sales and Marketing: Scaling a Successful Business Model**Credits: (3)****Typically Taught Fall Semester:** *2nd Blk***Typically Taught Spring Semester:** *2nd Blk*

Description: This course takes students who have successfully identified a start-up and teaches them the process of customer development, product development, business models and selling ideas to investors and customers. This includes examining a range of marketing techniques that are available for low to no cost. This course will look at alternatives to these traditional methods and students will, through hands on efforts, test these methods with real customers. By the end of the course students will be able to analyze business ideas for commercial viability.

Pre-requisite(s): ENTR 1004.

ENTR 2002 - Marketing Strategy for Small Business**Credits: (1)****Typically Taught Fall Semester:** *Full Sem - Online***Typically Taught Spring Semester:** *Full Sem - Online*

Description: This course introduces students to marketing methods used by startups and early-stage companies with a particular emphasis on pre-launch marketing strategies. This course seeks to develop the student's

understanding of delivering value, standing out from the competition, and having a compelling reason to exist. We will discuss differentiation, branding, targeting, and leveraging the power of collaborations (with existing brands, influencers and distribution partners) to gain instant traction in the marketplace. This course will use lectures, class discussions, assignments and a final project based on the student's business idea.

ENTR 2003 - Marketing Execution for Small Business

Credits: (1)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course introduces students to marketing methods used by startups and early-stage companies. We will discuss differentiation, branding, targeting, and leveraging the power of collaborations (with existing brands, influencers and distribution partners) to gain instant traction in the marketplace. This course will use lectures, class discussions, and assignments to examine existing companies and how they executed various marketing tactics.

ENTR 2004 - Branding for Small Business

Credits: (1)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Branding for Small Business takes you through the process of identifying an innovation opportunity to create a new product and/or service that can generate profitable revenue for an established organization (aka: corporate innovation or non-profit innovation). In this course, students take on the role of managers, both proposing an innovation project and evaluating other innovation projects on behalf of the organization. Managers use a disciplined approach to identify an important customer "job" that's not getting done well with existing solutions. Managers precisely and accurately define important and unsatisfied customer needs for this job and propose a new solution that can profitably satisfy those needs better than competing alternatives.

ENTR 2005 - Product to Market

Credits: (1)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Entering this course, you will move forward with validating in the market an opportunity you have identified that you believe is a high-potential demand creation opportunity. It is expected that you have already 1) verified the customers' job priorities, 2) verified that your value proposition is compelling to those customers, 3) designed a viable business model that you believe can profitably fulfill the value proposition, 4) ascertained an exhaustive set of value targets to inform solution design and 5) determined a demand creation strategy for commercializing the proposed solution (steps 1-5 in the AVID methodology). In this course, you'll continue through the AVID cycle, moving deeper into the discovery process.

ENTR 2006 - E-Commerce for Small Business

Credits: (1)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course will help you establish an e-commerce foundation for your business that can be built upon as you grow. We'll learn the steps needed to help your business start selling online. From which platform to use, to a growth strategy once a foundation is built, this course will aid your journey in becoming digitally mature entrepreneurs. I'm not a traditional professor, so this class probably won't follow traditional guidelines. Innovation, experiences gained, and execution of principles taught will be more important than papers written or assignments turned in.

ENTR 2007 - Product Design & Prototyping for Small Business

Credits: (1)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course presents the overall process of taking an idea through to a manufactured product ready for marketing and selling. Starting from the initial product idea, each lecture will cover a step in the process. Though specific skills and techniques will be covered, the goal is to understand primarily how to manage the process of design and development successfully. Students will learn to analytically vet ideas at the beginning and continually through the design and development cycle. They will also research successful products online and in-person, and understand what factors contributed to this effectiveness.

ENTR 2008 - Legal Foundations for Small Business

Credits: (1)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course is concerned with understanding and navigating some of the top legal issues facing business today. It is designed specifically for individuals who are, or intend to become, small business owners. The course has a dual focus on developing you: (1) as a more analytical and effective business owner, and (2) leader.

ENTR 2009 - Money Management for Small Business

Credits: (1)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course covers basic financial statements, creating pro-forma statements and analysis of financial statements. The course will view finance from the entrepreneur, lender and investor's perspectives. By the end of the course students will be able to evaluate and apply a range of financial techniques for business startup purposes.

ENTR 2010 - Funding For Small Business

Credits: (1)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course presents traditional and non-traditional financing techniques appropriate for the entrepreneurial business startup. The course will view finance from the entrepreneur, lender and investor's perspectives. By the end of the course students will be able to evaluate and apply a range of financial techniques for business startup or expansion purposes.

ENTR 2011 - Results-Focused Leadership

Credits: (1)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course is concerned with identifying, evaluating, and supporting metrics which promote outcomes which are important for your venture. It is designed specifically for individuals who are, or intend to become, small business owners. The course has a dual focus on developing your: (1) results-focused analytical abilities, and (2) leadership approach in directing/promoting employee growth. It is designed to give you insight into your own attitudes, beliefs, and leadership philosophy, to provide you with assessment tools that will help you diagnose, understand, and develop more effective and influential leadership programs for your business. It is also designed to provide skill development in important areas such as leadership, performance enhancement, teamwork, communication, and feedback-giving.

ENTR 2012 - People Management for Small Business

Credits: (1)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course is concerned with understanding and managing the human resources of a small business. It is designed specifically for individuals who are, or intend to become, small business owners. The course has a dual focus on developing you: (1) as a more analytical and effective manager, and (2) leader. It is designed to give you insight into your own attitudes, beliefs, and management philosophy, to provide you with analytical tools that will help you diagnose, understand, and develop solutions to management problems. It is also designed to provide skill development in important areas such as leadership, performance enhancement, teamwork, communication, and feedback-giving.

ENTR 2550 - Scale & Exit

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description:

The aim of this course is for students to develop a business model that they will validate and iterate via paying and participating customers including managing budgets and spending plans designed to launch a business.

ENTR 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

ENTR 3003 - Growing the Business

Credits: (3)

Description: This course helps students take their start-ups business to the next level and accelerate the pace of customer validation and acquisition. This course will focus on launching the business from a student run start-up in a university setting, to a standalone company that can operate outside the confines of a college campus.

Pre-requisite(s): ENTR 2550

Note: This course is not currently offered.

ENTR 4680 - Consulting Essentials

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Diagnostic analysis of small business issues through the use of case studies and consultation opportunities with small businesses in the community. Students will work both individually and in teams to analyze the health of sample small businesses, identify issues and develop recommendations for remediation. Case issues will cover a broad spectrum of typical small business issues and require the student to evaluate based on all areas of business operations. Research, written reports and presentations are required. Cross-listed with BSAD 4680.

ENTR 6810 - Experimental Course

Credits: (1-6)**Experimental**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ENVS 4890 - Environmental Science Internship**Credits: (1-6)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all Environmental Science majors who meet the minimum Internship requirements of the program. Provides academic credit for relevant on-the-job experience. Grade and amount of credit will be determined by the department.

May be repeated 5 times with a maximum of 6 credit hours.

Note: This course is offered as needed.

Pre-requisite(s): Instructor Approval

ENVS 4999 - Environmental Science ePortfolio**Credits: (.5)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course includes final assessment (e.g., exit interviews) and signoff needed for graduation with a BS degree from the Environmental Science program. Students assemble ePortfolios with artifacts demonstrating achievement of each of the six program learning outcomes in Environmental Science and complete a reflection essay. Contact your major advisor to complete this requirement once your portfolio is complete or, at the latest, at the beginning of your last semester before graduation. Credit/no credit.

ESS 2200 - Exploring Exercise Science Professions**Credits: (3)**

Typically Taught Summer Semester: *2nd Blk Online, 1st Blk Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: Designed to orient and acquaint students with the goals, objectives, scope, professional preparation, career opportunities, and trends in exercise science professions.

ESS 2300 - Health/Fitness Evaluation and Exercise Prescription**Credits: (3)**

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include skinfold calipers, blood pressure cuffs, online blood pressure course access, cycle ergometer maintenance, heart rate monitors, sit and reach boxes, and sanitizing supplies.

Description: Skills and competencies for prospective health fitness instructors, personal fitness trainers, and nutrition educators to deliver preventive exercise programs.

Pre-requisite(s): HLTH 1030 and NUTR 1020.

ESS 2890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all students in Human Performance Management and Physical Education who meet the minimum Cooperative Work Experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

May be repeated 5 times up to 6 credit hours.

ESS 3450 - Structural Kinesiology

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include muscle and bone models, classroom computers, isokinetic Dynamometer, EMG equipment, goniometers, bone density tester, hand-grip dynamometers, and movement analysis tablets and apps.

Description: This course is a detailed study of muscles, nerves, bones, and joints as they are involved in the science of movement. It is designed for students to experience theoretical concepts and apply functional anatomy knowledge to the execution and improvement of human performance.

Pre-requisite(s): HTHS 2110 and Co-requisite: HTHS 2111, or Prerequisite: ZOOL 2320.

ESS 3500 - Biomechanics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include force plates, isokinetic dynamometer, motion analysis devices and programs and EMG equipment.

Description: A study of the musculomechanical bases of human movement and experience in applying that knowledge to the execution and evaluation of human performance.

Pre-requisite(s): ESS 3450 and MATH 1050 QL or higher.

ESS 3510 - Exercise Physiology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include body composition equipment, skinfold calipers, BodPod, blood pressure

cuffs, metabolic cart and equipment, ECG equipment, core temperature sensors, spirometry filters, ergometers, and lactate analyzer.

Description: A study of various physiological and environmental factors which affect performance of exercise and sport during acute exercise and physiological adaptations to chronic exercise.

Pre-requisite(s): HTHS 2110 or ZOOL 1020 or ZOOL 2420.

ESS 3540 - Physiological Aspects of Human Performance

Credits: (2)

Description: Examine, evaluate, and apply the latest physiological concepts and ideas in conditioning practices for improving human performance.

Pre-requisite(s): PEP 2000 or ESS 2200 and 3 hours of General Education Life Science (LS).

ESS 3600 - Measurement and Statistics in Exercise Science

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include computer lab use, body composition equipment, vertical leap device, and handgrip dynamometer.

Description: The selection, administration, and interpretation of measurement techniques and statistical procedures for the purpose of evaluation and research as related to exercise science and health promotion.

Pre-requisite(s): Meet WSU Quantitative Literacy requirement.

ESS 4280 - Advanced Strength and Conditioning

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course. The course fee expenditures for this specific course include exam preparation materials for the Certified Strength & Conditioning Specialist (CSCS) certification exam.

Description: This course focuses on a more comprehensive/deeper understanding and applications of strength and conditioning concepts through in-depth discussions and practical application of strength and conditioning competencies. The emphasis is placed on performing evaluation of athletes and on program design under the guidance of Certified Strength and Conditioning Specialists (CSCS).

Pre-requisite(s): ESS 3510, PEP 3280, or permission of the instructor.

ESS 4320 - Special Topics

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online, 1st Blk, 1st Blk Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course will provide undergraduate students an opportunity to learn emerging and timely topics in the areas of exercise science by critically interpreting information from various sources. The course will also allow students to engage in discussions to appreciate different perspectives on certain exercise science topics.

Pre-requisite(s): ESS 2300, ESS 3450, ESS 3510 or Permission of the Instructor.

ESS 4370 - Exercise Physiology for Special Populations

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include laboratory equipment for blood cholesterol measurements, skinfold calipers, blood pressure cuffs, heart rate monitors, ECG supplies, treadmill and cycle ergometer maintenance.

Description: This course provides a comprehensive look at the clinical aspects of exercise physiology by thoroughly examining the relationship between exercise and chronic disease. It provides students with fundamental knowledge of disease-specific pathology and treatment guidelines. The guidelines and considerations for pregnancy and older population will be also discussed. Overview of each condition's unique physiology, effects of the condition on the exercise response, effects of exercise training on the condition, and recommendations for exercise testing and programming are presented in a selected topics format.

Pre-requisite(s): ESS 2300 and ESS 3510.

ESS 4470 - Electrocardiography and Cardiac Rehabilitation

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include laboratory equipment for blood pressure cuffs/stethoscope, ECG supplies and treadmill and personal protective equipment supplies.

Description: This course is designed to introduce students to cardiac rehabilitation and current scientific and evidence-based models for designing and updating rehabilitation programs. Emphasis is placed on a deeper understanding of cardiovascular diseases, operation of electrocardiography, interpretation of electrocardiography readings, exercise testing, and exercise prescriptions.

Pre-requisite(s): ESS 2300, ESS 3510, or permission of the instructor.

ESS 4620 - Leadership Concepts for Human Performance Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students will study the current philosophical leadership concepts and the principles, practices, and issues of administration.

Pre-requisite(s): ESS 2200.

ESS 4800 CRE - Directed Undergraduate Exercise Science Research

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will provide undergraduate students an opportunity to engage in research processes and participate in ongoing research projects in the areas of exercise and sport science under the guidance of the ESS faculty.

Pre-requisite(s): ESS 2300, ESS 3450, ESS 3510 and/or Permission of the Instructor.
May be repeated for a total of up to 10 credit hours.

ESS 4830 - Directed Readings in Exercise Science

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem - Online, 1st Blk Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Each student is given the opportunity to do independent and directed readings, or secondary research on advanced special topics under the direction of a faculty mentor.

Pre-requisite(s): ESS 2200 and consent of faculty supervisor.

ESS 4890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A continuation of ESS 2890.

May be repeated 5 times up to 6 credit hours.

ESS 4920 - Short Courses, Workshops, Institutes and Special Programs

Credits: (1-3)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ESS 4990 - Senior Seminar

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: For Seniors only. Structured seminar focuses on synthesis of ideas and portfolio preparation.

ESS 6300 - Advanced Biomechanics

Credits: (3)

Description: Designed to expose the graduate student to appropriate research in sports biomechanics and to be involved in the analysis of movement based on selected mechanical principles such as balance, buoyancy, leverage, force, angles of rebound, projection and motion.

Note: Check with Department for course availability.

ESS 6400 - Advanced Exercise Physiology

Credits: (3)

Description: Understanding the physiological changes associated with exercise and training and the reasons for change are the paramount directives of this course.

Suggested Requisite(s): Concurrent with the lecture component is the practicum laboratory experience of equipment operation and individual assessment of physiological parameters.

Note: Check with Department for course availability.

ESS 6540 - Physiological Aspects of Human Performance

Credits: (2)

Description: Examine, evaluate, and apply the latest physiological concepts and ideas in conditioning practices for improving human performance.

Pre-requisite(s): PEP 2000 or ESS 2200 and 3 hours of General Education Life Science (LS).

Note: Check with Department for course availability.

ETC 2001 SS/CC - Engineering Culture

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Engineering Culture describes the culture of engineering and the social and scientific practices as well as beliefs that engineers ascribe to in pursuing their profession. It also describes how culture is shaped by engineering and by the technologies that engineers make and maintain. This course examines the professional cultures that engineers inhabit as well as the way that a wider culture is shaped by engineering.

ETM 5913G - Six Sigma Tools I

Credits: (3)

Description: This distance learning course provides an introduction to the six sigma body of knowledge as defined by the American Society of Quality (ASQ). The course will examine the foundations of six sigma and the statistical tools used in the initial stages of the DMAIC problem solving methodology.

Pre-requisite(s): BS with three years relevant experience & an engineering statistics undergraduate course or equivalent such as MATH 3410 is required, or instructor's approval. Students also must be able to work on an approved six sigma project at a firm.

ETM 5923G - Six Sigma Tools II

Credits: (3)

Description: This distance learning course is a follow-on to the initial six sigma course and provides additional detail on the analyze, improve and control portions of the DMAIC problem solving methodology. This course is required for the Institutional Certificate in Quality and Lean Manufacturing, and can be used as a technical elective for the Oklahoma State University Engineering Technology Management Master's Degree.

Pre-requisite(s): ETM 5913G, Six Sigma Tools I.

ETM 5933G - Lean Tools

Credits: (3)

Description: This course teaches students lean manufacturing tools for continuous improvement in a manufacturing environment.

Pre-requisite(s): BS with three years relevant experience & an engineering statistics undergraduate course or equivalent such as Math 3410 is required, or instructor's approval. Students also must be able to work on an approved six sigma project at a firm. This distance learning course is required for the Institutional Certificate in Quality and Lean Manufacturing, and can be used as a technical elective for the Oklahoma State University Engineering Technology Management Master's Degree.

ETM 5943G - Lean-Sigma Implementation

Credits: (3)

Description: This course introduces students to the implementation skills necessary to successfully combine and apply lean manufacturing and six sigma concepts in small to mid-sized manufacturing facilities. This course is

required for the Institutional Certificate in Quality and Lean Manufacturing, and can be used as a technical elective for the Oklahoma State University Engineering Technology Management Master's Degree.

Pre-requisite(s): ETM 5923G, ETM 5933G.

FAM 1400 - Marriage and Romantic Relationships

Credits: (3)

Typically Taught Summer Semester: *1st Blk Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: An introductory survey course which addresses individual, interpersonal, and developmental dynamics essential for sustaining interpersonal and marital relationships.

FAM 2100 - Family Resource Management

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Understanding the significance of values, goals, attitudes and planning strategies in the management of human, economic and environmental resources as they relate to increasing satisfaction and the enhancement of family relationships.

FAM 2810 - Experimental Courses

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

FAM 2830 - Directed Readings

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individually chosen readings on specialized topics supervised by a faculty member.

Pre-requisite(s): Consent of faculty supervisor prior to registration.

May be repeated up to 3 credit hours.

FAM 2860 INT - Practicum

Credits: (2-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: This course fee will be used to provide coaching support for field experiences associated with this course.

Description: Work experience which applies prior academic learning in a supervised setting.

Pre-requisite(s): For Early Childhood majors: CHF 1500, ECED 2500, ECED 2600, ECED 2610, ECED 2620, or

consent of faculty advisor prior to registration.
May be repeated up to 6 credit hours.

FAM 2910 - Children & Families: Variable Titles

Credits: (1-3)

Variable Title

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: An examination of the conceptual knowledge, research, theory and applied skills on specific topics for early childhood and family life educators such as, becoming a teacher leader, observation and assessment, children's health and well-being, infant mental health, or trauma informed care and teaching.

Suggested Requisite(s): ECED 2500, ECED 2600, ECED 2610, ECED 2620.

FAM 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is taught as needed.

FAM 2990B - Seminar in Family Studies

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Discussion and analysis of special topics for Family Studies majors including professional skills, professional credentials, and the development of professional ethics.

FAM 3150 - Consumer Rights and Responsibilities

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: The role and responsibilities of the family and its members as consumers. An exploration of marketplace fact and fraud and identification of consumer resources.

FAM 3350 GLB - Diverse Families

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A comparative analysis of various types of ethnic families in the United States reflecting their social and political dynamics with extensive coverage of the family lifestyles, traditions and values. Several American ethnic groups will be examined including historical background, key ethnic cultural components, traditional and current ethnic family characteristics, and changes and adaptations to the ethnic family and culture.

FAM 3400 - Development in Middle Adulthood

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The content of this course is designed to create a foundation of knowledge and understanding for the required core competency of the nationally recognized Family Life Education Content areas. Specifically addressing competency area number 3, Human Growth and Development across the Lifespan. The course will focus on normative and non-normative individual developmental processes, as well as systemic dynamics of social context surrounding and impacting middle-aged development.

FAM 3450 - Development in Late Adulthood

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Spring Semester: *Full Sem*

Description: Growth and development through late adulthood within a developmental and family system context.

FAM 3550 - Parenting Education

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A course designed to assist in the acquisition of skills and knowledge regarding the understanding and facilitation of contemporary parents in their parenting role. Course content will include conceptualizations and strategies from both contemporary theoretical and applied perspectives.

FAM 3650 - Introduction to Marriage and Family Therapy

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Marriage and Family Therapy theories will be used to examine family internal dynamics and family systems for the purpose of enrichment, problem prevention and education.

Pre-requisite(s): CHF 2400.

FAM 3660 - LGBTQ Families

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is an exploration and investigation into the issues facing lesbian, gay, bisexual, transgender, and queer (LGBTQ) families. Family is defined broadly to include all relationships in which primary care-giving responsibilities are shared by individuals who are interdependent upon each other. This includes conjugal relationships (marriages and other romantic relationships) and non-conjugal relationships (parent/children, friends, siblings, grandparents/grandchildren, etc.). We will consider not only LGBTQ families, but also the social structures and systems in which they operate. We will use lectures, group discussions, films, readings and in-class activities to explore the meanings of sex, sexual orientation and sexuality, family form and function, care-giving, family-planning, marriage and parenting. We will pay particular attention to cultural, political, gender, racial, and economic dimensions of queer families. You will develop an understanding of the issues facing a wide range of LGBTQ+ family configurations.

Suggested Requisite(s): CHF 2400.

FAM 3700 - Family Life Education and Sexuality

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Spring Semester: *Full Sem*

Description: This course is a survey of issues and attitudes associated with Family Life Education (FLE) and sexuality. It is primarily intended for professionals who currently work with individuals or plan to in the future. Using a biopsychosocial perspective, emphasis will be placed on the social, cultural, familial and individual differences in sexual and reproductive attitudes, values, and behavior. Students will be introduced to common sex-related issues and to the particular concerns of various sexually oppressed groups. Information will also be provided about childhood sexual abuse and its relationship to the intimacy issues that clients typically present in direct practice.

FAM 3820 - Organization and Leadership of Non-profit Family Services

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Spring Semester: *Full Sem*

Description: This course will introduce the student to theories and structures of family service organizations, best practices for planning, managing people, customer service models, working budgets and evaluating family service programs. Class discussions, case studies, and guest speakers will be used to help students understand the application of the basic concepts. Leadership styles will be examined as an overall context within which the management of family service programs occurs.

FAM 3850 CRE - Current Research Methods in Child and Family Studies

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to the methods and types of research used in the study of family issues and processes. Focus of the course includes the development of student knowledge and skills used in applying the scientific method in family studies contexts. Understanding, reviewing, evaluating, and interpreting the methods and conclusions reported in the professional empirically based journals will also be emphasized.

Pre-requisite(s): CHF 1500, CHF 2400.

FAM 4275 - Family Life Education Coaching

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is to prepare students to become family life coaches. The course covers topics from the foundational theories/models of coaching (positive psychology, cognitive-behavioral coaching, and others), how to conduct coaching sessions, the delineation between counseling and coaching, and how to run a coaching business. Students will practice coaching with other students as well as with actual practice clients.

FAM 4300 - Latino Child and Family Development

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Spring Semester: *Online*

Description: The Latino Child and Family Development course is designed as an upper division course for those who will work with, advocate for, or interact with children and families from a Latino background. The course uses a cultural constructivist approach to understand Latino children and their families. The central focus includes the study of Latino culture, parenting practices, couple and marital practices, and other family dynamics. Additionally, a major goal is to understand and deconstruct stereotypes associated with individuals within the Latino culture. The course

will simultaneously focus on Latinos living within the United States as well as cultural groups throughout North America, South America, and the Caribbean.

FAM 4310 - Understanding the Modern United States Military Family

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to assist you in understanding the structure and formation of each service branch as well as the experiences of families serving in the U.S. Military focusing on both Active duty and Reserve components using Family Systems Theory, Risk and Resiliency Theory and Ambiguous Loss Theory. In recent years, many changes have taken place in the military family landscape. The knowledge gained in this course should provide you with insight into the complex experiences of today's U.S. Military Families. The information provided in this course is designed to assist students to be effective in professional settings working with military personnel and their families, and is a starting foundation for those interested in pursuing professional civilian careers working with military families in a variety of settings (e.g., nonprofit organizations, the U.S. Military, and others). This course will focus on different components of family life that specifically impact military families. The course format will include (1) readings, (2) online lectures, (3) quizzes, (4) exams, and (5) online and in class discussion.

Pre-requisite(s): FAM 1400, CHF 1500, CHF 2400.

FAM 4350 - Religiosity and Family Life Education

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The Religiosity and Family Life Education course as an upper-division course that examines how various religious traditions and practices influence family dynamics and interaction. Specifically, how religious traditions and practices influence couple formation, marital dynamics, parenting practices, gender roles, intergenerational relationships, and sexuality. Furthermore, to develop an understanding and appreciation for a diversity of faith traditions (including nonbelief). Finally, how family life educators can effectively work with diverse populations in a variety of settings.

FAM 4400 - The Family in Stress

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Examining causes of stress in the family and developing strategies for coping with stress.

FAM 4450 - Children and Families in the Medical Setting

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of this course is to understand and serve children and families in the medical setting and to provide basic background and knowledge of Child Life practices. This course prepares individuals who plan to complete a 600-hour volunteer internship in the field of Child Life. Passing this course is required prior to entering into an internship and taking the National Child Life Certification Examination. The content of this course is designed to create a foundation of knowledge, both academically and practically, in the required core competencies of the Association of Child Life Professionals to achieve the nationally recognized Child Life Certification. The core competencies include the ability to assess and provide services to infants, children, youth, and families in a medical setting including stress management, coping strategies, educational preparation, age-appropriate interventions and community resource education.

FAM 4500 - Comparative Study of Childhood and Adolescent Development

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Spring Semester: *Full Sem*

Description: An advanced level course that addresses the understanding of the principles and theories of growth and development within and between the stages of children in childhood and adolescence. Covers the physiological, intellectual, social, emotional domains of development.

FAM 4520 - Basic Mediation Training

Credits: (3)

Description: A basic mediation training course addressing the theory and skills to effectively deal with conflict situations. The course leads to certification in basic theory and skills of mediation. (Supervised mediation practice is required to complete certification.)

Note: This course is taught as needed.

FAM 4600 INT - Family Studies Field Experiences

Credits: (1-8)

Description: Six to eight weeks internship, which may require off-campus residence. Credit and hours as arranged with instructor.

Pre-requisite(s): consent of instructor.

May be repeated up to 8 credit hours.

Note: This course is taught as needed.

FAM 4650 - Family Life Education Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Preparing students to be Family Life Educators by exploring philosophies, methods, and skills for teaching and working with parents and family members.

Pre-requisite(s): FAM 3350, FAM 3550, and FAM 3850, or consent of instructor.

FAM 4660 - Advanced Skills for Family Life Educators

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This upper division course is centered on students' development of interpersonal and pedagogical skills as Family Life Educators under the direct supervision of course instructors. This theory-based course will provide students with hands-on skills and experiences that are vital for today's family life educators. This includes building audience engagement and trust through the use of observational feedback, responding to nonverbal cues, and addressing common teaching challenges. This course will teach students to present specific family life education program curricula. The course training will include students reviewing and presenting the family life education materials in two contexts: 1-within the classroom among peers and faculty and 2-within the community. This course also provides students with a number of teaching tools and philosophies considered key to becoming effective in the field of Family Life Education, and it also provides students with the experience of having presented a community education program in multiple contexts.

FAM 4800 - Individual Research

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Supervised projects and primary research in various areas of Child and Family Studies. Limited to advanced students upon consent of faculty supervisor.

May be repeated up to 6 credit hours.

FAM 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

FAM 4830 - Directed Readings

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individually chosen readings on specialized topics supervised by a faculty member. Credit for this course towards a Child and Family Studies major or minor will only be accepted when the course is completed with a grade of B- or better.

Pre-requisite(s): Consent of faculty supervisor prior to registration.

May be repeated up to 3 credit hours.

FAM 4860 INT - Practicum

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Work or volunteer experience which applies prior academic learning in a supervised setting. Consent of faculty supervisor is required prior to registration.

Pre-requisite(s): for Family Studies Majors include FAM 2990B, FAM 3350, FAM 3550, FAM 3850, and completed background clearance.

May be repeated up to 6 credit hours.

FAM 4900 - Career Strategy Seminar

Credits: (1)

Description: Open to first semester Juniors through first semester Seniors in all academic schools. Course objectives are to help students develop a career strategy to meet expected career goals, i.e., acquire a career position or successfully prepare for graduate school acceptance.

Note: This course is not currently offered.

FAM 4910 - Children & Families: Variable Titles

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An in-depth examination of the conceptual knowledge, research, theory and applied skills

investigating specific topics for early childhood and family life educators such as becoming a teacher leader, observation and assessment, children's health and well-being, infant mental health, or trauma informed care and teaching.

FAM 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is taught as needed.

FAM 4990B - Senior Seminar in Family Studies

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Discussion and analysis of special topics for seniors in Family Studies major.

Pre-requisite(s): FAM 2990B, FAM 3350, FAM 3550, FAM 3850, or consent of instructor.

FILM 2200 CA - Fundamentals of Film

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: Fundamentals of Film Studies offers film majors a more specialized analysis of formal cinematic elements, and narrative structure while introducing students to the basics of filmmaking and related technologies. It helps film students to articulate the theoretical and practical skills to recognize, analyze, and create the film as an art form. Students will also learn about the principle of "building blocks" and formal elements (narrative, mise-en-scene, cinematography, sound and editing) that constitute the fundamental principles of analysis, genre, style, performance and storytelling. We will also outline, explain, and draw connections among artistic, technological, socioeconomic forces, which have shaped and reflected in the world of cinema. We will concentrate on essential films and directors from around the world to comprehend their contribution to the evolution of film form and content. In addition to the weekly lecture, screenings, and reading and writing assignments, students will also have the opportunity to put theory to practice by producing short film projects.

FILM 2280 - Introduction to Film Production

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$50.00

Course Fee Purpose: Maintenance and purchasing of camera and editing equipment

Description: This practical and technical course explores all essential aspects of filmmaking in preparation of more advanced film production classes. Participants will acquire a fundamental grounding in all of the essential skills in film production from planning a project to producing and on toward completing the project with an overview of film festival participation and distribution. Students will also have an opportunity to gain insight into industry-standard film equipment and post-production technologies. One of the primary goals of this course is to familiarise film students with the fundamentals of cinematography, including the use of the professional camera, composition,

lighting, and editing. Another goal is to examine the conceptual and unique challenges of visual-driven filmmaking: scriptwriting, pre-production, planning, continuity, and directing among them.

FILM 2820 - Special Topics in Film Studies

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: The special topic in film course may focus on an international cinema, a major filmmaker, genre, or a specific era.

It may be repeated three times for credit.

FILM 3010 - Pre- To Post-Production

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course provides an introduction to the key elements of the pre-production and post-production filmmaking process. Students will learn essential steps in developing a film project, from brainstorming ideas and creating detailed production plans to managing the post-production workflow after filming is complete. The course covers writing a short script, script analysis, visual style development, scene breakdowns, shot lists, production schedules, budgeting, and collaboration with a production team. By the end of the course, students will have produced a complete pre-production package and a post-production plan for a short film.

Pre-requisite(s): FILM 2280 or COMM 2250 or ART 2750 or instructor exception.

FILM 3200 - History of Film

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This class is a survey of world cinema from 1893 to the present. We will examine movies as a business, a social phenomenon, a series of technological innovations, and an art form, and we will work toward a functional explanation of how each of these aspects of the movies has changed over time. Although many people associate movies with the American film industry, filmmakers in every historical period and all over the world have worked to both distinguish their work from that of Hollywood and to draw upon some approaches innovated by the Americans. The films screened in class may include silent epic blockbusters from Italy, riveting crime thrillers from Germany, explosive Hong Kong action movies, French New Wave dramas, anarchic British satires, and many other examples of exciting and innovative filmmaking from all over the world.

FILM 3280 - Directing for Film

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Course Fees for this course cover the high costs associated with the necessary equipment, safety, and resources needed for hands-on instruction. This includes the maintenance and upkeep of equipment, battery replacements, studio and lab access, consumable supplies such as gaff tape, cables, external storage devices, guest speakers, and workshops.

Description: This course focuses on the art and craft of directing for the screen, emphasizing creative decision-making and leadership. Students will delve into the director's responsibilities, from pre-production planning to working with actors and the production crew on set. Through hands-on projects, students will direct scenes with actors and learn how to communicate effectively with cast and crew to bring a script to life. This course builds on

basic filmmaking principles, focusing on refining directing skills for narrative storytelling.

Pre-requisite(s): FILM 2280 or COMM 2250 or ART 2750 or instructor exception.

FILM 3310 - Editing and Beyond

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course Fees for this course cover the high costs associated with the necessary resources for hands-on instruction. This includes the maintenance and upkeep of studio and lab access, software licensing such as DaVinci Resolve or Final Cut Pro X, and guest speakers and workshops.

Description: This course thoroughly studies advanced post-production processes, including video editing, sound design, color correction, and visual effects. Students will gain hands-on experience with various industry-standard editing software and tools, learning to refine the post-production workflow from raw footage to polished final products and distribution. This course emphasizes storytelling through editing, effective pacing, and the use of sound and color to enhance a film's emotional impact. By the end of the course, students will have edited a series of short projects demonstrating their post-production skills.

Pre-requisite(s): FILM 2280 or COMM 2250 or ART 2750 or instructor exception.

FILM 3500 - Advanced Film Theory and Criticism

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course aims to help the student view, discuss, and write about films with greater acuity, nuance, and depth. We will investigate the nature of film as an art form, explore the role of the critic in the film industry and society at large, and apply a variety of theoretical frameworks and cultural studies methodologies to our discussion of film. In addition to engaging the work of popular critics, we will navigate various theoretical approaches to film including the Bakhtin and Frankfurt schools, auteur theory, poststructuralism, gender studies, semiotics, textual analysis, postcolonial and digital theories to grapple with cinematic transformations across the 20th and 21st centuries. By the end of the course students will be able to address and historically contextualize the writings of media theorists and critics from diverse schools of thought; place theorists' ideas in dynamic conversation with class screenings; apply the concepts and ideological interventions of a school of theorists or critics to the unique analysis of a specific film or media text.

Pre-requisite(s): FILM 2200 or THEA 1023 or ENGL 2210.

FILM 3780 - Survey of Documentary Cinema

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The history of documentary cinema consists of a series of experimentations in the attempt to represent reality, taking its material from the historical world we live in. As we study the forms, modes, theories, and criticism of non-fiction film in this course, we will also discover how filmmakers have chosen to represent reality, how changing technologies and sensibilities have affected the way reality is represented in documentaries, and how nonfiction films have been used for different purposes.

FILM 3800 - Independent Study

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This Independent Study course provides an opportunity to earn academic credit for learning outside

the regularly scheduled class structure. A student interested in knowing more about a topic not covered in the regular Film Studies curriculum may propose a creative or research project to any rostered department faculty member. If a student and faculty member share a sufficient interest in the subject to sustain an independent study project, an independent study contract will be created.

Pre-requisite(s): FILM 2280: Introduction to Film Production.

FILM 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. May be repeated for a total maximum of 6 credit hours.

FILM 3820 - Advanced Special Topics-Variable

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This rotating upper-division course will provide students with the opportunity to focus in depth on a specific genre of filmmaking (horror, science fiction, romantic comedy, western, etc.) or the oeuvre of an influential filmmaker. The class will grapple with questions of how authorship frames our understanding of the style and ethics of any given film and how genre categories help us make sense of films and their cultural contexts. Students will engage media history methodologies and utilize primary resources housed within the Stewart Library to develop a substantial research essay. By the end of the course students will adopt appropriate critical and theoretical frameworks through which to engage film genres and authorship; cultivate skills for primary source research; undertake scaffolded processes of essay development and revision.

Suggested Requisite(s): FILM 2820 or FILM 2200 or THEA 1023 or ENGL 2210.

FILM 3900 - Sundance Film Festival Experience

Credits: (1-3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is a hybrid intense first-hand experience of the world of independent filmmaking through the Sundance Film Festival. The Sundance Film Festival has launched the careers of many contemporary auteurs, including the Coen Brothers, Christopher Nolan, Wes Anderson, Lynn Ramsey, Quentin Tarantino, and Steven Soderbergh. This course provides the opportunity for film students to hone their own creative and critical visions by viewing and discussing a wide variety of world premiere films, as well as by attending talks by filmmakers, business people, scholars, and critics in the vibrant environment of Sundance.

FILM 4120 - Careers in Film and Entertainment Industry

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This introductory course for producers, directors, writers, development personnel, and aspiring film executives examines the changing business issues associated with the film industry. This course is designed to provide film students with a systematic overview of the modern-day filmed entertainment industry, not only the traditional "Hollywood System" operating out of Los Angeles but the independent film model as well. Through lectures, discussions, and case studies, instruction focuses on current business and production issues and introduces new business models to navigate content onto new distribution platforms.

FILM 4700 - Film Studies Capstone

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$50.00

Course Fee Purpose: Maintenance and purchasing of camera and editing equipment

Description: This Capstone course is designed to conclude students' experiences as film majors at the Weber State University as well as to develop students' research, writing, and/or production skills. In this course, students will analyze or produce films that pertain to the special topic of their choice. Peer review will occur throughout the writing or production process. At the end of the course, students will present their findings and/or films to the class and faculty members from the Film Studies program.

FILM 4890 - Film Internship

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: FILM 4890 connects the theoretical and practical understanding of film studies that students develop in the classroom to professional experience in the workplace. The course is open to Film Studies majors who have obtained internship placements working with professionals in film production, Film organizations such as Sundance Institute and Utah Film Commission, exhibition, preservation, or other film-related fields. The academic component of the course consists of reading and written work designed to provide a theoretical framework for experiential learning. Students will submit a portfolio of writing, reflections, and evaluations where they connect these readings to their on-site experiences.

Pre-requisite(s): FILM 2200: Fundamentals of Film; FILM 2280: Introduction to Film Production.

FIN 1010 - Personal Finance

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Personal and family budgeting, installment buying, borrowing money, buying a home, life and property insurance, personal investment, and retirement and estate planning.

FIN 2300 - Introduction to Investments

Credits: (3)

Description: A study of investment opportunities, mechanics, analysis, risk, and risk management at the introductory level. This course is designed for non-finance majors and will not be accepted as a substitute for FIN 3300.

Note: Course not currently being offered.

FIN 3200 - Financial Management

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Financial analysis, planning and control, working capital management, capital budgeting, and short-term and long-term financing. Student use of computers is required for the preparation of case study material used to enhance the presentation of selected topics presented in the course.

Pre-requisite(s): ACTG 2010, ECON 2010, MIS 2010, and QUAN 2600.

FIN 3300 - Investments

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An in-depth study of principles, concepts, and tools used in the investment field as they relate to investment opportunities, mechanics, financial statement analysis, risk, and portfolio management. Computer use is required to access the Dow-Jones market analyzer investment software and in the preparation and analysis of investment portfolios.

Pre-requisite(s): BSAD 2899, FIN 3200, and QUAN 3610.

FIN 3350 - Financial Institutions

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A study of the functions and significance of the major financial institutions, such as commercial savings institutions, with an emphasis on management problems, regulations, credit appraisal, and loan types.

Pre-requisite(s): BSAD 2899, FIN 3200.

FIN 3400 - Real Estate Principles and Practices

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Description: Fundamental economic aspects of real estate with emphasis on realty as a commodity of trade. The subject matter in this course is of general interest to both those desiring to enter the real estate profession and those who only intend to own real estate.

Pre-requisite(s): FIN 3200.

FIN 3500 - Capital Budgeting

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Capital investment decision-making procedures relative to make/ buy, lease/buy, working capital, replacements, and new investment decisions. Involves use of the computer in the analysis of cash flows and capital acquisition alternatives.

Pre-requisite(s): BSAD 2899, FIN 3200.

FIN 4400 - Financial Problems - Corporate Finance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Problems in financial management with an emphasis on corporate finance. Use of financial software and computers is an integral part of problem solutions.

Pre-requisite(s): BSAD 2899, FIN 3200, and QUAN 3610.

FIN 4410 - Financial Problems - Investments

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Problems in financial management with an emphasis on investments. Use of financial software and computers is an integral part of problem solutions.

Pre-requisite(s): BSAD 2899, FIN 3300.

FIN 4800 - Independent Research

Credits: (1-3)

Description: Directed research and study on an individual basis.

Pre-requisite(s): BSAD 2899; Senior Standing; Written Instructor Approval.

May be repeated until a total of 4 hours credit is accumulated.

FIN 4850 - Finance Study Abroad

Credits: (1-3)

Description: This course is designed for students who wish to explore financial theory and practice in countries other than the U.S. Students will study international finance as offered through a partner university (or other university with department chair approval).

Pre-requisite(s): BSAD 2899.

May be repeated once up to 6 credits.

FIN 4860 INT - Finance Internship

Credits: (1-3)

Description: A structured professional-level field experience. The student will be counseled and supervised as he/she applies and integrates the knowledge and skills obtained through finance courses.

Pre-requisite(s): BSAD 2899; Senior Standing; Instructor approval.

FIN 4900 - Special Topics in Finance

Credits: (4)

Variable Title

Description: Special treatment of current topics in Finance. This course will involve primary and/or secondary research by class participants.

Pre-requisite(s): BSAD 2899, FIN 3200; Instructor approval.

FRCH 1000 - Proficiency Development

Credits: (1-2)

Description: (N=Novice) (Cr/NCr) Non-graded courses for entry-level students to augment foreign language instruction in stress-free activities such as reading children's literature, learning and performing skits, folk dancing, singing, cooking, etc.

May be repeated for credit under different titles.

Note: Course not currently being offered.

FRCH 1010 - First Semester French

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Introductory course assuming no significant previous experience with the language.

Beginners and students with less than two years of high school language should register for this class. Emphasis on everyday conversation and exposure to cultural perspectives.

FRCH 1020 - Second Semester French

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Continuation of FRCH 1010. Basic language skills including listening, speaking, reading, writing and culture.

FRCH 1700 - Conversational Skills

Credits: (1-3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Specific vocabulary and speaking skills in one semester (e.g., nursing, law enforcement, medical, tourism, family language courses, etc.). May be repeated for credit under different titles.

Note: Course not currently being offered.

FRCH 1852 - Study Abroad

Credits: (1-3)

Description: (N=Novice) Language and culture studies for students with no previous experience in the target language and culture. Most assignments are performed in English. Prior travel experience does not apply.

May be repeated twice with a maximum of 3 credit hours.

Note: Check with Department for course availability.

FRCH 2000 - Proficiency Development

Credits: (1-2)

Description: (NH=Novice High) (CR/NC) Non-graded courses for second-year students to augment foreign language instruction in stress-free activities appropriate to the linguistic level of second-year students. May be repeated under different titles. Note: Course not currently being offered.

FRCH 2010 - Third Semester French

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of FRCH 1020. Assumes completion of first-year or equivalent experience. Students learn to understand and express ideas about their community and the world. Includes listening, speaking, reading, writing and culture.

FRCH 2020 HU - Fourth Semester French

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of FRCH 2010. The learning and application of strategies for acquiring a foreign language. Students also learn how cultural products and practices reflect a culture's attitudes, values, ideas and meaning. The process of language acquisition and the seeking of cross-cultural understanding provide insights into the commonalities of how the human family learns, thinks and communicates.

FRCH 2021 - Second Year II

Credits: (3)

Description: (NH=Novice High) Continuation of FRCH 2010 without General Education Humanities credit. Offered through examination only.

Pre-requisite(s): Only available through testing.

FRCH 2030 - Second Year Language Review

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) This course will prepare students who wish to continue language study. Emphasis on conversational skills and a review of language structure and usage.

Note: Check with department for course availability.

FRCH 2600 HU - Introduction to Cultural and Literary Studies in Translation

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: May be offered under any of the languages taught in the department. All Foreign Language HU2600 courses are taught in English and all texts are read in English translation in order to make some of the literature we normally would teach in a foreign language accessible to all students. These courses may introduce students to specific literary periods, literary themes or some prominent authors in specific areas of the world where languages other than English are spoken.

May be repeated up to 10 times for credit under different titles.

Note: Check with Department for course availability.

FRCH 2851 HU - Study Abroad

Credits: (3)

Description: (NH=Novice High) Language and culture studies for students whose minimal proficiency is Novice High. Language assignments at the Novice or Intermediate-Low levels are performed in the target language. All other assignments are performed in English. Prior travel experience does not apply.

Note: Check with Department for course availability.

FRCH 2852 - Study Abroad

Credits: (1-3)

Description: (NH=Novice High) Language and culture studies for students whose minimal proficiency is at Novice High. Language assignments at the Novice or Intermediate-Low levels are performed in the target language. All other assignments are performed in English. Prior travel experience does not apply.

Twice with a maximum of 3 credit hours.

Note: Check with Department for course availability.

FRCH 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

FRCH 2960 - Introduction to World Languages and Cultures

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Required of all majors during their first year. This course provides guidance to help the student successfully navigate their academic career in WSU Department of World Languages & Cultures and its programs. It provides an overview of what it is like to study a second language, as well as an overview of the U.S. language industry and language careers. The course is also designed to help students develop a clearer focus on their educational and occupational goals, as well as creating a sense of belonging in our department, college, and community.

Co-Requisite(s): FRCH 3060.

FRCH 3000 - Proficiency Development

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) This is a transition course to upper division. The course focuses on oral proficiency development. Students will learn a variety of techniques and strategies to increase their oral proficiency in a variety of social, educational and cultural settings. Native-speaking students or those who have acquired proficiency through residence in the target language community are not eligible to take this class.

Note: Check with department for course availability.

FRCH 3060 - Grammar & Composition

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Students will read examples of writing in various modes (such as description, narration, exposition, and argument), write short compositions in those modes, and review the necessary grammar to write correctly in those modes.

Note: Check with department for course availability.

FRCH 3116 - DLI Bridge Course I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): FRCH 2020 or AP exam with a score of 4 or better.

FRCH 3117 - DLI Bridge Course II

Credits: (3)**Typically Taught Fall Semester:** *Full Sem***Description:** Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.**Pre-requisite(s):** FRCH 2020 or AP exam with a score of 4 or better.**FRCH 3118 - DLI Bridge Course III****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Description:** Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.**Pre-requisite(s):** FRCH 2020 or AP exam with a score of 4 or better.**FRCH 3160 - Introduction to Literature****Credits: (3)****Course Fee:** \$8.00**Course Fee Purpose:** Maintain technology in the FL lab, EH 408, and classroom technology.**Description:** (IL=Intermediate Low) Required of all majors and minors. 3160 may be taken concurrently with other literature courses. One sheltered section may be offered to students who have not had extensive in-country experience.

Note: Check with department for course availability.

FRCH 3220 - Phonetics and Phonology**Credits: (3)****Course Fee:** \$8.00**Course Fee Purpose:** Maintain technology in the FL lab, EH 408, and classroom technology.**Description:** (IL=Intermediate Low) Analysis of the sounds of language and word formation: practice of native like speech patterns. Required of all teaching majors and minors.

Note: Check with department for course availability.

FRCH 3270 - Special Topics in Linguistics**Credits: (3)****Variable Title****Course Fee:** \$8.00**Course Fee Purpose:** Maintain technology in the FL lab, EH 408, and classroom technology.**Description:** (IM=Intermediate Mid) An introduction to linguistic structures and semantic elements. The course provides useful information and practice in the language, its structures and usage. The sub-disciplines of linguistics, other than phonetics and phonology (covered in FL 3220), will be studied. These may include lexical analysis, semantics, morphology, syntax, linguistic change and dialectal variation.

Note: Check with department for course availability.

FRCH 3320 - Applied Language Studies**Credits: (1-3)****Variable Title****Course Fee:** \$8.00**Course Fee Purpose:** Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Minimal proficiency level varies with content).
May be repeated up to 10 times under different titles.

FRCH 3360 - Advanced Grammar

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Analysis and application of syntactic principles and discourse structure.

Note: Check with department for course availability.

FRCH 3550 - Cultural Heritage I

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and civilization. May be repeated up to 7 times for credit and for other non-English speaking cultures.

FRCH 3560 - Cultural Heritage II

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Med) Studies in culture, history, geography, social customs, fine arts, and civilization. May be repeated 3 times for other non-English speaking cultures.

FRCH 3570 GLB - Special Topics in Culture

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and civilization.

May be repeated up to 7 times for credit and for other non-English speaking cultures.

Note: Check with Department for course availability.

FRCH 3610 - Literature Survey I

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) A survey of the authors and works of a particular period or place. May be repeated under different titles.

FRCH 3620 - Literature Survey II

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) A survey of the authors and works of a particular period or place. May be repeated under different titles.

FRCH 3630 - Literature Poetry

Credits: (3)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM= Intermediate Mid) One literature course is required for regular and teaching majors. May be taken concurrently with FL 3160 . May be repeated under different titles.

FRCH 3631 - Literature: Prose

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of works in prose by one or various authors of a particular period or place, or spanning several literary movements and geographical regions. May be taken 3 times up to 9 credits under different titles.

FRCH 3632 - Literature: Drama

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of theater plays by one or various authors of a particular period or place, or spanning several literary movements and geographical regions. May be taken 3 times up to 9 credits under different titles.

FRCH 3650 - Literature Periods

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with FRCH 3160.

FRCH 3670 - Literature Authors

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IN=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with FRCH 3160.

FRCH 3680 - Literature: Film

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of film by one or various filmmakers of a particular period or place, or spanning several literary movements and geographical regions.

May be taken 3 times up to 9 credits under different titles.

Note: Check with department for course availability.

FRCH 3690 - Special Topics in Literature

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with FRCH 3160.

FRCH 3710 - Business Language I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) Business Language and Practices. Required of all commercial majors.

FRCH 3715 - Business Language II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (IM=Intermediate High) Advanced Business Language and Practices. Required of all commercial majors.

FRCH 3720 - Language for Specific Purposes I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) This course is content, vocabulary and culture-based. The course focuses on practical vocabulary, idiomatic expressions, professional terminology and cultural interactions on a variety of topics such as language for the medical professions, social workers, law enforcement or tourism.

FRCH 3730 - Language for Specific Purposes II

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) This course is content, vocabulary and culture-based. The course focuses on practical vocabulary, idiomatic expressions, professional terminology and cultural interactions on a variety of topics, such as language for medical professions, social work, law enforcement or tourism.

FRCH 3740 - Translation I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) Introduction to basic techniques and skills needed for bilingual translation of non-fiction texts. Emphasis will be on the translation into English, and on the stylistic, syntactic, cultural, lexical, and terminological problems. Students are given ample opportunity to apply these techniques through a series of written translation assignments, which form the basis for class discussion.

FRCH 3750 - Introduction to Interpreting

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: Introduction to basic techniques and skills needed for bilingual interpretation in a variety of professional settings. The course includes an overview and history of the interpreting industry and work of interpreters, certification and licensure, and the variety of consumers and modalities with which interpreters work. Ethical decision-making models and the Code of Ethics for interpreters are explored.

FRCH 3760 - Special Topics in Translation

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: This is a specialized course that offers in-depth studies in selected topics, current developments or recent trends in the fields of Translation and Translation Studies.

FRCH 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Individual courses offered on an experimental basis, identified by specific name and description. The specific title will appear on student's transcript along with the authorized credit.

May be repeated for a total maximum of 6 credit hours.

FRCH 3850 - Study Abroad

Credits: (1-6)

Description: (IM=Intermediate Mid) Language and culture studies for students whose language proficiency is Intermediate Low to Intermediate High. All Intermediate and Advanced tasks will be performed in the target language. All Superior tasks may be performed in English. Prior travel experience does not apply. May be repeated up to 10 times for credit.

FRCH 4190 - Foreign Language Journal

Credits: (3)

Course Fee: \$2.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) For foreign language students in the fourth year who work on publishing the foreign language literary journal. Includes selecting articles, editing and preparing journal layout.

FRCH 4620 - Survey of Literature I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) One literature course is required of regular and teaching majors.

Pre-requisite(s): FRCH 3160.

FRCH 4630 - Survey of Literature II

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) One literature course is required of regular and teaching majors.

FRCH 4690 - Special Topics in Literature

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (IH=Intermediate High) Detailed analysis of a particular body of literature. For students whose proficiency in the target language is at least Intermediate High.

Pre-requisite(s): FRCH 3160.

FRCH 4740 - Translation II

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) Development of techniques and skills needed for bilingual translation of non-fiction texts. Emphasis will be on the translation into the target language. Methods of contrastive linguistics to analyze pertinent aspects of language structure, involving syntax, vocabulary and style, as well as basic theoretical-historical concepts are employed. Students are given ample opportunity to apply these techniques and concepts through a series of written translation assignments, which form the basis for class discussion. Prerequisite/Co-requisite: FRCH 3740 is strongly advised, but not required.

FRCH 4830 - Directed Readings

Credits: (1-3)

Description: (IH=Intermediate High) Independent readings under the direction of a faculty member.

May be repeated up to 10 times.

Note: Check with Department for course availability.

FRCH 4850 - Study Abroad

Credits: (3)

Description: (A=Advanced) Language and culture studies for students whose language proficiency is Advanced or Superior. All tasks are performed in the target language. Prior travel experience does not apply.

FRCH 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: (Minimal proficiency level; varies with content). Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Course not currently being offered.

FRCH 4960 - Senior Project

Credits: (3)

Course Fee: \$6.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) For students completing a major with Departmental Honors. Before registration in this course, students must work with a faculty advisor to define the project, create a contract and schedule, and determine the appropriate number of credit hours.

FYE 1105 - Foundations of College Success

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course assists incoming students in making a successful transition to college. Topics include the purpose of higher education, goal setting, time management, study and test taking skills, critical thinking, stress management, academic advisement, career and major exploration, using campus resources, and understanding student responsibilities.

FYE 3170 - First Year Experience Mentor Leadership Seminar

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: In this seminar course, FYE Peer Mentors are taught to effectively help Foundations of College Success (FYE 1105) students in making a successful transition to college. FYE Mentor requirements are available at www.weber.edu/fye/. Course enrollment limited to FYE Peer Mentors.

May be repeated once for 2 more credits and additionally for zero credits.

GEO 1030 PS - Earthquakes and Volcanoes

Credits: (3)

Typically Taught Summer Semester: *2nd Blk, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: The causes, distribution, and effects of earthquakes and volcanoes within the framework of global

plate tectonics. Development of problem solving and analytical thinking skills are emphasized through homework assignments related to geologic processes.

Three lectures per week.

GEO 1060 PS - Environmental Geosciences

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: The scientific study of the interaction of humans and earth systems including topics of natural hazards; soil, water, energy and mineral resources; and issues of global change.

Three lectures per week.

GEO 1065 - Environmental Geosciences Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Laboratory and field exercises involving analysis of geologic data related to environmental issues or problems. Application of the scientific method and development of basic computational and map interpretation skills will be stressed.

One three-hour lab per week.

Pre-requisite/Co-requisite: GEO 1060.

GEO 1110 PS - Dynamic Earth: Physical Geology

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Fundamental principles of geology emphasizing physical aspects of the Earth including earth materials, plate tectonics, and the effects of water, wind and ice on the Earth's surface. Useful for all students, and recommended as the first geology course for students with majors/minors in geosciences, science teaching, archaeology, and pre-engineering.

Three lectures per week. Optional field trip to observe local geologic features.

GEO 1115 - Physical Geology Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: The course fees for this class will be used to partially offset the cost of purchasing replacement specimens, topographic maps, and geologic maps, and to periodically replace classroom microscopes.

Description: The study of minerals and rocks in hand specimens, as well as surficial processes of the Earth revealed by topographic maps and air photos.

One three-hour lab per week.

Pre-requisite/Co-requisite: GEO 1060 or GEO 1110 or GEOG 1000.

GEO 1130 PS - Introduction to Meteorology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Survey of atmospheric processes that create weather. Topics include solar radiation, temperature, moisture, pressure, wind, storm systems, weather forecasting, and air pollution. Problem solving skills and use of satellite imagery included.

Three lectures per week.

GEO 1220 - Historical Geology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The history of the Earth and the methods used to interpret this history. Short field trips required.

Three lectures and one three-hour lab per week.

Pre-requisite(s): GEO 1110 and GEO 1115.

GEO 1350 PS - Principles of Earth Science

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Overview of Earth's systems, including weather, climate, seasons, rocks and minerals, processes that change Earth's surface, earthquakes, volcanoes, and plate tectonics. Data collection and analysis are included.

Two lectures and one three-hour lab per week. Designed for Elementary Education majors.

GEO 1710 - Introduction to Geographic Information Systems (GIS)

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The fees in this course are used to purchase expendables such as printer paper and color printer cartridges used for student printing in the lab. The remaining funds are pooled with funds from other courses to help pay for nonexpendable items such as annual software license fees (e.g., ESRI ArcGIS, ENVI, Trimble, etc.) and replacement of computer workstations / other equipment.

Description: This introductory geospatial course presents the fundamental principles and applications of Geographic Information Systems (GIS). You will learn how to evaluate and apply geospatial concepts using industry-leading GIS software to create, store, edit, evaluate, and query raster- and vector-based geospatial data. Successful completion of this course will ensure you have the critical knowledge and skills of a GIS (geospatial) technician.

Pre-requisite/Co-requisite: GEOG 1790.

GEO 1720 - Geospatial Analysis

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The fees in this course are pooled with funds from other courses to help pay for nonexpendable items such as annual software license fees (e.g., ESRI ArcGIS, ENVI, Trimble, etc.) and replacement of equipment (e.g., GNSS instruments). The remaining funds are used replace expendables such as printer paper and color printer cartridges used for student printing in the lab.

Description: This advanced geospatial course presents geoprocessing techniques that support spatial analysis and modeling in both the vector and raster data models. The main goal of the course is to teach you the tools/methods that address spatial analysis / modeling applications used in a variety of professional fields that utilize geospatial information. After successful completion of this course, you will have the foundation necessary to become

an advanced GIS user with marketable skills transforming data into information needed to address today's geospatial problems.

Pre-requisite(s): GEO 1710.

GEO 1810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

GEO 2050 - Earth Materials

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: An introduction to the origin, classification, and identification of minerals and rocks including topics related to crystallography, mineral chemistry, petrology, and the importance of mineral and rock resources to our society.

Three lectures and one three-hour laboratory per week.

Pre-requisite(s): GEO 1115 and CHEM 1200.

Co-Requisite(s): CHEM 1210.

GEO 2200 - Geospatial Data Acquisition

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The fees in this course are used to purchase expendables such as printer paper and color printer cartridges used for student printing in the lab. The remaining funds are pooled with funds from other courses to help pay for nonexpendable items such as field equipment (drones, GNSS units, tablets, etc.), annual software license fees (e.g., ESRI ArcGIS, ENVI, Trimble, etc.) and replacement of computer workstations.

Description: This applied geospatial course introduces students to primary data collection methods in the field, with emphasis on GPS/GNSS, sUAS (drone), and smartphone/tablet operations. The main objective is to provide students with the knowledge and skills needed to successfully plan and execute field campaigns that result in the accurate collection and processing of geospatial data that can be used in a variety of applications. After successful completion of this course, you will know the fundamental techniques needed to effectively and accurately collect and process the most common types of geospatial field data.

Pre-requisite(s): GEO 1710.

GEO 2600 - Laboratory Safety

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An interdisciplinary, course that will be an overview of the major chemical, biological and physical safety issues related to science laboratories and field work.

Class will meet once per week and will be taught in a lecture/demonstration format.

Cross-listed with BTNY, CHEM, GEO, and PHYS.

GEO 2820 - Elements of Research in the Sciences

Credits: (3)**Typically Taught Spring Semester:** *Full Sem*

Description: This interdisciplinary course provides concrete skills for productive entry-level scientific research. Students engage in a hands-on introduction to scientific research and methods, including an introduction to sample handling, data analysis, and dissemination of results through papers and presentations. Upon completion of the course, a student will be prepared for potential internships, summer research programs, and research assistantships both on and off campus.

Pre-requisite(s): MATH 1060 or MATH 1080 or MATH 1210; and CHEM 1210 or PHYS 2210 or PHYS 2010 or (GEO 1110 and GEO 1115).

Cross-listed with CHEM 2820 and PHYS 2820.

GEO 2840 INT - Geospatial Internship**Credits: (1-3)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This summative course provides a structured work experience in a supervised setting under the direction of a geospatial employer mentor and the course instructor. The internship will give students invaluable experience with technical, professional, and ethical issues commonly faced by geospatial professionals in today's workforce. Each student will work with their supervisor/mentor and instructor to develop a set measurable Internship Learning Outcomes (ILOs) that will be used to evaluate performance and competence in a real-world job situation.

Pre-requisite(s): Consent of instructor prior to registration.

Pre-requisite/Co-requisite: GEO 1720 and GEOG 2400

This is a dual-listed course with GEO 4840.

May be repeated for a maximum of three credit hours.

GEO 2850 - Geospatial Capstone**Credits: (3)****Typically Taught Spring Semester:** *Even Years*

Description: This capstone course provides a summative learning experience that is a culmination of a student's geospatial education. Students apply their knowledge and skills to develop, implement, and evaluate a geospatial project that simulates a workplace environment, including collaboration as part of a team when appropriate. Students and the instructor develop a set of measurable Capstone Learning Outcomes (CLOs) that will be used to evaluate performance and competence to complete a geospatial project from start to finish.

Pre-requisite/Co-requisite: GEO 1720, GEO 2200, and GEOG 2400.

This is a dual-listed course with GEO 4850.

GEO 2890 INT - Cooperative Work Experience**Credits: (1-6)**

Description: Open to all students in Geosciences who meet the minimum Cooperative Work Experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

May be repeated 5 times with a maximum of 6 credit hours.

Note: This course is offered as needed.

GEO 2920 - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.
Note: This course is offered as needed.

GEO 2950 - Geoscience Fieldtrips

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Application of basic Geoscience field methods during fieldtrips. Readings, written and oral reports, and/or examinations may be required.

Pre-requisite(s): consent of instructor.

May be repeated for a maximum of 6 credit hours.

GEO 3000 - Geoscience Methods and Careers

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to a variety of methods and skills used by geoscientists, including geoinformation literacy, written-oral-visual communication, and basic statistical/data analysis skills, that will be used and further developed in upper-division courses. Basic field and laboratory methods used in geoscience research/investigations will be demonstrated and practiced. Geoscience career paths will be explored and students will begin planning for professional licensure. Two hours of lecture and three hours of field/laboratory per week.

Pre-requisite(s): GEO 1220 and MATH 1010.

GEO 3010 SUS - Oceans and Climate

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: The study of the ocean as a framework for understanding the climate system. Topics include plate tectonics, the origin of ocean basins, the climate system, atmosphere-ocean interactions and feedbacks, ocean circulation, nearshore processes, geochemical cycling, biological productivity and marine ecosystems, and anthropogenic impacts to the marine environment (including climate change and marine pollution).
Three lectures per week.

Pre-requisite(s): GEO 1060 or GEO 1110 or GEO 1130 or GEOG 1000.

Suggested Requisite(s): MATH 1050.

GEO 3060 - Structural Geology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: Origin and characteristics of structural features in deformed rock. Topics include basic principles of stress, strain, and rock deformation; analysis of faults and folds; and relations to major tectonic features of Earth. Field trips required.

Three lectures and one three-hour lab per week.

Pre-requisite(s): GEO 2050 and either MATH 1050 or MATH 1080; or consent of instructor.

GEO 3080 - Applied Hydrology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A detailed examination of Earth's water cycle, including precipitation, surface water, groundwater,

water management, and water conservation. Three hours of lecture and three hours of laboratory per week.

Pre-requisite(s): GEO 1115 and GEO 3000.

GEO 3150 - Geomorphology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: A study of landforms, surficial deposits, and geomorphic processes operating in fluvial, coastal, eolian, and glacial environments. Laboratory exercises employ maps, aerial photographs, and field analysis to understand the interactive nature of geomorphic processes and landform development.

Three lectures and one three-hour lab per week.

Pre-requisite(s): GEO 1220 and MATH 1050 or MATH 1080. Or instructor approval.

GEO 3180 - Paleontology

Credits: (4)

Description: Characteristics of important fossil groups and their geologic distribution and paleoecology. Emphasis on the invertebrate record with some treatment of vertebrates and plants.

Three lectures and one three-hour lab per week.

Pre-requisite(s): GEO 1220 or ZOOL 1610 or consent of instructor.

Note: This course is not currently offered.

GEO 3210 SUS - Paleoclimate

Credits: (3)

Description: An introduction to climate science and an overview of the paleoclimatic history of Earth focusing on the interactions between geological, climatological, and biological processes in Earth's systems. Topics include paleoclimate reconstruction using proxies and climate models, how plate tectonics and the carbon cycle affect long-term climate change, insolation controls on monsoons and ice sheets, the Last Glacial Maximum, oscillations in climate, and anthropogenic climate change.

Three lectures per week.

Pre-requisite(s): GEO 1220 or GEO 3010.

Suggested Requisite(s): GEO 1220 and GEO 3010.

Note: This course is not currently offered.

GEO 3214 - Soils

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to the fundamental principles of soil science. Chemical, physical, geological, and biological properties of soils; Course will examine the role of soils as a fundamental ecological constraint through space and time on patterns and processes, such as plant distribution, nutrient cycling, and cycling of water between terrestrial ecosystems and the atmosphere. Course will also examine the human dimensions of soils as a natural resource, and the historical and current environmental impact of soil use and management. Three hours of lecture and one 3-hour lab per week.

Pre-requisite(s): BTNY 2104 or GEO 1110 or GEO 1060 and CHEM 1130 or CHEM 1110 or CHEM 1210.

Course is cross listed with BTNY 3214.

GEO 3250 - Geology of Utah

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: The study of Utah's geologic history, rocks, minerals, fossils, and landforms and their relationship to

regional and global events. Field trips required.

Three lectures per week.

Pre-requisite(s): GEO 1220.

GEO 3550 - Sedimentology and Stratigraphy

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: The processes, origin, classification, identification, and basic petrology of sedimentary rocks and the principles, concepts, and applications of stratigraphy. Field trips required.

Three lectures and one three-hour lab per week.

Pre-requisite(s): GEO 1220 and GEO 2050; or consent of instructor.

GEO 3570 - Foundations of Science Education

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A thorough investigation of research in science learning and curricular standards at the state and national levels. Foundations of the philosophy of science and scientific inquiry as applicable to science teaching at the secondary level. This course serves as a foundation to a preservice science teacher's education coursework.

GEO 3710 - Introduction to Geographic Information Systems

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The fees in this course are used to purchase expendables such as printer paper and color printer cartridges used for student printing in the lab. The remaining funds are pooled with funds from other courses to help pay for nonexpendable items such as annual software license fees (e.g., ESRI ArcGIS, ENVI, Trimble, etc.) and replacement of computer workstations / other equipment.

Description: This introductory geospatial course presents the fundamental principles and applications of Geographic Information Systems (GIS). You will learn how to evaluate and apply geospatial concepts using industry-leading GIS software to create, store, edit, evaluate, and query raster- and vector-based geospatial data. Successful completion of this course will ensure you have the critical knowledge and skills of a GIS (geospatial) technician.

GEO 3720 - Geospatial Analysis

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The fees in this course are pooled with funds from other courses to help pay for nonexpendable items such as annual software license fees (e.g., ESRI ArcGIS, ENVI, Trimble, etc.) and replacement of equipment (e.g., GNSS instruments). The remaining funds are used replace expendables such as printer paper and color printer cartridges used for student printing in the lab.

Description: This advanced geospatial course presents geoprocessing techniques that support spatial analysis and modeling in both the vector and raster data models. The main goal of the course is to teach you the tools/methods that address spatial analysis / modeling applications used in a variety of professional fields that utilize geospatial information. After successful completion of this course, you will have the foundation necessary to become a Geospatial/GIS analyst or advanced GIS user with marketable skills required in the geospatial workforce today.

Pre-requisite(s): GEO 3710.

GEO 3753 - Geomicrobiology

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Course Fee: \$30.00

Course Fee Purpose: GEO 3753: fees support the cost of field trips, supplies for the labs, and helps support the course based undergraduate research project.

Description: Geomicrobiology is the study of the interactions between microorganisms and minerals. This course will explore 1. geological change mediated by microorganisms, 2. microbial evolution driven by geologically diverse habitats, and 3. applications of geomicrobiology, including understanding the evolution of life on earth, the study of life in extreme environments, and industrial applications of geomicrobiology. This team-taught course includes classroom discussion, laboratories, and field trips.

Pre-requisite(s): CHEM 1210/CHEM 1215 or approval of the instructor.

Cross-listed with MICR 3753.

GEO 3810 - Experimental Course**Credits: (1-6)****Experimental**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

GEO 3840 - Remote Sensing: Principles and Methods**Credits: (4)**

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Fee is used to purchase expendables such as printer paper and color printer cartridges used for student printing in the lab. The remaining funds are pooled with funds from other courses to help pay for non-expendable items such as annual software license fees for (ESRI, ArcGIS, ENVI, Trimble, etc.) and replacement of computer work-stations and other equipment.

Description: This is an advanced geospatial course that introduces and analyzes important concepts, issues, and methods related to a variety of multispectral and other types of remotely sensed imagery (e.g., satellite and airborne platforms). The major objectives are to provide students with both a foundation in understanding different types of imagery and how to process imagery used to address geospatial problems and issues. After successful completion of this course, you will have the knowledge needed to understand different types / applications of imagery and the skills needed to process the image data and assess the accuracy of the results.

Pre-requisite/Co-requisite: GEO 3710.

GEO 3880 - Groundwater**Credits: (4)**

Typically Taught Spring Semester: *Full Sem*

Description: Origin, occurrence, behavior, and use of groundwater, with special emphasis on practical applications in Utah.

Three lectures and one three hour lab per week.

Pre-requisite(s): GEO 1115 and either MATH 1050 or MATH 1080; or consent of instructor.

Note: This course is currently not being offered.

GEO 4060 - Geoscience Field Methods**Credits: (4)**

Typically Taught Fall Semester: *Full Sem*

Description: A capstone course in the collection and analysis of field data for various Geoscience applications.

Topics include introductory surveying, geologic mapping of bedrock and surficial deposits, measuring stratigraphic sections, GPS surveying, groundwater monitoring, and analysis of geologic hazards. Results are presented in maps, computer graphics, written reports, and oral presentations.

Two hours of lecture and six hours of lab/field work per week.

Pre-requisite(s): GEO 2050, GEO 3000, and GEO 3550.

GEO 4080 - Groundwater and Environmental Assessment

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: A survey of groundwater hydrology, including the origin, occurrence, behavior, and use of groundwater and the transport of groundwater and soil contaminants. Environmental site assessment and groundwater remediation are also examined. Three hours of lecture and three hours of laboratory per week.

Pre-requisite(s): GEO 3080.

GEO 4100 - Engineering Geology

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: Introduction to basic concepts in engineering geology and geotechnical engineering; emphasizes problem solving as the primary method.

Three lectures per week.

Pre-requisite(s): GEO 1060 and GEO 1065, or GEO 2050, or consent of instructor.

GEO 4200 - Geospatial Data Acquisition

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The fees in this course are used to purchase expendables such as printer paper and color printer cartridges used for student printing in the lab. The remaining funds are pooled with funds from other courses to help pay for nonexpendable items such as field equipment (drones, GNSS units, tablets, etc.), annual software license fees (e.g., ESRI ArcGIS, ENVI, Trimble, etc.) and replacement of computer workstations.

Description: This applied geospatial course introduces students to primary data collection methods in the field, with emphasis on GPS/GNSS, sUAS (drone), and smartphone/tablet operations. The main objective is to provide students with the knowledge and skills needed to successfully plan and execute field campaigns that result in the accurate collection and processing of geospatial data that can be used in a variety of applications. After successful completion of this course, you will know the fundamental techniques needed to effectively and accurately collect and process the most common types of geospatial field data.

Pre-requisite(s): GEO 3710.

Crosslisted with GEO 2200.

GEO 4300 - Igneous and Metamorphic Petrology

Credits: (4)

Typically Taught Spring Semester: *Full Sem even years*

Description: The origin, classification, and identification of igneous and metamorphic rocks, and understanding of igneous and metamorphic processes. Laboratory includes analysis of rocks in thin section and an introduction to optical mineralogy.

Three lectures and one three-hour lab per week.

Pre-requisite(s): GEO 2050 and CHEM 1220; or consent of instructor.

GEO 4510 - Geology Field Camp

Credits: (4)

Typically Taught Summer Semester: *1st Blk even years*

Description: Integrated approach to collecting field data and interpreting geologic processes and history. Includes geologic mapping and analysis of bedrock, surficial deposits, and geologic structures using aerial photographs, topographic maps, and surveying techniques. Results presented in written reports, maps, and graphical formats. About forty hours of lab per week for about 4 weeks.

Pre-requisite(s): GEO 3060, GEO 3550, and GEO 4060; or consent of instructor.

GEO 4550 - Geochemistry**Credits: (3)**

Typically Taught Spring Semester: *Full Sem odd years*

Description: The chemical evolution of the Earth and geochemical processes operating in the lithosphere, hydrosphere, and atmosphere. Applications to chemical reactions, mineral stability, aqueous solutions, geochemical cycles, and isotope geochemistry.

Three lectures per week.

Pre-requisite(s): CHEM 1220 and GEO 2050; or consent of instructor.

GEO 4560 - Environmental Geochemistry**Credits: (4)**

Typically Taught Spring Semester: *Full Sem*

Description: Applications of chemistry to understanding Earth system cycles and assessing environmental health and safety. Course emphasizes modern surface geochemical cycles operating in the lithosphere, hydrosphere, atmosphere, and biosphere. Applications of aqueous chemistry, geomicrobiology, and isotope geochemistry. Laboratory introduces practical skills and real-world applications.

Three hours of lecture and three hours of lab per week.

Pre-requisite(s): CHEM 1220; or consent of instructor.

GEO 4570 CEL - Secondary School Science Teaching Methods**Credits: (3)**

Description: Acquaintance and practice with various teaching and assessment methods. Development of science curricula including lesson and unit plans. It is recommended that this course be completed immediately before student teaching.

Pre-requisite(s): Admission to the Teacher Education Program.

Note: This course is offered as needed.

GEO 4600 - Geophysics**Credits: (3)**

Description: Principles and techniques of geophysical exploration, including gravity, magnetic, electric, and seismic methods. Course includes field collection and computer modeling of geophysical data.

Three lectures per week. Field trips required.

Pre-requisite(s): GEO 3060 and MATH 1220; or consent of instructor.

Note: This course is not currently offered.

GEO 4630 - Global Tectonics**Credits: (3)**

Typically Taught Spring Semester: *Full Sem odd years*

Description: Large-scale structure and dynamics of the Earth. Framework of plate tectonics including plate motion, processes at plate boundaries, and driving mechanisms. Processes of crustal deformation and evolution of orogenic

belts over time, with examples from North America.

Three lectures per week. Field trips required.

Pre-requisite(s): GEO 2050 and GEO 3060; or consent of instructor.

GEO 4750 - Special Topics in Geosciences

Credits: (1-4)

Variable Title

Typically Taught Spring Semester: *Full Sem*

Description: An opportunity to examine in depth topics in the Geosciences not regularly offered as part of the standard course offerings. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): GEO 1110, GEO 1115, and any specific courses selected by the instructor.

May be repeated for a maximum of 8 credit hours.

GEO 4800 CRE - Independent Research

Credits: (1-3)

Typically Taught Summer Semester: *Offered as needed.*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Independent research under the advisement of a faculty member.

Pre-requisite(s): Consent of instructor prior to registration.

May be repeated for a maximum of six credit hours.

GEO 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

GEO 4830 - Directed Readings

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed individual readings in the general areas of geoscience and/or environmental science. Specific topics and readings selected in consultation with faculty member. Students will complete a scientific literature review and/or annotated bibliography.

Pre-requisite(s): GEO 3000 and approval of instructor.

May be repeated twice for a total of 2 credits.

GEO 4840 INT - Geospatial Internship

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This summative course provides a structured work experience in a supervised setting under the direction of a geospatial employer mentor and the course instructor. The internship will give students invaluable experience with technical, professional, and ethical issues commonly faced by geospatial professionals in today's

workforce. Each student will work with their supervisor/mentor and instructor to develop a set measurable Internship Learning Outcomes (ILOs) that will be used to evaluate performance and competence in a real-world job situation.

Pre-requisite(s): Consent of instructor prior to registration.

Pre-requisite/Co-requisite: GEO 3720 and GEOG 4400.

This is a dual-listed course with GEO 2840.

May be repeated for a maximum of three credit hours.

GEO 4850 - Geospatial Capstone

Credits: (3)

Typically Taught Spring Semester: *Even Years*

Description: This capstone course provides a summative learning experience that is a culmination of a student's geospatial education. Students apply their knowledge and skills to develop, implement, and evaluate a geospatial project that simulates a workplace environment, including collaboration as part of a team when appropriate. Students and the instructor develop a set of measurable Capstone Learning Outcomes (CLOs) that will be used to evaluate performance and competence to complete a geospatial project from start to finish.

Pre-requisite/Co-requisite: GEO 3720, GEO 4200, and GEOG 4400.

This is a dual-listed course with GEO 2850.

GEO 4890 INT - Cooperative Work Experience

Credits: (1-6)

Description: A continuation of GEO 2890. Open to all students.

May be repeated for a maximum of 6 credit hours.

Note: This course is offered as needed.

GEO 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

GEO 4950 - Advanced Geoscience Fieldtrips

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Application of Geoscience field methods during fieldtrips. Readings, written and oral reports, and/or examinations required.

Pre-requisite(s): consent of instructor.

May be repeated for a maximum of 6 credit hours.

GEO 4970 - Senior Thesis

Credits: (2)

Description: A thesis to be written by a student at the culmination of a period of individual field/laboratory and library research, under the direction of a specific faculty person.

Pre-requisite(s): Senior standing and departmental approval of the thesis topic.

Note: This course is offered as needed.

GEO 4990 - Earth Science and Society Seminar

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Case studies, readings, presentations, and/or seminar-style discussions related to natural hazards/disasters, natural resources, climate change, and environmental issues. Guest speakers highlight a range of careers in earth and environmental science.

Two hours of lecture and/or seminar discussion per week.

GEO 5030G - Geology for Teachers

Credits: (2-4)

Description: Science content course for teachers in the M.Ed Science Emphasis Program. To register, select another departmental course and develop a contract detailing additional work required for graduate credit. Contract must be approved by instructor, department chair, and Director of the Master of Education Program.

May be repeated once with a maximum of 4 credit hours.

Note: This course is offered as needed.

GEO 5920G - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

GEOG 1000 PS SUS - Planet Earth: Air, Water, Land and Life

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online, 1st Block, 2nd Block*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: With a focus on interactions among air, water, land and life, this course explores the essentials of Earth's dynamic physical systems and society's profound impact upon them. When you finish this course, you will have a better understanding of how the planet works, a deeper appreciation for the environmental changes affecting all life on earth, and a guide to the prospects for a sustainable future.

GEOG 1002 - GPS, Map Reading and Navigation

Credits: (1)

Typically Taught Summer Semester: *1st Blk Online*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Description: Students learn how to use fundamental navigational equipment such as global positioning systems (GPS), compasses, aerial photos, and common topographic maps. Field work prepares course participants to apply these navigational skills and knowledge. With these skills you will not get lost.

Weekly two-hour lab sessions for ten weeks.

GEOG 1005 - Planet Earth: Local Field Studies

Credits: (1)

Typically Taught Summer Semester: *1st Block, 2nd Block*

Typically Taught Fall Semester: *1st Block*

Typically Taught Spring Semester: *2nd Block*

Description: Students conduct local field studies and measurements to explore air, water, land and life.

Pre-requisite/Co-requisite: GEOG 1000.

GEOG 1300 SS/SUS/CC - Exploring Global Geography: Places, People and the Planet

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online, 1st Block, 2nd Block*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: With an eye toward change and challenges, this course explores the planet's diverse and interdependent regions and people. Students gain a firm grounding in global economic, social and environmental issues, and how they manifest in the countries of the world. When you finish this course, you will know more about the geography of our global community and the shared and substantial challenges we all face if we are to achieve a sustainable future.

GEOG 1500 PS SUS - Climate Change: Science, Society and Solutions

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online, 1st Block, 2nd Block*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course examines the science behind climate change and provides an understanding of the basic physical, chemical, biological and geographical principles that explain the Earth's climate system and the human influence upon it. This course also explores the impacts of climate change, climate justice and communication, and considers feasible solutions. When you finish this course, you will be able to separate climate change myths from realities, and grasp the map to a sustainable future.

GEOG 1520 SS/CC/SUS - United States and Canada: Geography, Diversity and Change

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online, 1st Block, 2nd Block*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course explores the diverse places and people of the United States and Canada, with a focus on rapid change and sustainability. Students gain a firm grounding in a range of interconnected economic, social and environmental issues. Topics include warming climates, polarized politics, diversifying populations, growing economic inequality, all-consuming technology, natural disasters, social justice, immigration, and many more. When you finish this course, you will better understand the geography of such transformative change in the context of this multifaceted region.

GEOG 1790 - Exploring Our World Through Geospatial Technology

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This exploratory course introduces students to the fundamental concepts of Geospatial Science and how Geospatial Technology (GST) is used to measure, imagine, study, and discover our complex and ever-changing human and natural world. You will learn the basic techniques of cartography (mapping), GPS (global positioning systems), GIS (Geographic Information Systems), spatial analysis, and remote sensing (drones and satellites).

GEOG 2400 - Cartography and Map Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Course Fee Statement: The fees for this course are used to support licensing and equipment needs of the course and geospatial courses in general at Weber State University. Thank you for allowing us to bring you the commercial grade and work bench software and tools that you will need and use in your geospatial futures.

Description: Cartography and Map Design is an essential component of geospatial knowledge and skills and anchors all research, presentation, publication, decision-making, and output from Geospatial Technologies. This course will cover geovisualization topics such as map components, projections, symbols, scale, grid systems, direction, coordinates, distance, relief, color, patterns, and the map design process. You can expect to work with Geographic Information Systems (GIS), though no previous experience is necessary. After finishing this course, you'll be able to study, understand, analyze, interpret, and especially construct good maps.

GEOG 2790 - Pathways and Careers in Geography, Environment & Sustainability

Credits: (1)

Typically Taught Fall Semester: *2nd Block*

Typically Taught Spring Semester: *2nd Block*

Description: This course introduces new and prospective Geography, Environment & Sustainability majors and minors to career opportunities, department faculty, options for major tracks, and real-world applications of geographic perspectives and techniques. When you finish this course, you will be able to identify a pathway through a major or minor and into a productive career.

GEOG 2840 INT - Geospatial Internship

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This summative course provides a structured work experience in a supervised setting under the direction of a geospatial employer mentor and the course instructor. The internship will give students invaluable experience with technical, professional, and ethical issues commonly faced by geospatial professionals in today's workforce. Each student will work with their supervisor/mentor and instructor to develop a set measurable Internship Learning Outcomes (ILOs) that will be used to evaluate performance and competence in a real-world job situation.

Pre-requisite(s): Consent of instructor prior to registration.

Pre-requisite/Co-requisite: GEO 1720 and GEOG 2400.

May be repeated for a maximum of three credit hours.

GEOG 2850 - Geospatial Capstone

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This capstone course provides a summative learning experience that is a culmination of a student's geospatial education. Students apply their knowledge and skills to develop, implement, and evaluate a geospatial project that simulates a workplace experience, including collaboration as part of a team when appropriate. Students and the instructor develop a set of measurable Capstone Learning Outcomes (CLOs) that will be used to evaluate performance and competence to complete a geospatial project from start to finish.

Pre-requisite/Co-requisite: GEO 1720, GEO 2200, and GEOG 2400.

GEOG 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

GEOG 2950 - Regional Field Studies or Field Trips

Credits: (1-3)

Typically Taught Summer Semester: *1st Block, 2nd Block*

Typically Taught Fall Semester: *1st Block*

Typically Taught Spring Semester: *2nd Block*

Description: Travel to explore nearby National and State Parks, and urban and rural lands to make observations, collect data, perform field-based research, and report on the experience.

May be repeated twice with a maximum of 3 credit hours.

Note: This course is offered as needed.

GEOG 3050 - Weather and Climate: from daily storms to decades of drought

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course examines Earth's climate system, and the way its components interact to produce major weather and climate features. Examples include tornadoes, hurricanes, jet streams, El Niño, and the causes and consequences of climate change. When you finish this course, you will better understand our complex atmosphere, and the ways in which it affects us all.

Pre-requisite(s): GEOG 1000, or GEOG 1500, or GEO 1130, or the equivalent, or instructor's consent.

GEOG 3060 SUS - Environmental Issues: Local to Global Impacts and Solutions

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course explores a range of environmental issues from local to global contexts, considering their root causes, impacts, and interconnections to social and economic factors. Topics typically include air and water quality, food production, forests, consumption and waste/resource management, and the overarching issue of climate change. The course also identifies solutions to these challenges toward the creation of a more sustainable, equitable and healthy world for all. When you finish this course, you will better understand how people have transformed the environment and your own ability to contribute to solutions.

GEOG 3070 - Wetland Environments

Credits: (3)

Description: Analysis of physical properties, values, economic, and legal issues associated with wetland environments. Since wetlands in different places have many different attributes, a detailed examination is made of wetland environments in different parts of the United States.

Note: Course not currently being offered.

GEOG 3080 - Arid Lands: Resources, Landforms, and the Quest for Water

Credits: (3)**Typically Taught Fall Semester:** *Full Sem*

Description: This class explores the complexity of a desert environment using a variety of learning materials such as satellite imagery, local to global databases, literature, podcasts, and documentaries. Students will discern the natural forces responsible for creating features of desert landscapes throughout the world. The class also explores how arid environments have shaped cultural practices and the management of resources in areas with little water and those facing climate change. Students will likely participate in brief local field work either during class time or on their own. After taking this class, students will understand why water is scarce in certain places, what forms the unique features of arid lands including those in Utah, and the delicate process of sustaining life in such environments.

Pre-requisite(s): GEOG 1000, GEOG 1500, or GEO 1060, or the equivalent, or consent of the instructor.

GEOG 3090 - Arctic and Alpine Environments**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: This course explores polar and high mountain physical environments, how humans interact with them, and the broader roles these places play within global-scale Earth systems. Topics include the causes and consequences of avalanches, polar climate and ozone depletion, basic glaciology, sea ice, and the responses of human physiology to high altitudes. When you finish this course, you will know more about Earth's spectacularly beautiful cold places, and why they matter to the rest of the world.

Pre-requisite(s): GEOG 1000, or GEOG 1500, or GEO 1060, or the equivalent, or consent of the instructor.

GEOG 3210 - Urban Geography: The How and Why of Cities**Credits: (3)****Typically Taught Fall Semester:** *Full Sem*

Description: This course explores cities-the urban and suburban places where most of us in the world choose to live. In this course we will study the historical development of cities, the geography of how cities continue to grow and change, and how cities interact with their changing natural environments. When you finish this course, you will understand how cities work and be prepared to participate in a more sustainable urban future.

GEOG 3300 - Historical Geography of the United States**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: A geographic analysis of America's past featuring an examination of cultural development in different parts of the United States and how this has produced many distinct regional landscapes throughout the country.

GEOG 3360 - Economic Geography: Globalization, Development and Conflict**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: More than anything else, economic activity binds the world's places, resources, producers, consumers, markets, governments, technology, and citizens. This global development produces both extravagant wealth and searing poverty, and it is rapidly exhausting the planet's natural environment. This course takes students from local to global as it explores the stunning force of economic activity. When you finish this course, you will better understand the power and peril of the global economy.

GEOG 3500 - Geography of Utah and the American West**Credits: (3)****Typically Taught Summer Semester:** *Full Sem - Online***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online*

Description: This course examines the geography of the fast-growing and ever-changing state of Utah. Through explorations of public land, water, cities, tourism, environmental issues, population, and political economies this course provides a foundation for understanding Utah and how the state fits in the regional context of the American West. When you finish this course, you will be prepared to engage more thoughtfully with the challenges and opportunities of Utah and the American West.

GEOG 3540 - Geography of Latin America and the Caribbean

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: From Mayan, Aztec, and Incan beginnings to Conquest and Colonization by European powers, and later U.S. hegemony, this region of extraordinary natural beauty and diversity has been the subject of foreign intervention and control. Its contemporary geography is a legacy of the mighty forces that created the Amazon and the Andes as well as the clash of cultures from abroad, and now rapid and transformative change. When you finish this course, you will be able to chart the influences that have shaped this fascinating region.

GEOG 3590 - Geography of Europe: the Land and People who Built a World Power

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: What is Europe? A hearth of civilization or the home of war, conquest, and global empires? An emerging superstate or a fragmented collection of nations? This course explores the geography of Europe, from its physical environments to its diverse people and historical landscapes, and the geographical origins of current issues, such as the expansion and fracturing of the European Union, the future of NATO, and tensions with nearby countries and regions. When you finish this course, you will better understand the complexities of this historic U.S. ally and trading partner.

GEOG 3640 - Geography of Asia: Development, Geopolitics and Environment

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Description: This course explores the diverse geographies of East Asia, South Asia, and Southeast Asia-including the powerful and populous countries of China and India. Specifically, the class investigates how each region is following different development paths, is impacted by and influences global geopolitics, and is experiencing changing populations, economies, and environments. When you finish this course, you will be better prepared to engage with a world in which many countries in the Asian region are becoming increasingly influential.

GEOG 3740 - Geography of Africa: Culture, Colonialism, Crises and Change

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The geography of Africa is one of historical mystique, rapid modernization, and tremendous diversity. This course builds upon a basic understanding of Africa's physical geography and early history to examine continued neocolonial impacts and challenges facing the people of Africa today. In today's increasingly interdependent global community, understanding ethnic diversity, differences in gender, age and class is critical to resolving social, economic, political and environmental problems in both the African context, and in our own interconnected society. When you finish this course, you'll have a full appreciation of Africa's diverse geography.

GEOG 3780 - Geographic Area Studies

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Surveys different geographic areas and regions of the world. When this number is used it will be accompanied by a descriptive title and the credit authorized, which will appear on the student's transcript. May be repeated for credit up to nine hours when a different title is used.

GEOG 3790 CRE - Research Methods in Geography

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces the methods used in geographic research, beginning with hypothesis formulation, review of literature, research design, gathering and analysis of data from a spatial perspective, and the analysis, interpretation and presentation of research results. Students are exposed to both quantitative and qualitative methods commonly used in geographic research, and are expected to have basic proficiency in spreadsheets, word processing and presentation software. IRBs and Grant Writing are also covered. The course is an essential prerequisite for GEOG 4990 CRE - Senior Seminar in Geography, which should be taken in the following semester.

Pre-requisite(s): One statistics class taken from any of the following: CJ 3600, SW 3600, GERT 3600, PSY 3600, SOC 3600, or MATH 1040.

Pre-requisite/Co-requisite: GEOG 2790 with a grade of C or higher.

GEOG 4400 - Cartography and Map Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Course Fee Statement: The fees for this course are used to support licensing and equipment needs of the course and geospatial courses in general at Weber State University. Thank you for allowing us to bring you the commercial grade and work bench software and tools that you will need and use in your geospatial futures.

Description: Cartography and Map Design is an essential component of geospatial knowledge and skills and anchors all research, presentation, publication, decision-making, and output from Geospatial Technologies. This course will cover geovisualization topics such as map components, projections, symbols, scale, grid systems, direction, coordinates, distance, relief, color, patterns, and the map design process. You can expect to work with Geographic Information Systems (GIS), though no previous experience is necessary. After finishing this course, you'll be able to study, understand, analyze, interpret, and especially construct good maps. Advanced work required for upper division credit.

GEOG 4410 SUS - Sustainable Land Use Planning

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A study of the status and tools of planning, planning office organization, the federal and state role in planning, and problems in planning. The course emphasizes concepts of sustainable land use planning such as resource conservation, air and water quality improvement, agricultural land preservation, transit oriented development, and alternatives to suburban sprawl.

GEOG 4420 - Advanced Urban and Regional Planning

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A study of the enabling legislation for planning, zoning laws and ordinances, rezoning and review processes, zoning problems, and the ramifications of urban growth. The preparation, financing, citizen participation and evaluation of land use pertaining to general plans. Class groups will prepare, critique, and present a draft urban general plan.

Pre-requisite(s): GEOG 4410.

GEOG 4600 - Geospatial Programming and Online Methods

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Course Fee Statement: The fees for this course are used to support licensing and equipment needs of the course and geospatial courses in general at Weber State University. Thank you for allowing us to bring you the commercial grade and work bench software and tools that you will need and use in your geospatial futures.

Description: Increasingly, geospatial professionals count both programming and web methods among their most useful skill sets, and employers often list them as highly desirable. This course focuses on two essential components of that geographic online experience: geospatial programming and online methods. This class is conducted in the Python programming language, but no previous experience is required. The first half of the course is devoted to helping students learn Python, while the second half is focused on applications of Python in the geospatial domain, including ESRI's ArcPy, Open Source Modules, and custom web mapping solutions. With these tools, students will be able to solve geospatial problems, extend functionality, and streamline/automate GIS workflows through the creation and modification of Python scripts.

Pre-requisite/Co-requisite: GEO 4200.

GEOG 4800 - Individual Research

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A personalized course designed to foster individual research and scientific writing. A maximum of six credit hours will be accepted toward a major in geography. **Instructor approval required before registering for this course.**

Pre-requisite(s): Instructor approval required before registering for this course.

May be repeated up to a maximum of 12 credit hours.

GEOG 4840 INT - Geospatial Internship

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This summative course provides a structured work experience in a supervised setting under the direction of a geospatial employer mentor and the course instructor. The internship will give students invaluable experience with technical, professional, and ethical issues commonly faced by geospatial professionals in today's workforce. Each student will work with their supervisor/mentor and instructor to develop a set measurable Internship Learning Outcomes (ILOs) that will be used to evaluate performance and competence in a real-world job situation.

Pre-requisite(s): Consent of instructor prior to registration.

Pre-requisite/Co-requisite: GEO 3720 and GEOG 4400.

May be repeated for a maximum of three credit hours.

GEOG 4850 - Geospatial Capstone

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This capstone course provides a summative learning experience that is a culmination of a student's geospatial education. Students apply their knowledge and skills to develop, implement, and evaluate a geospatial project that simulates a workplace experience, including collaboration as part of a team when appropriate. Students

and the instructor develop a set of measurable Capstone Learning Outcomes (CLOs) that will be used to evaluate performance and competence to complete a geospatial project from start to finish.
This is a dual-listed course with GEOG 2850.

GEOG 4890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all students in Geography who meet the minimum Cooperative Work Experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

A maximum of six credit hours will be accepted toward a major in geography. **Instructor approval required before registering for this course.**

GEOG 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student's transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

GEOG 4950 - Advanced Regional Field Studies or Field Trips

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem, 1st Block, 2nd Block*

Typically Taught Fall Semester: *1st Block*

Typically Taught Spring Semester: *2nd Block*

Description: Travel to explore nearby National and State Parks, and urban and rural lands to make observations, collect data, perform field-based research, and report on the experience. Expectations and outcomes are more advanced than those of GEOG 2950. A maximum of six credit hours will be accepted toward a major in geography.

Pre-requisite(s): A general course in Geography or consent of the instructor.

May be repeated up to a maximum of 12 credit hours.

GEOG 4990 CRE - Senior Seminar in Geography

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This capstone course builds on GEOG 3790 CRE - Research Methods in Geography. Students engage in a primary research experience that draws on the full range of skills and abilities acquired in prior semesters and classes, culminating in an original, professional-quality research report, thesis, or applied project. Students present their work in an end-of-semester forum, and will have the opportunity to present in other professional settings and/or submit their work for publication.

Pre-requisite(s): Senior standing.

Pre-requisite/Co-requisite: GEOG 3790.

GEOG 5030G - Geography for Teachers

Credits: (3)

Description: Science content course for teachers in the MEd Science Emphasis Program. To register, select another departmental course and develop a contract detailing additional work required for graduate credit. Course may be repeated. Contract must be approved by instructor, department chair, and Director of the Master of Education Program. Graduate.

Note: This course is offered as needed.

GERT 1010 SS - Introduction to Gerontology**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A study of physical, psychological, social-psychological, and social dimensions of aging and the application of principles and strategies to facilitate adaptation to aging. Emphasis is placed on methods of gathering knowledge, the current knowledge base, and strategies for adaptation in the later stages of life cycle.

GERT 2220 - Introduction to Social Gerontology**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: A scientific study of social and psychological aging and the application of principles and strategies to facilitate adaptation to aging. The focus is on methods and systems for gathering data, demography of aging, social theoretical perspectives, psychological effects of aging, aging and the economy, and government and the politics of aging.

GERT 2900 - Current Topics on Aging**Credits: (2-4)****Variable Title**

Description: A study on age related topics of current interest. Specific title will appear on student's transcript along with authorized credit.

May be repeated once for a maximum of 4 credits.

Note: This course is offered as needed. Please check with the department for availability.

GERT 2920 - Short Courses, Workshops, Institutes and Special Programs**Credits: (1-4)****Variable Title**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated up to 3 times for a maximum of 4 credits.

Note: This course is offered as needed. Please check with the department for availability.

GERT 3000 - Death and Dying**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An in-depth study of death, death-related issues and social institutions and practices dealing with death in American society, with special emphasis on the social processes surrounding death and constructive responses to death and dying.

Cross-listed with SW 3000.

GERT 3120 - Aging: Adaptation and Behavior

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An examination of the physical and psychological processes of aging. The emphasis is upon behavioral and social adaptation to these processes.

Cross-listed with SW 3120.

GERT 3320 - Ethnicity and Older Women in the American Society

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The importance of special populations (ethnic, racial and women) as they relate to the aging process.

Cross-listed with SW 3320.

GERT 3400 - Methods of Research: Social and Behavioral Research

Credits: (4)

Description: Focus on acquiring knowledge, developing skills, and conducting social and behavioral scientific research, utilizing single system design that includes visual and statistical assessment. The course will include both qualitative methodologies (evaluative research, historical methods, case studies, field research, ethnography studies, and grounded theory) and quantitative methodologies (experimental and survey with a special emphasis on survey).

Pre-requisite(s): It is recommended to take a Statistics course before Research.

Note: Course not currently being offered.

GERT 3500 - Social Welfare & Gerontological Policy Development and Service

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The history, mission, philosophy and human service aspects used in the development of social work/gerontology as a profession will be covered. Examples of social, public and social welfare policy will be identified and studied. Knowledge of local, state, and federal legislation, professional organizations, and membership organizations will assist in review of lobby, funding and implementation practices used in meeting human service needs. Methods for the political and organizational analysis of processes and policy will be covered.

Pre-requisite(s): SW 1010 or GERT 1010. (SW 3500/GERT 3500 must be completed before entering Field Practice).

GERT 3600 - Social Statistics

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, 1st Blk, Online*

Typically Taught Spring Semester: *Full Sem, 2nd Blk, Online*

Description: Introduction to analysis and presentation of data.

Pre-requisite(s): Meet WSU Quantitative Literacy requirement.

Cross-listed with SW 3600.

GERT 4220 - Societal Responses to Aging

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is designed to cover aspects of retirement relating to job change or discontinuance. The

processes, events, social roles, and phases of life will presented.
Cross-listed with SW 4220.

GERT 4650 - Retirement: Adjustment/Planning

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to cover aspects of retirement relating to job change or discontinuance. The processes, events, social roles, and phases of life will presented.

Cross-listed with SW 4650.

GERT 4830 - Readings and/or Projects

Credits: (2-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual readings and/or projects for the senior Gerontology major (with the approval of the instructor).

May be repeated once for a maximum of 4 credits.

Note: Check with department for course availability.

GERT 4860 - Introductory Field Practicum

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introductory experience in the world of work in a gerontology setting whereby the student might develop, test, and use knowledge derived from classroom experiences (90 hours at approved agency).

Pre-requisite(s): GERT 1010, GERT 3320 and GERT 3500; must be a declared minor. Offered on demand.

GERT 4861 - Advanced Field Practicum

Credits: (2)

Description: Advanced experience in the world of work in a gerontology setting whereby the student might develop, test, and use knowledge derived from classroom experiences (90 hours at approved agency).

Pre-requisite(s): GERT 3400, GERT 3500, GERT 4860, and must be a declared major or minor.

Note: Course not currently being offered.

GERT 4862 - Specialized Field Practicum

Credits: (2)

Description: Specialized experience in the world of work in a gerontology setting whereby the student might develop, test, and use knowledge derived from classroom experiences (90 hours at approved agency).

Pre-requisite(s): GERT 3600, GERT 4861, and must be a declared major or minor.

Note: Course not currently being offered.

GERT 4900 - Current Topics on Aging

Credits: (2-4)

Variable Title

Description: An in-depth study on age related topics of current interest. Specific title will appear on student's transcript along with authorized credit.

May be repeated once for a maximum of 4 credits.

Note: This course is offered as needed. Please check with the department for availability.

GERT 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed. Please check with the department for availability.

GERT 4990 - Senior Seminar

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Preparation and discussion of gerontology concepts and topics. Information and techniques for obtaining a job and selecting a graduate school.

Pre-requisite(s): GERT 1010, GERT 3320, GERT 3400, GERT 3500 and GERT 3600. Offered on demand.

GRMN 1000 - Proficiency Development

Credits: (1-2)

Description: (N=Novice) (Cr/NCr) Non-graded courses for entry-level students to augment foreign language instruction in stress-free activities such as reading children's literature, learning and performing skits, folk dancing, singing, cooking, etc.

May be repeated for credit under different titles.

Note: Course not currently being offered.

GRMN 1010 - First Semester German

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Introductory course assuming no significant previous experience with the language.

Beginners and students with less than two years of high school language should register for this class. Emphasis on everyday conversation and exposure to cultural perspectives.

GRMN 1020 - Second Semester German

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Continuation of GRMN 1010. Basic language skills including listening, speaking, reading, writing and culture.

GRMN 1700 - Conversational Skills

Credits: (1-3)

Course Fee: \$8.00

Course Fee Purpose: Cover the cost of classroom equipment maintenance and replacement such as desktops, projectors, projector screens, and software, including the tutoring site (EH 244) and the language lab (EH 408); consumable materials and supplies; and support for student tutors, and online instructional resources.

Description: Specific vocabulary and speaking skills in one semester (e.g., nursing, law enforcement, medical, tourism, family language courses, etc.). May be repeated for credit under different titles.

GRMN 1852 - Study Abroad

Credits: (1-3)

Description: (N=Novice) Language and culture studies for students with no previous experience in the target language and culture. Most assignments are performed in English. Prior travel experience does not apply.

May be repeated twice with a maximum of 3 credit hours.

Note: Check with Department for course availability.

GRMN 2000 - Proficiency Development

Credits: (1-2)

Description: (NH=Novice High) (CR/NC) Non-graded courses for second-year students to augment foreign language instruction in stress-free activities appropriate to the linguistic level of second-year students. May be repeated under different titles. Note: Course not currently being offered.

GRMN 2010 - Third Semester German

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of GRMN 1020. Assumes completion of first-year or equivalent experience. Students learn to understand and express ideas about their community and the world. Includes listening, speaking, reading, writing and culture.

GRMN 2020 HU - Fourth Semester German

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of GRMN 2010. The learning and application of strategies for acquiring a foreign language. Students also learn how cultural products and practices reflect a culture's attitudes, values, ideas and meaning. The process of language acquisition and the seeking of cross-cultural understanding provide insights into the commonalities of how the human family learns, thinks and communicates.

GRMN 2021 - Second Year II

Credits: (3)

Description: (NH=Novice High) Continuation of GRMN 2010 without General Education Humanities credit. Offered through examination only.

Pre-requisite(s): Only available through testing.

GRMN 2030 - Second Year Language Review

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) This course will prepare students who wish to continue language study. Emphasis on conversational skills and a review of language structure and usage.

Note: Check with department for course availability.

GRMN 2600 HU - Introduction to Cultural and Literary Studies in Translation

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: May be offered under any of the languages taught in the department. All Foreign Language HU2600 courses are taught in English and all texts are read in English translation in order to make some of the literature we normally would teach in a foreign language accessible to all students. These courses may introduce students to specific literary periods, literary themes or some prominent authors in specific areas of the world where languages other than English are spoken.

May be repeated up to 10 times for credit under different titles.

Note: Check with Department for course availability.

GRMN 2851 - Study Abroad

Credits: (3)

Description: (NH=Novice High) Language and culture studies for students whose minimal proficiency is Novice High. Language assignments at the Novice or Intermediate-Low levels are performed in the target language. All other assignments are performed in English. Prior travel experience does not apply.

Note: Check with Department for course availability.

GRMN 2852 - Study Abroad

Credits: (1-3)

Description: (NH=Novice High) Language and culture studies for students whose minimal proficiency is at Novice High. Language assignments at the Novice or Intermediate-Low levels are performed in the target language. All other assignments are performed in English. Prior travel experience does not apply.

Twice with a maximum of 3 credit hours.

Note: Check with Department for course availability.

GRMN 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

GRMN 2960 - Introduction to World Languages and Cultures

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Required of all majors during their first year. This course provides guidance to help the student

successfully navigate their academic career in WSU Department of World Languages & Cultures and its programs. It provides an overview of what it is like to study a second language, as well as an overview of the U.S. language industry and language careers. The course is also designed to help students develop a clearer focus on their educational and occupational goals, as well as creating a sense of belonging in our department, college, and community.

Co-Requisite(s): GRMN 3060.

GRMN 3000 - Proficiency Development

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) This is a transition course to upper division. The course focuses on oral proficiency development. Students will learn a variety of techniques and strategies to increase their oral proficiency in a variety of social, educational and cultural settings. Native-speaking students or those who have acquired proficiency through residence in the target language community are not eligible to take this class.

Note: Check with department for course availability.

GRMN 3060 - Grammar & Composition

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Students will read examples of writing in various modes (such as description, narration, exposition, and argument), write short compositions in those modes, and review the necessary grammar to write correctly in those modes.

Note: Check with department for course availability.

GRMN 3116 - DLI Bridge Course I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): GRMN 2020 or AP exam with a score of 4 or better.

GRMN 3117 - DLI Bridge Course II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): GRMN 2020 or AP exam with a score of 4 or better.

GRMN 3118 - DLI Bridge Course III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): GRMN 2020 or AP exam with a score of 4 or better.

GRMN 3160 - Introduction to Literature

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Required of all majors and minors. 3160 may be taken concurrently with other literature courses. One sheltered section may be offered to students who have not had extensive in-country experience.

Note: Check with department for course availability.

GRMN 3220 - Phonetics and Phonology

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Analysis of the sounds of language and word formation: practice of native like speech patterns. Required of all teaching majors and minors.

Note: Check with department for course availability.

GRMN 3270 - Special Topics in Linguistics

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) An introduction to linguistic structures and semantic elements. The course provides useful information and practice in the language, its structures and usage. The sub-disciplines of linguistics, other than phonetics and phonology (covered in FL 3220), will be studied. These may include lexical analysis, semantics, morphology, syntax, linguistic change and dialectal variation.

Note: Check with department for course availability.

GRMN 3320 - Applied Language Studies

Credits: (1-3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Minimal proficiency level varies with content).

May be repeated up to 10 times under different titles.

GRMN 3360 - Advanced Grammar

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Analysis and application of syntactic principles and discourse structure.

Note: Check with department for course availability.

GRMN 3550 - Cultural Heritage I

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and civilization. May be repeated up to 7 times for credit and for other non-English speaking cultures.

GRMN 3560 - Cultural Heritage II

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Med) Studies in culture, history, geography, social customs, fine arts, and civilization. May be repeated 3 times for other non-English speaking cultures.

GRMN 3570 GLB - Special Topics in Culture

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and civilization.

May be repeated up to 7 times for credit and for other non-English speaking cultures.

Note: Check with Department for course availability.

GRMN 3610 - Literature Survey I

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) A survey of the authors and works of a particular period or place. May be repeated under different titles.

GRMN 3620 - Literature Survey II

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) A survey of the authors and works of a particular period or place. May be repeated under different titles.

GRMN 3630 - Literature Poetry

Credits: (3)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM= Intermediate Mid) One literature course is required for regular and teaching majors. May be taken concurrently with GRMN 3160. May be repeated under different titles.

GRMN 3631 - Literature: Prose

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (IM=Intermediate Mid). A survey of works in prose by one or various authors of a particular period or place, or spanning several literary movements and geographical regions. May be taken 3 times up to 9 credits under different titles.

GRMN 3632 - Literature: Drama

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of theater plays by one or various authors of a particular period or place, or spanning several literary movements and geographical regions. May be taken 3 times up to 9 credits under different titles.

GRMN 3650 - Literature Periods

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with GRMN 3160.

GRMN 3670 - Literature Authors

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IN=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with GRMN 3160.

GRMN 3680 - Literature: Film

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of film by one or various filmmakers of a particular period or place, or spanning several literary movements and geographical regions.
May be taken 3 times up to 9 credits under different titles.

GRMN 3690 - Special Topics in Literature

Credits: (1-3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors.

Suggested Requisite(s): May be taken concurrently with GRMN 3160.

Note: Check with department for course availability.

GRMN 3710 - Business Language I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) Business Language and Practices. Required of all commercial majors.

GRMN 3715 - Business Language II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate High) Advanced Business Language and Practices. Required of all commercial majors.

GRMN 3720 - Language for Specific Purposes I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) This course is content, vocabulary and culture-based. The course focuses on practical vocabulary, idiomatic expressions, professional terminology and cultural interactions on a variety of topics such as language for the medical professions, social workers, law enforcement or tourism.

GRMN 3730 - Language for Specific Purposes II

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) This course is content, vocabulary and culture-based. The course focuses on practical vocabulary, idiomatic expressions, professional terminology and cultural interactions on a variety of topics, such as language for medical professions, social work, law enforcement or tourism.

GRMN 3740 - Translation I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) Introduction to basic techniques and skills needed for bilingual translation of non-fiction texts. Emphasis will be on the translation into English, and on the stylistic, syntactic, cultural, lexical, and terminological problems. Students are given ample opportunity to apply these techniques through a series of written translation assignments, which form the basis for class discussion.

GRMN 3750 - Introduction to Interpreting

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: Introduction to basic techniques and skills needed for bilingual interpretation in a variety of professional settings. The course includes an overview and history of the interpreting industry and work of interpreters, certification and licensure, and the variety of consumers and modalities with which interpreters work. Ethical decision-making models and the Code of Ethics for interpreters are explored.

GRMN 3760 - Special Topics in Translation

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: This is a specialized course that offers in-depth studies in selected topics, current developments or recent trends in the fields of Translation Studies and Localization.

GRMN 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

GRMN 3850 - Study Abroad

Credits: (1-6)

Description: (IM=Intermediate Mid) Language and culture studies for students whose language proficiency is Intermediate Low to Intermediate High. All Intermediate and Advanced tasks will be performed in the target language. All Superior tasks may be performed in English. Prior travel experience does not apply. May be repeated up to 10 times for credit.

GRMN 4190 - Foreign Language Journal

Credits: (3)

Course Fee: \$2.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) For foreign language students in the fourth year who work on publishing the foreign language literary journal. Includes selecting articles, editing and preparing journal layout.

GRMN 4620 - Survey of Literature I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) One literature course is required of regular and teaching majors.

Prerequisite: FL 3160

GRMN 4630 - Survey of Literature II

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) One literature course is required of regular and teaching majors.

Prerequisite: FL 3160

GRMN 4690 - Special Topics in Literature

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (IH=Intermediate High) Detailed analysis of a particular body of literature. For students whose proficiency in the target language is at least Intermediate High.

Pre-requisite(s): GRMN 3160.

May be repeated up to 10 times under different titles.

GRMN 4740 - Translation II

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) Development of techniques and skills needed for bilingual translation of non-fiction texts. Emphasis will be on the translation into the target language. Methods of contrastive linguistics to analyze pertinent aspects of language structure, involving syntax, vocabulary and style, as well as basic theoretical-historical concepts are employed. Students are given ample opportunity to apply these techniques and concepts through a series of written translation assignments, which form the basis for class discussion. Prerequisite/Co-requisite: FL 3740 is strongly advised, but not required.

GRMN 4830 - Directed Readings

Credits: (1-3)

Description: (IH=Intermediate High) Independent readings under the direction of a faculty member.

May be repeated up to 10 times.

Note: Check with Department for course availability.

GRMN 4850 - Study Abroad

Credits: (3)

Description: (A=Advanced) Language and culture studies for students whose language proficiency is Advanced or Superior. All tasks are performed in the target language. Prior travel experience does not apply.

GRMN 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: (Minimal proficiency level; varies with content). Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Course not currently being offered.

GRMN 4960 - Senior Project

Credits: (3)

Course Fee: \$6.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) For students completing a major with Departmental Honors. Before registration in this course, students must work with a faculty advisor to define the project, create a contract and schedule, and determine the appropriate number of credit hours.

GSE 6000 - Fundamentals of Graduate Study

Credits: (3)

Typically Taught Fall Semester: *1st Blk*

Description: This course serves as an introduction to the GSE program and to research and inquiry in education. Students will learn the process of finding, interrogating, analyzing, and synthesizing scholarly work on topics in or related to P-20 education. Additionally, students will learn how to apply APA Style to scholarly writing.

GSE 6010 - History, Philosophy, and Policy in Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Study of the relationship of contemporary education issues and policies to historical practices and philosophies.

GSE 6020 - Creating Environments for Student Success

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to provide students with the knowledge and concepts needed to develop appropriate, informed, and sensitive responses to the rich diversity found in the U.S. educational system. Content will focus on theoretical and practical issues of diversity, equity, inclusion, and belonging in educational settings.

GSE 6030 - Applied Learning Theory

Credits: (3)

Typically Taught Fall Semester: *2nd Blk*

Typically Taught Spring Semester: *1st Blk*

Description: The fields of philosophy and psychology have greatly contributed to our understanding of how individuals learn and identified possible reasons for students' success and failure in school. This course is designed to familiarize participants with some of the more important theories of learning and development that come from these two disciplines. These theories will be paired with instructional strategies that align with each theory. Emphasis will be placed on behavioral and cognitive learning theories and developmental and social learning theories.

GSE 6055 - Curriculum Theory and Development

Credits: (3)

Typically Taught Fall Semester: *2nd Blk*

Description: The purpose of this course is to advance students' understanding of the historical and contemporary theoretical underpinnings of curriculum development in the United States. In exploring these issues, students will

gain a broad perspective of curriculum, recognize historical orientations of curriculum theories, and investigate the societal consequences of the implementation of individual curricular frameworks.

GSE 6065 - Assessment and Informed Decision-Making

Credits: (3)

Typically Taught Spring Semester: *1st Blk*

Description: This course explores making ethical and practical decisions in the classroom informed by a variety of quantitative and qualitative data as well as formal and informal assessments relative to students' safety, academic achievement, and overall well-being. Candidates will demonstrate the knowledge and skills required to apply basic concepts supporting data-driven decision-making and performance accountability.

GSE 6080 - Conducting Educational Research

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students learn to locate and interpret educational research, and to apply research methods to their own education issues.

Pre-requisite(s): GSE 6000.

Note: (Only taught fall and spring)

GSE 6100 - Educational Leadership and Management

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *1st Blk*

Description: This course focuses on the multiple facets of leading organizations, leadership styles, organizational management, organizational cultures, and organizational change for educational leaders. Students will examine how leadership, management, and organizational theories are applied in educational settings.

GSE 6101 - Assessment and Data-Driven Decision Making

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Spring Semester: *1st Blk*

Description: This course will provide an overview of planning and decision making including assessment, strategic planning, and program evaluation and review processes. Concepts will include the gathering and use of data as well as the utilization of that data in the decision making process.

GSE 6102 - Education Finance and Resource Management

Credits: (3)

Typically Taught Spring Semester: *2nd Blk*

Description: This course will examine the economics, financing, and financial policy of public and higher education. Course topics will include an exploration of the different funding pools and regulations for both public and higher education as well as the economic and political forces driving these concepts and processes.

GSE 6130 - Topic in Education: (i.e., School Finance, Cooperative Learning, TRIBES, Teaching for Inquiry, etc.)

Credits: (1-3)**Typically Taught Summer Semester:** *1st Blk***Description:** This course explores a topic receiving current attention by educators and the public and deemed worthy of in-depth study. Credit will be determined by the nature of the topic.

May be repeated up to four times.

GSE 6140 - Adolescent Development**Credits: (2)****Description:** Study of physical, mental, social, and psychological characteristics of adolescents, their needs and problems, and methods of working with those who have behavior problems.**GSE 6201 - Coaching EC/ECE Professionals: Foundation & Organization of Coaching Application: Organization & Self Reflection****Credits: (3)****Typically Taught Spring Semester:** *Full Sem***Description:** Educator coaching is an evidence-based strategy to increase program quality and teacher effectiveness in early childhood/early childhood education classrooms, programs, and home delivery systems. This course will train EC/ECE coaches using material from research-based sources, program experiences, and related theory. Participants will learn recommended practices in coaching related to early childhood and develop a systematic, individualized approach to effective coaching. Participants will learn practical strategies for coaching early childhood staff of diverse backgrounds and varying adult learning styles. Materials and discussions will include theory, research, interpersonal communication skills, and a systematic approach to more intentional coaching. Students will apply these strategies to Case Studies and field work experiences throughout the course and will participate in hands-on activities in class to apply new skills. Educator coaching skills will apply to any early childhood/early childhood education curriculum or model. This is course 1 of a three course series for the Utah Coaching Credential.**GSE 6202 - Coaching EC/ECE Professionals: Connecting Awareness with Application & Deepening of Practice****Credits: (3)****Typically Taught Summer Semester:** *Full Sem***Description:** Becoming an effective educator coach is a result of theoretical understanding, introspection, thoughtful planning, application of coaching skills and knowledge, and continuous self-improvement. This course will identify effective ongoing support strategies for individuals providing educator coaching. Participants will integrate skills with effective application in real life coaching experiences. Discussions will include self-reflective practices, self-directed action, planning and goal setting, and managing progress and accountability. Students will apply these strategies to case studies and real life experiences throughout the course. Students will be encouraged to engage in self-reflection and share ideas, successes, and challenges with other students in this course. This is course 2 in a three course series for the Utah Coaching Credential.**Pre-requisite(s):** ECED 4201/GSE 6201 or instructor permission.**GSE 6203 - Coaching EC/ECE Professionals: Attuning for Personal and Organizational Change****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Description:** The success of the educator coaching relationship has been based on the trusting relationship between two peers, coach, and adult learner, through a collaborative process of co-learning. The opportunity for the adult learner to self-monitor, self-analyze, and self-modify enhances the adult learner's own resourcefulness and alters his/her own personal understanding. In addition, when the act of coaching is a collaborative process, the coach is also allowed the same opportunity to reflect on self as part of their learning. This course is designed to support the coach in creating a social learning climate where a synergy of shared learning and reflective dialogue about practice are

examined, analyzed and refined. Participants will integrate skills from Course 1 and 2 with opportunities to engage in conducting and constructing ongoing support strategies the coach can apply, refine and alter based on the adult learners' needs, readiness, and values about practice. Using strategies and protocols, coaching for organizational change in diverse settings (home- based programming, early care settings, classrooms, and school districts, etc.), and identifying effective ongoing personal supports will also be addressed. Students will apply these strategies to case studies and real life experiences throughout the course. This is course 3 of a three course series for the Utah Coaching Credential.

Pre-requisite(s): ECED 4201/GSE 6201 and ECED 4202/GSE 6202 or instructor approval.

GSE 6210 - Education Law and Policy

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Description: This course considers the legal rights and responsibilities of students, teachers, faculty and other educational practitioners. Students will connect these to education systems, policies, programs, and operations as determined by state and federal constitutions, laws, and court decisions.

GSE 6215 - Critical Perspectives and Research in Inclusive Early Childhood Education and Care

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Description: This course examines the historical, philosophical, ethical, and cultural roots of contemporary perspectives and research on early childhood and inclusion. Students will explore methods of understanding the lived experience of diverse children and early childhood professionals, and how research can inform practice, leadership, and policy.

GSE 6220 - Understanding Children Beyond Behaviors

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Description: This course provides a foundation for understanding and engaging with children's behavior and needs in school, home, and community settings, toward new and relational understandings of children, child development, and difference. While studying theories and research from fields of neuroscience, psychoanalysis, Disability Studies in Education, and critical perspectives in early childhood education, students will practice therapeutic techniques for observation and engagement with children and families.

GSE 6230 - Observing and Assessing Children in Context

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course provides students with knowledge and skills to use observation, documentation, and assessment tools to inform instruction, planning, and intervention programs for young children birth through eight years. Special attention is given to contextualized assessment practices that are responsive to children's strengths, needs, cultures, races, languages, and family experiences.

GSE 6240 - Culturally Sustaining Advocacy and Collaboration with Children and Families

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Description: This course explores Culturally Sustaining ethical practice for navigating the challenges, hopes, and possibilities that early childhood professionals may experience as they collaborate and advocate with diverse children and families. Topics include the social and cultural construction of the meaning of difference, race, disability, and intrinsic difference at the intersection of identity. Historical and contemporary rights, movements, and priorities of

disability and other communities (e.g., low income, immigrant, etc.) with a specific emphasis on issues of access and opportunity. Program, community and social systemic change, and self-advocacy. Students will collaborate with families, analyze the application of laws to their practice, program and social policies, and advocate to address challenges within specific sites, communities and systems.

GSE 6250 - Inclusive Early Childhood Intervention and Special Education

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online, 1st Block, 1st Block Online, 2nd Block, 2nd Block Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Description: Students will explore and apply current theory and practice in critical special education, Disability Studies in Education, and infant and child mental health for supporting young children (birth-age 8) with disabilities by supporting caregiver-child relationships in family, early childhood community and classroom environments. Students will gain an understanding of applicable history, laws and policies around inclusive education and special education service provision to effectively and equitably collaborate with children, families, and service providers in public and private settings in ways that sustain the rights and cultures of individual children and families, and of disability communities.

GSE 6260 - Inclusive Early Childhood Curriculum

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: Critical issues, theories, research, and practice in curriculum for inclusive early childhood education. The goal of this course is to assist students in planning, implementing, and evaluating curriculum that is accessible and culturally sustaining for diverse children and families. Students will be challenged to develop and articulate their own philosophies on what should be taught to young children and why.

GSE 6270 - Young Children's Play

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online, 1st Block Online, 2nd Block Online*

Description: This course focuses on the active joyful nature of young children's play, therapeutic and educational value, and how play may vary for children experiencing diverse abilities, circumstances and cultural backgrounds. Students will gain practical strategies for supporting the play of all children.

GSE 6280 - Student Teaching in Early Childhood Education

Credits: (3-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Practical early childhood teaching experience in the WSU early learning lab on campus.

GSE 6290 - Practicum/Internship in Early Childhood Education

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem, 1st Block, 2nd Block*

Typically Taught Fall Semester: *Full Sem, 1st Block, 2nd Block*

Typically Taught Spring Semester: *Full Sem, 1st Block, 2nd Block*

Description: Work experience which applies prior academic learning in a supervised early learning setting.

GSE 6301 - Specialized Family and School Programs

Credits: (3)

Typically Taught Summer Semester: *1st Blk, odd years*

Description: The Specialized Family and School Programs class is an advanced review of the theoretical foundations for established and emerging family life education programs. Furthermore, a review of best practices in disseminating and evaluating family life education programs in diverse settings and with diverse populations. Implications for policy are reviewed.

GSE 6302 - Advanced Family Theories**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *1st Blk*

Description: This course provides students with the ability to critically review and assess theories in family science. Additionally, they will learn and practice the construction and application of family theory vital for conducting research and practicing family life education.

GSE 6303 - Diverse Family Contexts**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Description: This class will proceed via comparative analysis of culture, ethnicity, and family life in the United States reflecting social and political dynamics with extensive coverage of the family lifestyles, traditions, and values. Several American ethnic groups will be examined including historical background, key ethnic cultural components, traditional, and current ethnic family characteristics, and changes and adaptations to families and individuals. Emphasis will be made on how to address ethnocentrism, and serve families due to their various strengths and challenges.

GSE 6304 - Organization and Leadership in Non-profit Family Services**Credits: (3)**

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will introduce the student to theories and structures of family service organizations, best practices for planning, managing people, customer service models, working budgets and evaluating family service programs. Class discussions, case studies, and guest speakers will be used to help students understand the application of the basic concepts. Leadership styles will be examined as an overall context within which the management of family service programs occurs.

GSE 6305 - Advanced Skills for Family Life Educators**Credits: (3)**

Typically Taught Summer Semester: *2nd Blk*

Description: This theory-based course will provide students with hands-on skills and experiences that are vital for today's family life educators by reviewing and presenting family life education materials in both the classroom and among the community. This course provides students with a number of teaching tools and philosophies considered key to becoming effective in the field of Family Life Education, and it also provides students with the experience of having presented a community education program in multiple contexts.

GSE 6306 - Parenting Education**Credits: (3)**

Typically Taught Spring Semester: *1st Blk*

Description: This course will provide students with the latest research and theory on developmentally appropriate practices for parents. Also, students will learn the theory- and research-based methods for educating parents.

GSE 6400 - Principles of Coaching and Leadership

Credits: (3)

Typically Taught Fall Semester: *1st Block Online*

Description: The course is designed to provide a foundation in sport coaching leadership. The course will examine theoretical underpinnings and applications of sport coaching and leadership, and strategic planning processes and management within sport organizations. The primary goal of this course is to help current and aspiring coaching leaders gain a better understanding of effective leadership.

GSE 6401 - Psychological Aspects of Sport Coaching

Credits: (3)

Typically Taught Fall Semester: *2nd Block Online*

Description: The course is designed to examine psychological knowledge and skills to address optimal performance and well-being in athletes, including interventions that are designed to assist athletes, coaches, and administrators in an array of sport settings.

GSE 6402 - Strength & Conditioning/Injury Prevention

Credits: (3)

Typically Taught Spring Semester: *1st Block Online*

Description: The course is designed to provide knowledge regarding advanced strength and conditioning theory and practice, what to do when athletes get injured, and how to prevent athletes from injury. Students will explore models of safe training protocols both at a physical and mental level, and develop a periodization model in all facets of strength and conditioning when it comes to sport-specific training.

GSE 6403 - Ethics in Sport

Credits: (3)

Typically Taught Spring Semester: *2nd Block Online*

Description: The course is designed to offer an introduction to ethics within the sporting context. The values promoted within sport will be examined along with academic investigation of sport within society, including drug use for performance enhancement, fair play and sportsmanship, Title IX, and many other ethical issues in sport. This course is intended to develop and foster critical thinking skills, and to learn and understand the ethical background of sport.

GSE 6404 - Facilities and Event Management in Sport

Credits: (3)

Typically Taught Summer Semester: *2nd Block Online*

Description: The course is designed to help students understand the role of managing sports events and facilities. Topics including maintenance, day-to-day operations, producing events, types of facilities, financial management, and building a facility will be presented. Multiple types of recreation facilities will be examined to compare and contrast differences and learn how to improve sustainability at sport and recreation facilities and events.

GSE 6405 - Advanced Sport Pedagogy

Credits: (3)

Typically Taught Summer Semester: *1st Block Online*

Description: The course is designed to increase understanding of sport pedagogy, effective coaching, and the art and science of coaching. Athlete skill development, practice and game planning, season schedules, creating drills and practice sessions, and motivating players will be presented. Students will also learn to assess and utilize apps, software, and other technology related to sport.

GSE 6430 - Creative Processes in the Elementary School

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: This is used for consumable art supplies and repair/replacement of musical instruments.

Description: This course focuses on the development of attitudes, methods, and skills in creative teaching, including an exploration of using music, art, dance, and drama in the elementary classroom. Graduate students will also explore philosophy, research, and theories which support arts integration, and development of teaching strategies and materials for use in the elementary classroom.

GSE 6501 - Introduction to K-12 Coding

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course will introduce candidates to coding in K-12 classrooms. Students will practice introducing coding concepts and activities to students, while simultaneously exploring current issues in computer science education. Activities will include anything from unplugged coding activities, CS books, board games, and toys, through block programming, and some basic text-based coding with HTML and CSS.

GSE 6502 - Advanced Educational Technology

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Description: This course allows students to develop advanced educational technology skills using Adobe products, such as Photoshop, Premiere Pro, InDesign, and Illustrator. Students will practice using Adobe technology to design graphics, manipulate images, make posters for school events, and make instructional videos. Students are allowed to "choose their own adventure" as they progress through the course and work in any order that they wish.

GSE 6503 - Intersections of Science, Technology and Culture

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: In this course, we examine scientific and technological ideas in their social and historical contexts. Students will also explore relationships between science, technology, and culture, while simultaneously exploring current issues in STEM (science, technology, engineering, and mathematics) education through the unique lens of Indigenous education.

GSE 6504 - Analyzing Education Data with R

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course provides an introduction to using the R programming language with R Studio for basic data analysis. Students will import, clean, visualize, create frequency tables, and run t-tests using R Studio.

GSE 6505 - Educative Making in K-12 Settings

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Cover students' take-home Circuit Playground Board Kit and maintenance of classroom supplies and equipment (LEGO Robotics, 3D Printer, and Laser Cutter).

Description: This course provides a survey of educative making from a constructionist perspective. Students will have hand-on experiences using LEGO robotics, other physical computing platforms, and use digital fabrication tools. In addition, students will design project-based, interdisciplinary mini-unit plans.

GSE 6600 - Ethical and Collaborative Leadership

Credits: (3)

Typically Taught Fall Semester: *1st Blk*

Description: This course will explore issues of ethical and professional conduct as a steward of school resources, student academic success and well-being, and faculty and staff professional development. The course will also explore strategies and practices associated with Distributive Leadership (DL) which involves a team of educators from different levels of leadership, grades, and/or subject areas in a school working collaboratively to create positive, schoolwide improvement. This course will be based on the Utah Educator Professional Standards as described in Utah State School Board rule.

GSE 6601 - Community Engagement and Advocacy

Credits: (3)

Typically Taught Fall Semester: *2nd Blk*

Typically Taught Spring Semester: *Full Sem*

Description: Effective school leadership has a powerful effect on teaching and learning and ultimately will increase overall student achievement. This course will explore strategies and responsibilities that will provide the guidance candidates need to provide strong leadership for better schools. Additionally, this course will examine the role educational leaders play in advocating for best practices in schools

GSE 6602 - Curriculum and Instructional Leadership

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Description: In this course, students will learn about school-level leadership which will lead toward improved instruction and learning. Students will explore and discuss current research and best practices in the fields of instructional leadership, learning theory, school climate and culture, effective teaching methods, professional development, and the relationship of instruction, curriculum, and assessment.

GSE 6603 - School Improvement through Strategic Student Support

Credits: (3)

Typically Taught Spring Semester: *2nd Blk*

Description: This course will focus on strategic student support systems including school-wide, classroom, and individual student academic behavioral processes to support school improvement.

GSE 6604 - Educational Leader Internship

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will provide directed and supervised leadership experiences in public education settings. Students will complete the hours required by Utah State Board Rule.

GSE 6650 - Understanding Science

Credits: (3)

Description: This course will examine the nature of science, the philosophy of science, and research in science education. Students will engage in authentic scientific research.

GSE 6700 - Higher Education Administration

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course provides an overview of the various types of institutions of higher education including a brief history, typical institutional organizational structures, principal administrative functions, and the philosophy of administration overall. Strategic decision making within organizations will also be discussed.

GSE 6701 - Current Issues in Higher Education

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an overview of current issues and trends, challenges, research, and policies impacting higher education at the institutional, state, national, and international level.

GSE 6702 - College Student Access and Success

Credits: (3)

Typically Taught Summer Semester: *2nd Block*

Description: This course introduces students to issues of access and success in postsecondary education through a lens of equity. Students will engage in and apply research and theories on current outcomes for students in higher education institutions including issues related to racial/ethnic minoritized groups, socioeconomic status, first-generation, gender and other minoritized identities. Issues addressed include: college choice, admissions, affirmative action, community colleges, financial aid, retention, and graduation outcomes.

GSE 6704 - Higher Education Internship

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will provide directed and supervised experiences in higher education administrative settings. Students will spend the required hours per semester in a structured, supervised setting.

This course can be taken 2 times for credit for a maximum of 4 credit hours.

GSE 6820 - Child Observation Seminar

Credits: (1)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online, 1st Block, 1st Block Online, 2nd Block, 2nd Block Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online, 1st Block, 1st Block Online, 2nd Block, 2nd Block Online*

Description: The Child Observation Seminar is a small group reflective practice seminar. Students meet weekly to view and discuss video clips from work with young children in school, home, or community settings. Groups are facilitated to support early childhood professionals in feeling and awareness in their subjective emotional present, toward new experiences of themselves with children, families, and fellow early childhood professionals that may transform their work.

GSE 6900 - Individual Study

Credits: (1-3)

Description: Intended for the candidate who has special needs and who would benefit from an individual study program. Forms must be approved by the instructor and the director at time of registration.
May be repeated up to 3 credit hours.

GSE 6910 - Project Development I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is the first of three courses intended to support the development of a project proposal. Specifically, this course supports the development of the Problem Statement of the project proposal. Online modules are supported by regular consultations with the faculty chair of the student's project.

Pre-requisite/Co-requisite: GSE 6000.

GSE 6920 - Project Development II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is the second of three courses intended to support the development of a project proposal. This course supports the development of the Literature Review of the research project proposal. Online modules are supported by regular consultations with the faculty chair of the student's project.

Pre-requisite/Co-requisite: GSE 6910.

GSE 6930 - Project Development III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is the third of three courses intended to support the development of a project proposal. This course supports the development of the Purpose and Method of the research project proposal. Online modules are supported by regular consultations with the faculty chair of the student's project.

Pre-requisite/Co-requisite: GSE 6910, GSE 6920.

GSE 6950 - Supervised College Teaching

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Block, 1st Block Online, 2nd Block, 2nd Block Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online, 1st Block, 1st Block Online, 2nd Block, 2nd Block Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online, 1st Block, 1st Block Online, 2nd Block, 2nd Block Online*

Description: Teaching assistant experience in undergraduate courses under faculty supervision.

GSE 6970 - Master of Education Project/Thesis/Capstone

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The student works independently and in consultation with the faculty chair and graduate committee to complete the final project/thesis/capstone.

Pre-requisite/Co-requisite: GSE 6930.

GSE 6990 - Continuing Graduate Advisement

Credits: (1)

Description: This course is used to fill the continuous enrollment requirement while completing the Master's project. The course is graded Credit/ No Credit.

HAS 3000 - The Healthcare System

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: A study of the U.S. healthcare system to help students understand the critical issues facing healthcare in its ever-changing environment and to gain a sense of the complex multidimensional nature of healthcare delivery in the United States.

HAS 3010 - Professionalism in Healthcare

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem, Online*

Description: This course explores a variety of topics to develop a stronger sense of professionalism for healthcare managers. Topics include business and social etiquette, self-assessment, professional deportment, networking, effective communication skills, and dressing professionally.

HAS 3020 - Healthcare Marketing

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course outlines the application of marketing principles to healthcare organizations and the public health arena. Students will apply those principles in the development of a marketing plan.

HAS 3190 - Cultural Competency in Patient Education

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is an introduction to patient or client education skills and theory. It also focuses on health traditions of various cultures and how those traditions must be considered during effective patient education. In particular, the course will move from the general health traditions of world populations and religions, to the more specific behaviors and expectations of U.S. populations.

HAS 3230 - Health Communication

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: A broad examination of communication theory, application, and research in health care delivery and management. Examines many different levels and channels of communication including the development and application of interpersonal communication, small group communication and teamwork, organizational communication, communication ethics, leadership, and motivation skills in dealing with health care providers, staff, and consumers in a variety of health care environments.

Cross-listed with COMM 3230.

HAS 3240 - Human Resource Development in Healthcare

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem*

Description: Study of human resource principles and practices in healthcare facilities. The general topics include: job analysis and work flows, compensation, recruitment and selection, performance appraisals, discipline, legal environment, unions, safety and health.

Pre-requisite(s): HAS 3000.

HAS 3260 - Healthcare Leadership and Management

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem*

Description: Basic theories and concepts of management. Emphasis is on individual and group behavior, interpersonal skills, decision making, leadership theory, planned change, motivation, teamwork, organizational design and culture within the context of the health care organization.

Pre-requisite(s): HAS 3000.

HAS 3700 - Public Health Finance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Finance in the public sector is fundamentally different from business or corporate finance. This course will provide an overview of finance as directly related to public health. Basic concepts of government accounting and budgeting will be presented. The financial aspects of Medicare and Medicaid along with grant funding and funding agencies will be discussed. Students will leave the course with the ability to formulate a public health program budget as well as the background knowledge necessary to understand the financial operations of local and state departments of health.

HAS 3750 - Healthcare Financial Administration

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to build upon the concepts introduced in basic accounting courses and develop

proficiency in applying administrative financial techniques in healthcare decision making.

Pre-requisite(s): HAS 3000, ACTG 2010, Quantitative Literacy.

HAS 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

HAS 3980 - Interprofessional Education

Credits: (1-3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Description: Variable titled course to discuss topics related to interprofessional education.

May be repeated up to 3 times for credit.

HAS 4160 - Medical Practice Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem Online*

Description: Covers the fundamentals of group practice and ambulatory care management. Includes leadership, planning, marketing, IT, business operations, physician/hospital relationships, and basic principles of management applied to the out-patient setting. This is an elective course for HAS students.

Pre-requisite(s): HAS 3000.

HAS 4320 - Healthcare Economics and Policy

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Discussion and analysis of the economic models controlling healthcare markets with subsequent investigation of the complex federal, state, and local policies and policymaking processes which result from those models in U.S. healthcare systems.

Pre-requisite(s): HAS 3000 and ECON 1010 or ECON 2010.

HAS 4400 - Legal and Ethical Aspects of Health Administration

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem Online*

Description: Review of legal responsibilities of physicians, other healthcare workers, and healthcare institutions and means by which health-related laws and regulations are developed and implemented. Issues involved in healthcare professional ethics are discussed and evaluated.

Pre-requisite(s): HAS 3000.

HAS 4410 - Clinical Instructional Design and Evaluation

Credits: (3)**Typically Taught Fall Semester:** *Online***Description:** Designed to provide individuals with the skills necessary for the preparation, planning and evaluation of instruction. The Philosophy, theory, and effective methods and techniques of teaching the adult learner.**HAS 4420 - Clinical Instructional Skills****Credits: (3)****Typically Taught Spring Semester:** *Online***Description:** Designed to provide individuals with skills necessary for the implementation of instruction. Presentation practice is provided with peer evaluation and feedback.**HAS 4520 - Long-Term Care Administration****Credits: (3)****Typically Taught Spring Semester:** *Full Sem***Description:** Application of health administration core curriculum to specific practice issues in the long-term care setting. Includes specific organization structures in skilled nursing care, relationships with healthcare providers, services offered, financial management issues in long-term care, and regulatory issues are investigated. Course includes a review of long-term care facility operations utilizing simulations. Teams of students make operational decisions utilizing financial statements, census reports, staffing schedules and other relevant factors. Prepares students for specific types of situations and questions encountered on the long-term care administrator licensing examination.**Pre-requisite(s):** HAS 3000 and HAS 4400.**HAS 4525 - Post-Acute Care Operations****Credits: (3)****Typically Taught Spring Semester:** *2nd Blk***Description:** This course is designed to introduce the specific issues and body of knowledge pertaining to the healthcare management of: specialty hospitals, rehab facilities, homecare agencies, hospice and palliative care and post-acute care. Emphasis is placed on guest lectures by professionals from each of these types of provider organizations.**Pre-requisite(s):** HAS 3000.**HAS 4620 - International Health and Healthcare****Credits: (3)****Typically Taught Summer Semester:** *Full Sem - Online***Typically Taught Spring Semester:** *Full Sem***Description:** This course is designed to explore health and health care systems in countries other than the United States. Emphasis will be directed toward illnesses and treatments, health promotion, environmental and economic issues, governmental infrastructures that support health, and cultural considerations. The course will be targeted to the professional interested in international health information and experiences.**HAS 4740 - Senior Seminar****Credits: (1)****Typically Taught Fall Semester:** *1st Blk***Typically Taught Spring Semester:** *1st Blk***Description:** A capstone course for seniors designed to provide integration and application of theory through the use of case study analysis. Departmental approval required.**Pre-requisite(s):** HAS 3000.

HAS 4741 - Senior Seminar Capstone

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A capstone course for seniors designed to provide integration and application of theory through the use of case study analysis, competency assessment, interaction with current practitioners, individual and team projects. Students will be provided with resources to assess and enhance their competencies in the various functional areas of health administration. Departmental approval required.

Pre-requisite(s): HAS 3000.

HAS 4800 - Individual Study

Credits: (1-3)

Description: Topics in allied health education studies tailored to the particular needs and interests of the student.

Class may be repeated once up to six credits with program approval.

Note: This course is offered as needed.

HAS 4850 - Study Abroad

Credits: (1-6)

Variable Title

Description: The purpose of this course is to provide opportunities for students in health professions to experience a study abroad program that is designed to explore healthcare, culture, and clinical experience.

May be repeated five times up to six credit hours.

Note: This course is offered as needed.

HAS 4860 INT - Practicum/Internship

Credits: (2-6)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Provides opportunities for observation, participation and practical application of administrative and management skills in the institutional setting. Departmental approval required.

Pre-requisite(s): HAS 3000 and HAS 3750.

HAS 4990 - Seminar

Credits: (1)

Description: Topics, issues, and trends in Health Care.

May be repeated twice up to 3 credit hours with program approval.

Note: This course is offered as needed.

HIM 2000 - Introduction to Health Information Systems and Settings

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Online*

Course Fee: \$15.00

Course Fee Purpose: Electronic Health Record

Description: Introduction to the health information profession. Job duties, functions, and the professional

organization are discussed. Health care settings, master patient indexes, health information documentation requirements, analysis, and deficiency management are presented.

Pre-requisite(s): HTHS 1101 and HTHS 2110 or ZOOL 2320.

HIM 2250 - Health Care Privacy and Security

Credits: (3)

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Full Sem*

Description: The HIPAA privacy and security law, institutional review boards and human subjects research, development of policies and procedures for privacy and security, and release of information are discussed.

HIM 2300 - Diagnosis Coding

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Online*

Course Fee: \$10.00

Course Fee Purpose: 3M Codefinder system

Description: Coding conventions and procedure using the ICD-10-CM coding system are introduced and practiced.

Pre-requisite(s): HTHS 2110 and HTHS 2111 or ZOOL 2320 and ZOOL 2420 or equivalent.

HIM 2320 - Ambulatory and Physician Office Coding

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$10.00

Course Fee Purpose: 3M Codefinder system

Description: CPT classification, conventions and coding procedures are introduced and practiced. Abstracting medical information from health documentation for coding facility outpatients, physician and professional billing is presented, discussed and practiced.

Pre-requisite(s): HIM 2300.

HIM 2330 - Healthcare Reimbursement

Credits: (2)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Discussion of issues parallel to or founded in the use of classification systems: Federal reimbursement systems, coding compliance, auditing, chargemaster maintenance, and revenue cycle management.

HIM 2410 - ICD-10-PCS Coding

Credits: (3)

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$10.00

Course Fee Purpose: 3M Codefinder system

Description: ICD-10-PCS coding, conventions and guidelines are introduced and practiced. Students will gain

exposure to procedure coding using the ICD-10-PCS system for hospital inpatient claims.

Pre-requisite(s): HIM 2300.

HIM 2430 - Pathophysiology & Pharmacology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an overview of the body system diseases and conditions, including etiology, signs and symptoms, diagnostic treatment modalities, and manifestation. Other topics will include progression of disease, drugs, drug classes, and drug interactions.

Pre-requisite(s): .

HIM 2500 - Healthcare Data Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Online*

Course Fee: \$15.00

Course Fee Purpose: Electronic Health Record access.

Description: An introduction to database monitoring, maintenance and use. Data definition, vocabularies, terminologies and dictionaries are discussed. Clinical abstracting and report writing are practiced. A working knowledge of data management is developed.

HIM 2861 INT - (2nd Year) Professional Practice Experiences

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Electronic Health Record access

Description: Student's final experience in the health care setting. Skills and learning from the classroom and laboratory are reinforced and practiced. The student observes in other health care settings. Projects assigned give the student expertise in technical functions, e.g., diagnostic and procedure coding systems.

Pre-requisite(s): HIM 2000.

HIM 2862 - Professional Practice Management

Credits: (2)

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Student's final experience in the health care setting. Skills and learning from the classroom and laboratory are reinforced and practiced. Projects assigned give the student expertise in technical functions.

Pre-requisite(s): HIM 2000.

HIM 2863 - Professional Practice Experience in Coding

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Course Fee: \$10.00

Course Fee Purpose: 3M Codefinder system

Description: Student's experiential learning of coding and revenue cycle systems. Skills and learning from the classroom and laboratory are reinforced and practiced in a simulated setting. Students will engage in coding and abstracting of actual inpatient and outpatient health records with an emphasis on compliance, accuracy, and productivity. Students will learn about credentialing exams, revenue cycle management, and professional networking.
Pre-requisite(s): HIM 2300.

HIM 3000 - Health Informatics

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Full Sem*

Description: A survey of the clinical, research, and administrative applications of computers in the health care industry from which health care information is currently derived. The role of this technology and of the data collected in accomplishing the objectives and procedures of the principle functional areas in health care organizations is emphasized as are the interrelationships of the organizational units with respect to data acquisition, storage, analysis, retrieval, and use.

HIM 3300 - Introduction to Quality Improvement in Healthcare

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Quality assessment, disease processes, risk management, and utilization review systems are presented to the student with an emphasis upon integration. TQM/CQI processes are examined and practiced.

HIM 3400 - Health Care Networks and Databases

Credits: (3)

Typically Taught Fall Semester: *Online*

Course Fee: \$10.00

Course Fee Purpose: Access to Database for course

Description: A comprehensive introduction to health care application development, including local and wide area networks, the internet and intranets, database structure, database tools, data management, and information management.

Note: This course is no longer taught.

HIM 3450 - Healthcare Systems Analysis and Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem - Online*

Description: A comprehensive introduction to the planning, design, and construction of healthcare information systems, using the systems development life cycle and other appropriate design tools.

HIM 3550 - Healthcare Data Analytics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem - Online*

Course Fee: \$10.00

Course Fee Purpose: Access to use UT Dept of Health Care Statistics to use in Tableau:

<https://stats.health.utah.gov/about-the-data/data-series/>

Description: An in depth exploration of healthcare data analytics. Application of data analytic methodologies to improve decision making, performance, healthcare quality and strategic planning will be presented and practiced. Students will become familiar with internal and external data sources in healthcare and will be able: extract data from the data source; evaluate the quality of the data; perform basic data analytics; interpret analysis; present information in a final report.

Pre-requisite(s): PUBH 3200.

Pre-requisite/Co-requisite: PUBH 3200 - Epidemiology and Biostatistics.

HIM 3600 - Advanced Diagnosis and Procedure Coding

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: This is an advanced coding course designed for students with previous medical coding experience or previous medical coding courses. This course explores the more complex areas of ICD-10-CM, ICD-10-PCS, and CPT coding in hospital, outpatient, and physician based settings. Students will apply coding principles and guidelines related to complex diagnoses and procedures. Coding from actual patient records is emphasized. The use of coding references and coding software is integrated into the course.

Pre-requisite(s): HIM 2300, HIM 2320, HIM 2410 or instructor approval.

HIM 3610 - Advanced Principles of Revenue Cycle Management

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: Elements of the revenue cycle are reviewed. Principles of revenue cycle management are examined including: scope and management of clinical coded data, process improvement and data quality, compliance, internal and external auditing, reporting, case-mix management, and changes in revenue cycle management.

Pre-requisite(s): HIM 2330 or instructor approval.

HIM 3620 - Principles of Clinical Documentation Improvement

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: Clinical documentation is the foundation of every patient health record. This course addresses the fundamentals of clinical documentation-assessing the current quality of health record documentation, development of a CDI program and process. How clinical documentation improvement impacts the revenue cycle of a healthcare organization will be reviewed.

Pre-requisite/Co-requisite: HIM 2300, HIM 2320, and HIM 2410 or instructor approval.

HIM 4100 - Health Information Services Management

Credits: (3)

Typically Taught Spring Semester: *Online*

Description: Management issues of health information services departments are discussed and worked through with reference to planning information services, organizing work force, procedures, and resources, staffing work units with qualified personnel, influencing information services teams performance, controlling/evaluating health information services performance and products, and resolving organizational conflict involving information issues. Background is developed to facilitate evaluation of a vended system's ability to meet health care information

applications, objectives and procedural requirements. "Entrepreneurial" skill is developed to lead organizations in finding solutions to their information management problems.

HIM 4990 - Baccalaureate Thesis and Presentation

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Senior health information management students complete a research project and thesis in partial fulfillment of program requirements. By the completion of the course, the senior student will be able to specify a thesis topic, specify individual thesis learning objectives, specify individual thesis learning activities, develop a thesis project time-line, implement the thesis project, write the thesis, and present it to the Health Information Management faculty and students. Topics are chosen by the student but require approval by the Program Coordinator.

Pre-requisite(s): PUBH 3500.

HIM 5000 - Clinical Foundations in HIM

Credits: (3)

Description: A foundation in the language of medicine, pathophysiology and pharmacology will be discussed and developed.

Note: This course is offered as needed.

HIM 5010 - Health Data Management

Credits: (3)

Description: This course prepares students to manage and create health data elements and data sets; and to develop and maintain organizational policies, procedures and guidelines for management of health information. Compliance with health care information laws, regulations, standards, and preparation for accreditation and licensing processes is discussed and practiced.

Note: This course is offered as needed.

HIM 5020 - Diagnosis and Procedure Coding

Credits: (3)

Description: Coding and classification conventions and procedures are developed and practiced. The course will also include auditing of coded data for accuracy.

Note: This course is offered as needed.

HIM 5030 - Clinical Data Management for Quality Care & Revenue Cycle Integrity

Credits: (3)

Description: This course prepares the student to collect, analyze, present and organize data to improve quality of patient care and revenue cycle management. The management of clinical data required in reimbursement systems and prospective payment systems in health care delivery are discussed.

Note: This course is offered as needed.

HIM 5040 - Privacy, Security and Confidentiality in Health Care

Credits: (3)

Description: This course prepares students to design and implement security measures to safeguard protected

health information. The management, access, disclosure and use of PHI to ensure confidentiality is discussed. How to investigate and resolve health care privacy and security issues and problems are introduced.

Note: This course is offered as needed.

HIM 5050 - Health Information Systems & Technology

Credits: (3)

Description: A foundation of electronic health record terminology and the information systems life cycle is explored. The important basis upon which successful EHR implementation must rely - project management, strategic planning, and migrations from the current state are discussed. Skills in selecting, negotiating for, implementing and operating the electronic health record and its corresponding databases are developed. The use of data dictionary, data models, database management and design for electronic health records are introduced.

HIM 5080 - Health Information Management Issues

Credits: (3)

Description: Managing the HIM function including the monitoring of industry trends and organizational needs for change, strategic and operational planning, training or educational activity development, and preparation for accreditation and licensing processes are discussed.

Note: This course is offered as needed.

HIM 5090 INT - HIM Internship

Credits: (3)

Description: Provides opportunities for observation, participation and practical application of health information management skills in the institutional setting.

Note: This course is offered as needed.

HIST 1000 - Introduction to the Craft of History

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: History 1000 is a one-credit course for newly declared history majors. It is designed to introduce students to different subfields within history; to familiarize them with the standard modes of researching, interpreting, analyzing, and citing historical sources; and to teach them how to build an historical argument. Should be taken upon registration as a history major or history teaching major.

HIST 1100 - European History to 1500

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides a survey of institutions and developments of early and medieval European History from its Mediterranean origins to the beginning of the early modern period.

HIST 1110 - European History from 1500

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides a survey of institutions and developments in European history from 1500 to the present, with an emphasis on Europe's interaction with the world.

HIST 1300 - Latin American History to the 1820s

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An introductory survey of Latin American history centering on the experiences of those marginalized by colonial rule such as people of indigenous and African descent, women, queer figures, and religious minorities. Emphasis is placed on the Spanish and Portuguese Empires not as institutions, but as a series of uneven encounters and extractive arrangements that drew the Americas into global economic and social processes. Key themes we will study include the creation and manipulation of human difference, individual and group resistance to imperial rule and oppression, the challenges to empire posed by scale and environment, and the complex and vibrant communities formed in Latin America between 1492 and the 1820s.

HIST 1310 - Latin American History since the 1820s

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This introductory course examines the political, social, and economic trajectories of Latin American countries since the nineteenth-century wars of independence. From the conflicts of early nation-building to the long-lasting effects of dictatorships and social movements, this course attends to important, and on-going, questions of identity, race, gender, and justice in Latin America. More than looking at Latin America in isolation, this course explores the interventions and exchanges with global economies, politics, and culture.

Suggested Requisite(s): HIST 1300.

HIST 1500 SS/CC/GLB - World History to 1500 C.E.

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Examines the political, social, cultural, economic, religious, scientific, and intellectual influences on the development of world civilizations to 1500 C.E. Emphasis is global, comparative, and multi-cultural.

Note: Multiple Sections are offered each semester.

HIST 1510 SS/CC/GLB - World History from 1500 C.E. to the Present

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: A survey of the political, social, cultural, economic, religious, scientific, and intellectual influences on the development of Asia, Africa, the Americas, and Europe from 1500 to the present.

Note: Multiple Sections are offered each semester.

HIST 1600 AI/CC - The Black Experience

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: HIST 1600 is the History of Black people in the United States. We will begin by tracing the origins of

Blacks and Black Americans in the New World from their origins in Africa. We will then explore the history of Black people in the United States from the Atlantic Creoles to the present day. This course will also fulfill all the requirements for American Institutions (AI) credit.

HIST 1610 AI - The Latinx Experience

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides a general introduction to the history of Latinx in the United States from the era of Contact to the present day. Even before this country existed as a republic, people from "Hispanic" and Indo-America had been incorporated into the culture, history, and occupational fabric of what would become the United States. Yet larger society and, oftentimes, the government, have frequently perceived Latinx as racially and culturally "alien." This course will examine how people of Latin American heritage have adjusted to, been integrated by, assimilated, resisted, and adapted to these forces in the United States over past centuries, creating new identities in the process.

HIST 1620 AI/CC - The LGBTQ Experience

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will be a survey of LGBTQ history in American history, from the colonial era to the present day. It will not only consider LGBTQ experiences, but also focus on changing views toward slavery, economics, race, gender, and nationality that inform American society. As a General Education American Institutions course, we will discuss the major principles of the United States, the operations of its institutions, and the consequences of its market economy, with a focus on the particular LGBTQ experience within that narrative.

HIST 1700 AI - American History

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 2nd Blk, Full Sem - Online, 1st Blk*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: An analysis of American history that traces social, cultural, economic, and political developments in the United States. May be taken to complete the American Institutions requirement (grade of C or better required). Note: Multiple Sections are offered each semester.

HIST 2700 - History of the United States to 1877

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A chronological survey of American history from Native American and European contacts through Reconstruction, 1877. Directed toward History majors, minors, and those planning to teach U.S. history.

Note: Note: Students may fulfill the American Institutions requirement by completing either HIST 1600, 1610, 1620, or 1700 or this course AND HIST 2710 with a grade of C or better.

HIST 2710 - History of the United States since 1877

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A chronological survey of American history from the Gilded Age, 1877, to the present. Directed toward

History majors, minors, and those planning to teach U.S. history.

Note: Note: Students may fulfill the American Institutions requirement by completing either HIST 1600, 1610, 1620, or HIST 1700, or this course AND HIST 2700 with a grade of C or better.

HIST 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for credit under unique course titles. Only six hours may count toward major or minor.

HIST 3010 - History of Indigenous America

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online, even years*

Description: An introduction to Indigenous history before and after the creation of the United States. The course focuses especially on the resiliency and adaptability of sovereign Indigenous nations and societies with specific attention paid to the modern history of Indigenous peoples and their experiences with colonialism and settlement.

HIST 3030 - African-American History

Credits: (3)

Typically Taught Fall Semester: *Full Sem, even years*

Description: African-American history from African origins to the late twentieth century. This course examines the historical experiences and enduring influence of African-Americans on U.S. history.

HIST 3050 - History of U.S. Latinos

Credits: (3)

Typically Taught Spring Semester: *Full Sem, even years*

Description: Traces the historical development of the Latin Americans in the U.S. from their Indian, Spanish and African heritage to the present with special emphasis on the Mexican-American, Chicano contributions to American life.

HIST 3070 - Women in American History: 1600 to Present

Credits: (3)

Typically Taught Fall Semester: *Full Sem, odd years*

Description: Examines gender as an organizing principle in United States history from the beginnings of European settlement to the present. Also explores the ways in which race, ethnicity, class, and region have shaped different female experiences.

HIST 3090 - American Social History

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem Online every other year*

Description: Explores American society through analyses of the public and private lives of ordinary individuals from colonial times to the present.

HIST 3110 - American Ideas and Culture

Credits: (3)

Typically Taught Fall Semester: *Full Sem, odd years*

Description: This course will look at key transformations in American cultural and intellectual history. Subjects will include the history of religion, the changing nature of political ideology, and transformations in who creates and controls entertainment, leisure and literature in American society. The course will use novels, sermons, essays, movies, museums, paintings, and music as tools for understanding American cultural life.

HIST 3120 - American Society through Film**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: This course explores the development of society and culture of twentieth-century America as they are represented and created through the medium of film. The motion picture has had a major impact on American society and culture, and this course analyzes how movies reflected and created American social and cultural structures in history.

HIST 3130 - Cities in US History**Credits: (3)**

Typically Taught Fall Semester: *Full Sem even years*

Description: Examines themes in social, economic and cultural development of American cities from the colonial era to the present. Key topics will include the process of urbanization and the ways in which various social groups and classes adapt to urban life and society. The course will also examine the transformation of urban neighborhoods and ghettos, social reform movements in the city, and the history of urban planning.

HIST 3210 - U.S. Constitutional History**Credits: (3)**

Typically Taught Fall Semester: *Full Sem, even years*

Description: The ideas and issues which resulted in the 1787 Constitution. It considers two centuries of American Constitutionalism, focusing on powers and rights, and the role of the Constitution in American culture.

HIST 3220 - History of the Bill of Rights**Credits: (3)**

Typically Taught Fall Semester: *Full Sem, odd years*

Description: This course will explore the historical origins of the first Ten Amendments to the Constitution, also known as the Bill of Rights. We will explore the original intent of the Framers of the Constitution and the Bill of Rights, as well as the context in which they were drafted and ratified. The historical significance of the Bill of Rights will be compared with their current understanding by Americans in the present.

HIST 3230 GLB - American Foreign Relations**Credits: (3)**

Typically Taught Spring Semester: *Full Sem, odd years*

Description: Diplomatic relations and foreign policy of the United States, with particular emphasis in the "American Century" beginning with the imperialist thrust of 1898.

HIST 3250 - Religion in American History**Credits: (3)**

Typically Taught Spring Semester: *Full Sem, odd years*

Description: A history of religion in America from the colonial period (including Native American spirituality) through the early twentieth century. This course will examine religious figures, events, and movements in U.S. history. Particular emphasis will be placed upon the influence of religion in the United States on culture, politics, education, and reform.

HIST 3270 SUS - American Environmental History

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Explores the new scholarship in American environmental history, considering the intellectual and material interaction people have had with the environment of North America, from pre-contact to the present.

HIST 3280 GLB - American Military History from 1500 to 1890

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The course explores the multifaceted dimensions of military history to include: the international security environment; the relationship between American security policy, strategic planning, and intelligence; civil-military relations; defense legislation; the roles and missions of the armed forces; leadership; strategic thought; doctrinal developments; technological innovation; industrial mobilization; joint and combined operations; operational and tactical effectiveness; and the experience of battle.

HIST 3290 GLB - American Military History from 1890 to the Present

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The course explores the multifaceted dimensions of military history to include: the international security environment; the relationship between American security policy, strategic planning, and intelligence; civil-military relations; defense legislation; the roles and missions of the armed forces; leadership; strategic thought; doctrinal developments; technological innovation; industrial mobilization; joint and combined operations; operational and tactical effectiveness; and the experience of battle.

HIST 3350 - History and Philosophy of Science

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The evolution and practice of Western science from origins to contemporary ideas.

HIST 3400 - Principles of Public History

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course will consider the theoretical background of public history and its disciplines: historic preservation, museum studies, archives and records administration, and documentary editing. Students will survey, research, and analyze the ways in which history is conveyed to a broad public through museums, monuments, sites, films, and other media outside the classroom or scholarly writings.

Note: (Replaces HIST 2500.)

HIST 3500 - Historic Preservation

Credits: (3)

Typically Taught Fall Semester: *Full Sem, odd years*

Description: A study of the historic preservation movement in the United States including the history and evolution of the movement, theoretical origins, current conditions and laws, organizational framework and design philosophies.

HIST 3530 INT - History Editing

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Advanced principles in copyediting, scholarly publication, and preparation of material for multiple publishing venues, including journals and monographs, public displays, and online collections.

Suggested Requisite(s): HIST 1000 or HIST 3400.

HIST 3550 - Archives: Principles, Practices & Preservation

Credits: (3)

Typically Taught Fall Semester: *Full Sem, even years*

Description: This course provides an introduction to archival management, in which the students learn how archival institutions obtain, process and manage a variety of archival formats, and how this information is made available to the public generally and to historians in particular.

HIST 3560 - Oral History: Connecting the Past to the Present

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: This course will provide students with the foundations for designing and executing oral history projects. The study of oral history allows us to examine events and experiences not recorded by written history and to interpret their place in history.

HIST 3570 - Digital History

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on the frameworks, methods, and theories behind digital history, and offers practical experience in the field.

HIST 4010 - Early North America to 1763

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The history of the North American continent from pre-contact to the end of the French and Indian War. This course will study the lives of the First Nations in the countries now known as Canada, the United States, and Mexico before and after contact with Europeans. We will also investigate the imperial conquest of North America by the Spanish, French, British, and other European powers. In addition, the forced migration of Africans and their enslavement in North America as well as the enslavement of others will also be a key focus of the semester.

HIST 4015 - History of the Atlantic World, 1400-1815

Credits: (3)

Typically Taught Fall Semester: *Full Sem, odd years*

Description: Atlantic World history refers to relationships and interactions between the peoples of the Americas, Africa and Europe, from the fifteenth through the nineteenth century. Its study focuses on themes such as migration

and colonialism; the African slave trade, New World slavery and its abolition; trans-oceanic commerce and the development of history's first worldwide cash economy; violence, mixing and transculturation among Europeans, Africans and indigenous Americans; negotiation of knowledge about medicine, geography and the natural world; and the evolution of imperial systems and the wars of Independence.

HIST 4020 - Era of the American Revolution: 1763-1800

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: Causes of American Revolution, including the military, diplomatic and social aspects; the formation of the Union under the Articles of Confederation; the Constitution; and the Federalist era.

HIST 4030 - New Nation: 1800-1840

Credits: (3)

Typically Taught Fall Semester: *Full Sem, 1st Blk odd years*

Description: Emphasizes Jefferson's Administration, War of 1812, the Era of Good Feelings, and the Age of Jackson, including the growth of political parties, territorial expansion, sectionalism, and social reform.

HIST 4040 - Era of the Civil War and Reconstruction: 1840-1877

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Slavery and the causes of the Civil War with attention to the political, economic, social, and military aspects of the conflict, including the period of Reconstruction to 1877.

HIST 4050 - U.S. in the Gilded Age and Progressive Era: 1877-1919

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: The transformation of the United States following the Civil War and Reconstruction into a modern urban-industrial superpower by the end of the First World War.

HIST 4060 - United States: 1919-1945

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: Developments, historical patterns and conflicts that shaped the modern United States in the Twenties, the Great Depression and the Second World War.

HIST 4065 GLB - The United States in the Second World War

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: History of the United States during the Second World War. The course examines the war's origins, conduct, and consequences in distant battlefields and on the American homefront.

HIST 4070 - United States since 1945

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Description: The United States from 1945 to the present, including investigations of the Cold War, the Civil Rights Movement, the affluent society, modern politics, the Vietnam and Watergate crises and contemporary issues.

HIST 4110 - History of the American West to 1900

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Explores the history of the Trans-Mississippi West region of the United States from 1500 to the 1890s. The course considers the varied experiences of its peoples and the myth of the West in American culture.

HIST 4120 - The American West since 1900

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Explores the history of the Trans-Mississippi West Region since 1900, to include analysis of such issues as water use and allocation, population growth, land use, exploitation of resources, conservation, the federal presence, tourism, and threats to the environment.

HIST 4130 - History of Utah

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A study of Utah history from its Native American beginnings to the present, emphasizing political, economic, and social developments.

Note: This course is taught online when not offered face-to-face.

HIST 4210 - Ancient History

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: The ancient Near East and Mediterranean world, including the civilizations of Greece and Rome, from approximately 3500 B.C.E. to 475 C.E. This course examines the origins of civilization and traces the development of culture, emphasizing the religious, political, and intellectual legacy of the ancient world.

HIST 4220 - History of the Middle Ages 300-1300

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: A survey of Europe during the Middle Ages emphasizing the religious, political, and cultural institutions shaping this period.

HIST 4230 - Renaissance and Reformation - Europe: 1300-1660

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: Examines the cultural, religious, political and economic factors that affected Europe from the end of the Middle Ages to the mid-1600s. Special emphasis is given to the Renaissance and Reformation as vital forces at work during the period.

HIST 4240 - Absolutism, Enlightenment and Revolution - Europe: 1660-1815

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: Examines the political, economic, social, and cultural factors that affected Europe during the period. Special consideration is given to the Enlightenment as a cultural phenomenon and to European-wide revolution and counter-revolution in the late eighteenth century.

HIST 4250 - Nineteenth-Century Europe

Credits: (3)

Typically Taught Fall Semester: *Full Sem, odd years*

Description: A survey of European history from the fall of Napoleon to the beginning of the First World War. The course will focus on the lingering impact of the political and economic revolutions of the late eighteenth century on the politics, culture, and social development of the nineteenth. Major consideration will be given to liberalism, romanticism, socialism, nationalism, imperialism, industrialization, science, and the rise of mass society.

HIST 4260 - Europe in the Age of Total War

Credits: (3)

Typically Taught Spring Semester: *Full Sem, even years*

Description: This course on European history begins with a consideration of the causes of the First World War and concludes with an assessment of the impact of the Second World War on European politics, culture, and society. The course will examine the ways in which Europe was shaped in this period by warfare, revolution, the collapse of dynastic states, international agreements, colonial interests, labor movements, economic crises, economic modernization, the rise of totalitarian movements, genocide, and foreign occupation.

HIST 4280 - History of Christianity in Europe

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: A history of the development and impact of Christianity within Europe through the twentieth century. This course will examine how Christianity affected European society, culture, politics, and science; and how these affected the institutions within Christianity. Particular emphasis will be placed on the early growth of Christianity, medieval changes, the Reformation, and spirituality in the industrial age.

HIST 4310 - Tsarist Russia

Credits: (3)

Typically Taught Fall Semester: *Full Sem, even years*

Description: Russia's political, economic, social and cultural institutions from pre-history to 1917, emphasizing dynastic leaders, expansion, religion and other significant forces of change. Includes an analysis of both foreign and domestic policies that led to world war and revolution.

HIST 4320 CRE - Stalin and the Soviet Experiment

Credits: (3)

Typically Taught Spring Semester: *Full Sem, odd years*

Description: Analyzes the political, economic, military, diplomatic, social, and ideological problems, crises, and programs from the Russian Revolutions of 1917 to the present.

HIST 4330 - Medieval England

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: A survey of English history to 1485 with special consideration given to England's cultural, political, economic and social development during the Middle Ages.

HIST 4335 - Tudor and Stuart England

Credits: (3)

Typically Taught Spring Semester: *Full Sem, odd years*

Description: A survey of English history during the Tudor and Stuart periods (1485-1714). Emphasis will be placed on the social, cultural, political, religious and economic development of England during this period.

HIST 4340 - The British Empire

Credits: (3)

Typically Taught Fall Semester: *Full Sem, odd years*

Description: A survey of English history from 1714 to the present. Special emphasis will be given to England's cultural, political, economic, and social development during the Industrial Revolution, the Victorian era, and the twentieth century.

HIST 4350 - Germany and the Third Reich

Credits: (3)

Typically Taught Spring Semester: *Full Sem, even years*

Description: German social-political, economic and cultural developments from the eighteenth century to the present. Topics include the Prussians, Classicism, Revolution, the Age of Bismarck, industrialism and warfare, and the 20th Century.

HIST 4370 - History of Modern France 1789-present

Credits: (3)

Typically Taught Fall Semester: *Full Sem, even years*

Description: Examines the political, social, and cultural history of France from the outbreak of the French Revolution to the present. Attention will focus on political ideologies, religious and philosophical movements, artistic and literary expression, and changes in the social environment. The course will also attend to the impact of France and French culture on the world and to recent challenges presented to French national identity by globalization.

HIST 4410 - History of Spain and Portugal

Credits: (3)

Typically Taught Fall Semester: *Full Sem, odd years*

Description: A survey of the political, economic, social and cultural development of Spain and Portugal from the beginning to the present.

HIST 4440 SUS - East European Empires

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Examines the political, economic, and social factors that have shaped the history of this region from medieval era until 1815.

HIST 4450 - Cold War Europe

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Examines the political, economic, and social factors that have shaped the history of Europe.

HIST 4500 - Teaching Social Studies in Grades 5-12

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Materials and methods of teaching for skill, concept and value development in middle, junior high and senior high school social studies.

Note: (Required of all majors in Social Science area).

HIST 4510 GLB - Twentieth Century World

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The political, economic, and social forces of the twentieth century since World War I. Emphasis is placed on global relationships, the rise of mass society, and conflict among cultures in an era of accelerating change.

HIST 4520 - History of Medicine

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will examine the history of medicine from antiquity to the present in a comparative framework. It will discuss changing ideas about the body, the nature of disease, the role of physicians, and the practice of medicine in relationship to larger cultural transformations.

HIST 4530 - Far Eastern History

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A survey of the political, economic, social and cultural development of China, Japan, and Korea from the pre-modern era to the present, with particular emphasis given to the 19th and 20th centuries.

HIST 4550 - Southeast Asian History

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A survey of the political, economic, social and cultural development of Southeast Asia from the pre-modern era to the present, with particular emphasis given to the 19th and 20th centuries.

HIST 4570 - Islamic Civilization

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will examine the history of Islam from the 7th century to the present. It will discuss key theological developments, the spread of the religion and its diverse forms, and its effects on culture, art, and science.

HIST 4590 GLB - Middle Eastern History

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A survey of the political, economic, social and cultural development of the Middle East from the rise of Islam to the present with particular emphasis on the 19th and 20th centuries.

HIST 4630 - Latin American History: Pre-Columbian to Independence

Credits: (3)

Typically Taught Fall Semester: *Full Sem, even years*

Description: History of Latin America from the Pre-Columbian period through the Spanish and Portuguese invasion and colonial rule.

HIST 4650 - Latin American History Since Independence

Credits: (3)

Typically Taught Spring Semester: *Full Sem, even years*

Description: A survey of the political, economic, social and cultural developments of the Latin American nations from independence to the present.

HIST 4670 - History of Mexico

Credits: (3)

Typically Taught Fall Semester: *Full Sem, odd years*

Description: A survey from ancient Native American times, the colonial experience, and the nation including the U.S. Southwest until 1848.

HIST 4700 GLB - The U.S. and East Asia: War, Revolution, and Modernization

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course will survey major developments involving the U.S. in East Asia in the 20th century. Wars, revolution, and modernization resulted from direct encounters with the Philippines, China, Japan, and Vietnam, making these among the consequential episodes in world history.

HIST 4710 - Special Issues and Topics in American History

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: When offered will focus on a specific and detailed subject in American History. Students may repeat this course for credit when the topic offered is substantially different than the previous class. May be repeated 3 times with a maximum of 9 credit hours.

HIST 4720 - Special Issues and Topics in European History

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Description: When offered will focus on a specific and detailed subject in European History. Students may repeat this course for credit when the topic offered is substantially different than the previous class.

May be repeated 3 times with a maximum of 9 credit hours.

HIST 4730 - Special Issues and Topics in Global and Comparative History

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem odd years*

Description: When offered will focus on a specific and detailed subject in global or comparative history. Students may repeat this course for credit when the topic offered is substantially different than the previous class.

May be repeated 3 times with a maximum of 9 credit hours.

HIST 4810 - Experimental Course

Credits: (3)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

HIST 4830 - Directed Readings

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Independent reading under the supervision of a department member on special topics in History. For each hour of credit approximately 1500 pages of material will be read. A written assignment on this material will also be completed. No more than three hours will count towards a major or minor.

Pre-requisite(s): Instructor approval.

HIST 4860 INT - Internships in Historical Studies

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all students. Faculty supervised off-campus internships in public history institutions. Each internship is individually established and provides students with practical experience and the opportunity to apply and learn new professional skills. Six hours of internship are required for the Public History Emphasis. No more than six hours will count towards a major or minor.

Pre-requisite(s): Junior-class standing and permission of instructor and field supervisor.

May be repeated 3 times with a maximum of 9 credit hours.

HIST 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for credit under unique course titles. Only six hours may count toward major or minor.

HIST 4975 - Historiography

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Historiography is the study of history and the theory of history writing. Students will analyze historical interpretations, and develop new skills and methods to interpret both primary and secondary sources.

HIST 4985 - Historical Research and Methods

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course teaches research and writing skills and is designed to prepare History students for History 4990. Students will learn how to find a research topic, develop a thesis, identify primary sources, cite those sources, and prepare a research proposal. The course will expose students to models of good historical writing and argumentation which will serve as models for their own writing.

Pre-requisite(s): HIST 1000 or instructor approval.

HIST 4990 - Senior Seminar

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A seminar for History majors requiring the completion of an extensive thesis project.

Pre-requisite(s): HIST 4985.

HIST 6830 - Directed Readings

Credits: (1-3)

Description: Independent readings under the supervision of a department member on special topics in History. For each hour of credit approximately 1500 pages of material will be read. A written assignment on this material will also be completed.

Pre-requisite(s): Instructor approval.

No more than three hours will count towards a major or minor.

Note: This course is offered as needed.

HLTH 1000 - Foundations for Success in Health Promotion

Credits: (1)

Typically Taught Summer Semester: *1st Blk-Online, 2nd Blk-Online*

Typically Taught Fall Semester: *1st Blk-Online, 2nd Blk-Online*

Typically Taught Spring Semester: *1st Blk-Online, 2nd Blk-Online*

Description: This one-credit course provides students with the tools and insights needed to thrive in the Health, Physical Education, and Recreation (HPER) program. Students will explore Health, Physical Education, and Outdoor Community and Recreation Education (OCRE) as dynamic, innovative fields of study. The course also introduces

essential academic resources, strategies for success, and pathways to personal and professional growth within the program and campus community.

HLTH 1020 LS - Science and Application of Human Nutrition

Credits: (3)

Description: (available online) Human nutrition is the platform to study the nature and integration of science across disciplines and in society through applied problem solving and data analysis. Nutritional balance and good health are explored in context of the levels of organization, metabolism and homeostasis, genetics and evolution, and ecological interactions.

This course is taught Web enhanced.

HLTH 1030 SS - Healthy Lifestyles

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: A systematic approach to promote health enhancing behaviors related to the prevention of disease and achievement of optimal health. Focuses on the total person with a consideration of the mental, emotional, intellectual, social, physical, and environmental dimensions which impact human health.

HLTH 1110 - Stress Management

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: An introductory course focusing on the causes of stress, recognizing personal stressors and life change management for stress control.

HLTH 1300 - First Aid: Responding to Emergencies

Credits: (2)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Description: Training the lay person to respond correctly in emergencies and act as the first link in the emergency medical service system. Course leads to American Red Cross certification in Adult, Infant and Child CPR and First Aid: Responding to Emergencies.

Cross listed with Athletic Training.

HLTH 2220 - Prenatal and Infant Nutrition

Credits: (2)

Description: This course focuses on nutrition and diet as they apply to birth outcome, the maintenance of maternal health, and the growth of the infant. Breastfeeding and community programs will be discussed in support of maternal and infant health.

Pre-requisite(s): NUTR 1020 or HLTH 1020.

HLTH 2300 - Emergency Response

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Meets the needs of the non-health care professional who has a duty to respond in an emergency. Provides more skills and in-depth training than the First Aid: Responding to Emergencies course. Course leads to American Red Cross certification in Emergency Response and CPR for the Professional Rescuer. Cross listed with RHS 2300.

HLTH 2400 - Mind/Body Wellness**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Promotion of emotional wellness and understanding the body, mind, spirit connection. Required by the Utah State Board of Education for endorsement in health education.

HLTH 2420 - Childhood and Adolescent Nutrition**Credits: (2)**

Description: The effects of nutrition and diet on child growth, health and behavior are explored from toddler through adolescence. The processes of growth and puberty provide the foundations for understanding nutritional support. Common nutritionally-related problems such as obesity, anemia, and eating disorders are also addressed.

Pre-requisite(s): NUTR 1020 or HLTH 1020.

HLTH 2700 - Consumer Health**Credits: (3)**

Typically Taught Summer Semester: *Full Sem, 1st Blk, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem*

Description: Knowledge and skills relating to consumption of health products and services, including advertising and health, quackery, alternative health care, economics of health care, etc.

HLTH 2800 - Individual Projects**Credits: (1-3)**

Description: A comprehensive study or project in the field of Health Education. Hours to be arranged.

May be repeated 2 times up to 3 credit hours.

Note: This course is offered as needed.

HLTH 2890 INT - Cooperative Work Experience**Credits: (1-6)**

Description: Open to all students in Health who meet the minimum Cooperative Work Experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

May be repeated 5 times up to 6 credit hours.

Note: This course is offered as needed.

HLTH 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is taught as needed.

HLTH 3000 - Foundations of Health Promotion

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Emerging trends and roles of health education within occupational, medical, community, and school settings including history, philosophy, current practices.

Pre-requisite(s): HLTH 1030.

HLTH 3050 - School Health Program

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Designed to prepare the prospective teacher for their responsibilities in administering the functions of the School Health Program, including: health services, healthful school environment, and health education.

HLTH 3100 - Applications of Technology in Health Promotion

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is an exploration of current and future uses of technology in the health promotion fields.

Pre-requisite(s): Completion of Computer & Information Literacy requirement or permission of instructor.

HLTH 3150 - Community Health Agencies and Services

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: An overview of public and community health including history, management, prevention and epidemiology of disease. Emphasis on the role of community and government health agencies regarding health promotion and disease prevention activities.

Pre-requisite(s): HLTH 3000 or HLTH 3050.

HLTH 3160 - Principles of Health Behavior

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The course provides a comprehensive overview of theories and models that explain and modify health behaviors. The models and theories are viewed from a multidisciplinary perspective and are applied to health behaviors among both normal and special populations.

Pre-requisite(s): HLTH 3000.

HLTH 3200 - Methods in Health Education

Credits: (3)**Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Designed to appraise and utilize the different methods and aids used in teaching health and lifestyle management in the schools, community, worksite, and health care settings. Students develop skills in organizing, presenting, and evaluating learning experiences presented to target populations in the various settings.

Pre-requisite(s): HLTH 3000 or HLTH 3050 or ESS 2200.

HLTH 3320 - Health and Nutrition in the Older Adult**Credits: (3)**

Description: The developmental process of late adulthood with focus on the physiological age-related changes provides the foundation for understanding physical, mental, and social health and well-being in the older adult. Nutrition and exercise assessments and prescriptions, clinical services, community and social support services, complementary and alternative medicine, and other topics are explored in the context of promoting healthy aging.

Pre-requisite(s): NUTR 1020 or HLTH 1020.

HLTH 3400 - Substance Abuse Prevention**Credits: (3)****Typically Taught Summer Semester:** *Full Sem, Online***Typically Taught Fall Semester:** *Full Sem, Online***Typically Taught Spring Semester:** *Full Sem, Online*

Description: Study of legal and illegal drugs from a pharmacological, historical, psychosocial, and behavioral perspective. Emphasis on primary prevention concepts and responsible consumerism. Education students can receive "Substance Abuse Certification" from the Utah State Office of Education.

HLTH 3420 - Multicultural Health and Nutrition**Credits: (3)**

Description: The application and understanding of social, religious, economic and aesthetic qualities of foods provides the knowledge for the explorations of the food patterns of various cultures. The understanding of world food problems as they pertain to the health will also be discussed.

Pre-requisite(s): NUTR 1020 or HLTH 1020 and NUTR 2320.

This course is taught Web enhanced.

HLTH 3500 - Human Sexuality**Credits: (3)****Typically Taught Summer Semester:** *Full Sem, Online***Typically Taught Fall Semester:** *Full Sem, Online***Typically Taught Spring Semester:** *Full Sem, Online*

Description: A survey course of the biomedical and psychosocial forces which shape our sexuality. The focus will be upon the scholarly study of the biological, social, psychological, and spiritual dimensions of human sexuality.

HLTH 4013 - Health Promotion Research and Assessment**Credits: (3)****Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem*

Description: Application of research methods used both in assessing individual and community needs for health

education, and in assessing the effectiveness of health education programs.

Pre-requisite(s): HLTH 3000 and PUBH 3200.

HLTH 4150 - Needs Assessment & Planning Health Promotion Programs

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Conducting needs assessment and planning health promotion programs in a community, occupational, school or clinical setting.

Pre-requisite(s): HLTH 3000.

HLTH 4220 - Women's Health Issues

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A feminist perspective and analysis of the psychological, cultural and political health related issues that impact women throughout the life span.

Pre-requisite(s): Upper division standing or consent of instructor.

(Cross listed with Women's Studies)

HLTH 4250 - Contemporary Health Issues of Adolescents

Credits: (2)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Provides professionals who work with adolescents an overview of both the school health program and health issues prevalent among teens.

HLTH 4300 - Health Education in the Elementary School

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides elementary school teachers the resources and skills needed to teach the Utah Healthy Lifestyles curriculum.

HLTH 4700 - Wellness Coaching

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Wellness coaching provides a highly effective and focused approach towards improving people's individual health habits and involves coaching people towards achieving their personal, health, and wellness goals. Students with an interest in wellness coaching will gain a broad overview of the field including an introduction to the application of wellness coaching tools, theory, concepts and techniques.

Pre-requisite(s): HLTH 2400, HLTH 3200.

HLTH 4800 - Individual Projects

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A comprehensive study or project in the field of Health Education. Hours to be arranged for seniors only.

May be repeated 2 times up to 3 credit hours.

HLTH 4860 INT - Field Experience

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Work experience which applies prior academic learning in a supervised setting.

Pre-requisite(s): HLTH 3000, HLTH 3100, HLTH 3200, HLTH 4150.

May be repeated 5 times up to 6 credit hours.

HLTH 4890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A continuation of HLTH 2890.

May be repeated 5 times up to 6 credit hours.

Note: This course is offered as needed.

HLTH 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is taught as needed.

HLTH 4990 - Senior Seminar

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is a capstone course of Health Promotion seniors only. Summarizes the experiences of the Health Promotion Major, addresses future alternatives and prepares students for employment now and/or graduate study.

HLTH 6250 - Contemporary Health Issues of Adolescents

Credits: (2)

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: Provides professionals who work with adolescents an overview of both the school health program and health issues prevalent among teens.

HLTH 6300 - Health Education in the Elementary School

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides elementary school teachers the resources and skills needed to teach the Utah Healthy Lifestyles curriculum.

HNRS 1110 HU - Introduction to Honors

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An interdisciplinary class introducing students to the different ways university disciplines see the world and construct meaning.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 1500 PS - Perspectives in the Physical Sciences

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An interdisciplinary approach to the physical sciences. This introductory class deals with basic concepts, problems and issues of the physical sciences.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 1510 LS - Perspectives in the Life Sciences

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An interdisciplinary approach to the life sciences. This introductory class deals with basic concepts, problems and issues of the life sciences.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 1520 SS - Perspectives in the Social Sciences

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An interdisciplinary introduction to the social sciences. This introductory course deals with the basic concepts, methods, models and issues of the social sciences.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 1530 CA - Perspectives in the Creative Arts

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An interdisciplinary introduction to the creative arts. This introductory class deals with basic concepts, problems and issues of the creative arts.

A student may repeat a course number twice for a maximum of 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 1540 HU - Perspectives in the Humanities

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An interdisciplinary approach to the arts and humanities. This introductory class deals with basic concepts, problems and issues of the arts and humanities.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 2010 HU - Exploring Key Concepts in the Disciplines: Humanities

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will focus on the history and development of a central concept in the Humanities, using original sources as the primary class texts.

Pre-requisite(s): Prior to taking this course students are strongly advised to take HNRS 1110 HU and a 1000-level HNRS "Perspectives" General Education course.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 2020 CA - Exploring Key Concepts in the Disciplines: Creative Arts

Credits: (3-6)

Variable Title

Description: This course will focus on a central concept in the Creative Arts, using original sources as the primary class texts. Prior to taking this course students are strongly advised to take HNRS 1110 and a 1000-level HNRS "Perspectives" General Education course.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 2030 PS - Exploring Key Concepts in the Disciplines: Physical Sciences

Credits: (3)

Variable Title

Description: This course will focus on a central concept in the Physical Sciences, using original sources as the primary class texts. Prior to taking this course students are strongly advised to take HNRS 1110 and a 1000-level HNRS "Perspectives" General Education course.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 2040 LS - Exploring Key Concepts in the Disciplines: Life Sciences

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will focus on a central concept in the Life Sciences, using original sources as the primary class texts. Prior to taking this course students are strongly advised to take HNRS 1110 and a 1000-level HNRS "Perspectives" General Education course.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 2050 SS/CRE - Exploring Key Concepts in the Disciplines: Social Science

Credits: (3)

Variable Title

Description: This course will focus on the history and development of a central concept in the Social Sciences, using original sources as the primary class texts.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 2110 HU/SS - Intellectual Traditions: Great Ideas of the West in the Classical and Medieval Eras

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A survey of influential ideas, literature and events that characterize antiquity and the middle ages in the Western world. This course is offered either for HU credit (2110A) or for SS credit (2110B). Prior to taking this course students are strongly advised to take HNRS 1110 and a 1000-level HNRS "Perspectives" General Education course.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 2120 HU/SS - Intellectual Traditions: Great Ideas of the West in the Modern Era

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A survey of the great ideas, literature and events that characterize Western civilization from the Renaissance to relativity. This course is offered either for HU credit (2120A) or for SS credit (2120B). Prior to taking this course students are strongly advised to take HNRS 1110 and a 1000-level HNRS "Perspectives" General Education course.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 2130 HU/SS - Intellectual Traditions: Great Ideas of the East

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A survey of the great ideas, literature, religions and philosophical foundations of Asia. This course is offered either for HU credit (2130A) or for SS credit (2130B). This course also fills the Diversity requirement. Prior to taking this course students are strongly advised to take HNRS 1110 and a 1000-level HNRS "Perspectives" General Education course.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 2830 - Directed Readings, Projects, and Research

Credits: (1-3)

Description: Individualized tutorial with a professor who may be selected from many possible disciplines.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 2900 - Honors Colloquium

Credits: (1-3)

Description: Varied topics as described in the semester schedule; topics will be drawn from disciplines across the entire campus; may be taken twice up to 3 credits with different course content: restricted to lower division credit.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

HNRS 3110 - Great Books

Credits: (3)

Description: A selection of books that embody some of the great ideas, literature, and events influential in history.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 3900 - Honors Colloquium

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Varied topics as described in the semester schedule; topics will be drawn from disciplines across the entire campus.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 4830 - Directed Readings: Senior Project Research

Credits: (1-3)

Description: This class is taken in preparation for the HNRS 4990 Honors Senior Project. Class time is TBA, but

students working towards their Honors Senior Project usually meet about seven times during the semester. A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 4900 - Honors Colloquium

Credits: (2-4)

Description: Varied topics as described in the semester schedule; topics will be drawn from disciplines across the entire campus.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HNRS 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

HNRS 4990 - Honors Senior Project

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course offers a capstone senior project experience for students. All students aiming to complete University Honors must take this class in its 1-credit hour form. Students interested in completing additional research with the Honors Program may register for 2-3 credit hours as appropriate.

A student may repeat a course number for up to 6 credits if the course name, course syllabus, and faculty/instructor teaching the course is different.

HTHS 1005 - Current Certification in Health Care

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Certificate programs provide a foundation for many of the Allied Health Professions. This course allows students to obtain University credit for the completion of a certificate program. Students should complete their certificate program prior to or during the semester in which they are enrolled in the course. Certificates that currently qualify for this course are Certified Nurse Assistant. Other certificates may be eligible on a case-by-case basis. Students may elect 1-3 credit hours for this course. Required assignments will match the elected credit hours.

HTHS 1101 - Medical Terminology

Credits: (2)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: A comprehensive overview of medical language. This course takes a body-systems approach to presenting the medical terminology associated with anatomy, physiology, diseases and treatments. Designed for all students interested in health sciences or a career in medicine.

HTHS 1103 - Introduction to Health Careers

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will compare and contrast diverse health careers. Students will discuss the history, providers, and delivery models involved in Health Care. The course will explore how such factors as economic class and status in groups such as gender, age, and physical ability affect health care professionals. Students will also explore numerous fields and opportunities in the Health Care Industry.

HTHS 1104 - Introductory Human Anatomy and Physiology

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: Introductory Human Anatomy and Physiology is a single semester 3 credit-hour course that focuses on the basic structure and function of the human body. Course topics include a basic introduction to atomic, molecular, cellular, and tissue levels of organization; and the integumentary, musculoskeletal, neuroendocrine, cardiovascular, lymphatic, immune, respiratory, digestive, and genitourinary systems. Course activities will enhance your understanding of the material by providing practice in critical thinking, content application, and data analysis.

HTHS 1108 - Biocalculations for Health Professions

Credits: (5)

Description: Fundamental mathematical concepts using health professions applications. Topics include: basic arithmetic, pre-algebra, beginning algebra, geometry, and statistics applied to solutions, dosage calculations, electrolytes, acid base balance, circulatory and urinary function, pulmonary function testing and energy and metabolism. This course does not meet the University's quantitative literacy requirement.

Note: This course is offered as needed.

HTHS 1130 - Common Medicines

Credits: (3)

Description: This is an introductory course that will provide information regarding proper drug usage for those without significant backgrounds in the Biological Sciences. The course primarily discusses over-the-counter medicines as well as prescription drug groups that are commonly used by the public. The overall objective of this course will be to provide information in such a way that individuals are able to make wise and appropriate choices, are more aware of possible drug-related problems, and will become well-informed consumers.

May be repeated twice with a maximum of 6 credit hours.

Note: This course is offered as needed.

HTHS 2110 LS - Integrated Human Anatomy and Physiology I

Credits: (4)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: Integrated Human Anatomy and Physiology I is the first semester of a two-semester anatomy and physiology sequence that focuses on the structure and function of the human body. Course module topics include: the atomic and molecular levels of organization, cell biology and metabolism, microbiology, and the integumentary, skeletal and muscular body systems. Weekly integrated laboratory sessions serve to enhance the lectures through discussions, data analysis, hands-on activities, and activities utilizing cadaver specimens and interactive digital

cadaver technology. This course meets the life science (LS) general education learning outcomes for the university.
Suggested Requisite(s): Completion of HTHS 1101 and/or HTHS 1104 is strongly recommended.
Note: Course may only be taken three times.

HTHS 2111 - Integrated Human Anatomy and Physiology II

Credits: (4)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Integrated Human Anatomy and Physiology II is the second semester of a two-semester anatomy and physiology sequence that focuses on the structure and function of the human body. Course module topics include: the nervous, endocrine, cardiovascular (blood), cardiovascular (heart and blood vessels), respiratory, digestive, urinary, and reproductive body systems. Laboratory sessions serve to enhance the lectures through discussions, data analysis, hands-on activities, and activities utilizing cadaver specimens and interactive digital cadaver technology.

Pre-requisite(s): HTHS 2110 with a grade of C or better.

HTHS 2120 - Case Studies in Health Sciences

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Case Studies in Health Sciences is a course designed for students wishing to explore the interdisciplinary nature of health care using case study models. Each case study focuses on a disease process. Progression through each case study involves a review of anatomy and physiology, pathophysiology, medical terminology and a study of a variety of health professionals including their educational and training requirements. Additionally, the student will explore key medical diagnostic tests (e.g. laboratory, imaging) used in patient disease diagnosis, management and prevention. The course emphasizes the importance of the team approach to patient care.

Pre-requisite(s): HTHS 2110 and HTHS 2111 or an equivalent course in anatomy and physiology. Recommended prerequisite: HTHS 1101.

HTHS 2230 - Introductory Pathophysiology

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: An introduction to the pathophysiologic disruptions of normal human body function, this course will emphasize disease mechanisms and the body's response to restore homeostasis. Units of study include foundational concepts of cellular injury, genetics, acid-base, electrolyte, fluid balance and functional alterations of the immune, hematologic, nervous, endocrine, cardiovascular, respiratory, urinary, musculoskeletal, and reproductive systems.

Pre-requisite(s): Completion of HTHS 2110 and HTHS 2111, or ZOOL 2420, or an equivalent human physiology course with a grade of C or better. Concurrent enrollment in HTHS 2231 is recommended.

HTHS 2231 - Introductory Pathophysiology Laboratory

Credits: (1)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$25.00

Course Fee Purpose: This fee covers the cost of lab supplies, models, cadaver specimens, and a variety of

technology-based learning resources.

Description: Laboratory and computer exercises involving analysis of both clinical and laboratory data. Students evaluate signs, symptoms, diagnosis, and treatment of various pathological conditions and diseases.

One two-hour laboratory session per week.

Co-Requisite(s): HTHS 2230.

HTHS 2240 - Introduction to Pharmacology

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Introductory pharmacology course which covers pharmacological principles including modes of action, uses, modes of excretion, and patient side effects of various drug classes. The drugs are presented in a "system approach" with emphasis on medications utilized in diagnosing and treating diseases associated with the various body systems. Class format includes a 3 hour lecture class with students participating in oral presentations and case studies. Recommended prerequisite: HTHS 1101, HTHS 2110 and HTHS 2111.

HTHS 2830 - Health Sciences Directed Readings

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed Readings in Health Sciences areas. Must have departmental approval.

May be repeated twice with a maximum of 3 credit hours.

HTHS 2904 - Information Resources in the Health Professions

Credits: (1)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Intended for students interested in the health professions, this one-credit hour course will assist in developing information literacy and research skills. Students completing this course will be able to use an academic library and the Internet to successfully identify, access, evaluate and use information resources to support academic and clinical success and lifelong learning. Emphasis is placed on resources in the health sciences.

Cross-listed as LIBS 2904.

HTHS 2910 IL - Health Information Literacy, Healthcare Systems & Career Exploration

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: HTHS 2910 is designed for students who are investigating healthcare systems and careers in healthcare, integrating content from both health sciences and information literacy. The course explores pathways that can lead to meaningful and rewarding careers in healthcare, and techniques useful in applying and matriculating into these educational programs. Evidence-based practice is incorporated into the research process, enabling students to identify information needs, and to select, evaluate, and ultimately utilize health information to make informed decisions. This course emphasizes critical thinking and prepares students to join conversations on important topics in healthcare as informed and responsible participants. Ultimately, this course will enable students to approach our information landscape more critically, both as a consumer and creator of information and as a practitioner in the health sciences. This course fulfills the information literacy general education core requirement.

Note: Cohort Code

HTHS 2990 - Health Sciences Seminar

Credits: (1)

Description: Presentations, group discussions and analysis of selected topics, designed to prepare the Health Science major for career opportunities in the job market and applying for Health Professions professional programs. May be repeated twice with a maximum of 3 credit hours.

Note: This course is offered as needed.

HTHS 3240 - Pharmacology Principles and Clinical Applications

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Pharmacology Principles and Clinical Applications is an upper division course designed for students who are pursuing a career in health, health education, or the health professions. This course will focus on pharmacokinetics, pharmacodynamics, mechanisms of drug action, evidenced-based medicine, organ-systems approach to differential therapeutics, and topics of current relevancy. In addition, students will present on a pharmacology case or topic of their choice.

Pre-requisite(s): HTHS 2111 or ZOOL 2420, or an equivalent human physiology course. HTHS 2230 - Introductory Pathophysiology is also recommended.

HTHS 3328 - Pathophysiology of Cells and Tissues

Credits: (2)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Pathophysiology of Cells and Tissues is a course that will emphasize disease mechanisms and the body's response to restore homeostasis by presenting an orientation to disease as disordered physiology. This course describes the etiology, developmental considerations, pathogenesis and clinical manifestations of disease processes. Units of study focus on the interactions of cellular injury mechanisms, genetic disorders, neoplasia, and inflammatory and immune disorders. WSU Online class only.

Pre-requisite(s): HTHS 2111, ZOOL 2420, or equivalent human physiology course.
May be repeated once for credit.

HTHS 3329 - Pathophysiology of Organs and Systems

Credits: (2)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Pathophysiology of Organs and Systems is a course that will emphasize the mechanisms of disordered physiology that underlie disease conditions by analyzing the mechanism(s) of different disease states. Particular attention will be given to etiology, pathogenesis, developmental and environmental influences, and clinical manifestations. Units of study focus on the nervous, endocrine, cardiovascular, respiratory, urinary, musculoskeletal, and reproductive systems. WSU Online class only.

Pre-requisite(s): HTHS 2111 or ZOOL 2420, or equivalent human physiology course.
May be repeated once for credit.

HTHS 3410 - Foundations of Health Science Technology

Credits: (3)

Description: The purpose of this course is to teach the student fundamental technological and pharmacological principles used in dental and medical equipment. It will be focused on criteria used by dental and medical personnel to make technology and pharmacology decisions.

Note: This course is offered as needed.

HTHS 3412 - Health Science Technology Applications**Credits: (3)**

Description: The purpose of this course is to teach students fundamental technological and pharmacological principles used in specific medical devices. The students will develop an understanding of different health science manufactured products and services and will receive exposure to industry representatives.

Pre-requisite(s): HTHS 3410.

Note: This course is offered as needed.

HTHS 3997 - Digital EEG Concepts**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: This course is part of the Bachelor of Integrated Studies in Electroneurodiagnostics (END), a partnership between Weber State University and the END program at the University of Utah. Students will complete lecture and lab hours primarily at the University of Utah. In addition, five meetings during the fall semester will be required and there is a required research paper.

HTHS 3998 - Normal Adult EEG**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: This course is part of the Bachelor of Integrated Studies in Electroneurodiagnostics (END), a partnership between Weber State University and the END program at the University of Utah. Students will complete lecture and lab hours primarily at the University of Utah. In addition, five meetings during the spring semester will be required and there is a required research paper.

HTHS 3999 - Artifacts in EEG**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: This course is part of the Bachelor of Integrated Studies in Electroneurodiagnostics (END), a partnership between Weber State University and the END program at the University of Utah. Students will complete lecture and lab hours primarily at the University of Utah. In addition, five meetings during the spring semester will be required and there is a required research paper.

HTHS 4010 - Interdisciplinary Health Care Teams**Credits: (3)**

Description: This course provides an interdisciplinary experience with the team concept as a priority. The students learn the role of the health care team members, each with their different skills and objectives. The course teaches students to practice an interdisciplinary approach as they research, interact and learn in the interdisciplinary environment of a health care setting.

Cross-listed with DENT 4010 and NRSG 4010.

May be repeated twice for credit.

Note: This course is offered as needed.

HTHS 4850 - Study Abroad

Credits: (1-6)

Variable Title

Description: This course provides opportunities for students in health professions to experience a study abroad program that is designed to explore healthcare, culture, and clinical experience.

May be repeated 5 times for 6 credit hours.

HUMA 1010 HU - Introduction to Humanities

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course examines the world by learning about humanistic disciplines including philosophy, art, literature, and history. In considering how the humanities help us understand what makes us human, we will explore questions about individual identity and our roles in our communities. Europeans in the Renaissance thought that the study of the humanities would make people better citizens. We will ask ourselves if we agree with that sentiment and reflect on what the arts and humanities mean to us as individuals and as a society in the twenty-first century.

ID 1010 CA - Introduction to Interior Design

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$20.00

Course Fee Purpose: Computer lab/studio equipment including but not limited to computers, printers, print cartridges, paper, replaced as needed. Basic computer software needed for this course (Microsoft Office, internet access)

Description: Explores the interior design profession, professional certification and licensure. Students learn the various phases of the design process and develop spaces that relate to sustainability, accessibility and human factors. Study of architectural and furniture styles are explored. Students develop aesthetic judgment as they create spaces that utilize the elements and principles of design and color theory.

ID 1020 - Presentation Techniques

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Computer lab/studio equipment including but not limited to computers, printers, print cartridges, paper, replaced as needed. Basic computer software needed for this course (Microsoft Office, internet access)

Description: Exploration of materials and application of methods required for visual communications with interior design presentation. Emphasis in conceptualizing and quick-sketching techniques. Introduction to oral and technical visual presentation methods such as Adobe Illustrator, InDesign and Google SketchUp are incorporated into curriculum.

ID 1050 - Design Documentation, Visualization & Modeling I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course: AutoDesk products licensure, printers, computers.

Licensing fees annually

Description: The first in a series focusing on digital documentation, visualization and modeling using the latest technologies for interior construction documents and/or interior architectural renderings.

ID 1860 - Practicum

Credits: (1-2)

Description: A course of occupational experiences in the interior design industry. A plan is created by the instructor and student to provide meaningful training in the student's career field.

Pre-requisite(s): ID 2020, ID 2035.

May be repeated for a maximum of 2 credit hours.

Note: This course is offered as needed.

ID 2010 SUS - Sustainability I: Textiles and Soft Materials

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Computer lab/studio equipment including but not limited to computers, printers, print cartridges, paper, replaced as needed. Basic computer software needed for this course (Microsoft Office, internet access)

Description: A study of fibers, yarns, fabric structure, codes, finishes, and sustainable manufacturing practices and products-as they relate to residential and commercial interiors. Three-dimensional projects may be required as part of this course.

ID 2020 - Design Documentation, Visualization & Modeling, II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course AutoDesk products licensure, printers, computers. Licensing fees annually

Description: The second in a series focusing on digital documentation, visualization and modeling using the latest technologies for interior construction documents and/or interior architectural renderings.

ID 2035 - Design Process/Space Planning

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course AutoDesk products licensure, printers, computers. Licensing fees annually

Description: Experiences in programming, research development, and schematic design development. Emphasis on problem solving and space planning for residential and non-residential spaces. Design charrettes may be included as part of the course curriculum.

Pre-requisite(s): ID 1050 or ARCH 1350.

ID 2040 - Architectural Detailing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course AutoDesk products licensure, printers, computers.

Licensing fees annually

Description: This course develops interior detailing technical skills, emphasizing stairways, fireplaces, ceilings, floor systems, and millwork (built-in furniture) details for residential and commercial spaces. Accessibility standards are discussed and incorporated into construction drawings and custom millwork designs. Life safety issues in regards to door, frame and hardware specification. Preparation of construction drawings, specifications, door, window and finish schedules for use by the trade. Three-dimensional projects may be required as part of this course.

Pre-requisite(s): ID 2020.

ID 2050 - Codes

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Design specific software licensing. Computer lab, materials lab access. Accreditation fees.

Description: The study and application of interior building codes that insures the health, safety, and welfare of individuals who occupy the structure.

ID 2060 SUS - Sustainability II: Materials, Hard Surfaces, and Specifications

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Computer lab/studio equipment including but not limited to computers, printers, print cartridges, paper. replaced as needed. Basic computer software needed for this course (Microsoft Office, internet access)

Description: Exploration and research of interior finishes, materials, and sustainable practices. Practical application for specifying and installation of materials will be emphasized. Three-dimensional projects may be required as part of this course. An interdisciplinary design charrette is featured as part of this course.

ID 2080 - Design Documentation, Visualization & Modeling, III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course Adobe, AutoDesk products licensure, printers, computers. Licensing fees annually.

Description: The third in a series focusing on digital documentation, visualization and modeling using the latest technologies for interior construction documents and/or interior architectural renderings.

ID 2820 - Historical Interiors

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Specialized software used in this course Adobe, AutoDesk products licensure, printers, computers. Licensing fees annually.

Description: Historical research of interior furnishing and architecture from Egyptian through English Victorian. Oral presentations, research projects and/or three-dimensional projects may be required as part of this course. This course may be listed among credits for the IDT Study Abroad program.

ID 2830 - Directed Readings

Credits: (1-3)

Description: Individually chosen readings or specialized topics supervised by a faculty member. Instructor's approval required.

May be repeated up to 3 credit hours.

Note: This course is offered as needed.

ID 2860 - Practicum**Credits: (1-2)**

Typically Taught Spring Semester: *Full Sem*

Description: A course of occupational experiences in the interior design industry. Students are given opportunity to apply the design process to a real-life project, often with a service-learning emphasis. Instructor's approval required.

This course may be listed among credits for the IDT Study Abroad program.

Pre-requisite(s): ID 2020 and ID 2035.

May be repeated up to 2 credit hours.

ID 2990 - Interior Design Seminar**Credits: (1)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Support class materials, tour fees, guest lecture materials

Description: Professional issues presented by guest lecturers, tours, and current discussions in interior design. Due to the nature of the curriculum, not all lectures, tours and experiences may be held in a traditional setting or time.

This course may be listed among credits for the IDT Study Abroad program. It is encouraged that design majors enroll in this course each semester. May be taken for credit/no credit.

May be repeated for credit up to 8 times for a maximum of 9 credit hours.

ID 3000 - Lighting Design**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course Adobe, AutoDesk products licensure, printers, computers. Licensing fees annually.

Description: A study of lighting principles, lighting systems, light sources, layered lighting concepts, calculation of lighting levels. Voice and data telecommunications systems, communication of lighting design and specifications including budgetary limitations are covered. Lighting plans, switching plans and electrical plans are explored. Focus is given to life safety concerns, codes, and accessibility. Also, exploration of daylighting principles and energy efficiency is incorporated. Emphasis is placed on communicating a design solution by practical application of learned principles in project format. An interdisciplinary design charrette is featured as part of this course.

Pre-requisite(s): (ID 1050 OR ARCH 1350) and ID 2035.

ID 3020 - American and Modern Interiors**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Computer lab/studio equipment including but not limited to computers, printers, print cartridges, paper. replaced as needed. Basic computer software needed for this course (Microsoft Office, internet access)

Description: Historical survey and research of interiors, furnishings, and architecture from the 1880's to the

present. Application of modern design in today's interior including oral presentations, research projects and/or three-dimensional projects may be required as part of this course. This course may be listed among credits for the IDT Study Abroad program.

ID 3025 - Professional Practice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Computer lab/studio equipment including but not limited to computers, printers, print cartridges, paper, replaced as needed. Basic computer software needed for this course (Microsoft Office, internet access)

Description: A study of the business aspect of Interior Design. Information will be presented regarding forms and professional practices for the Interior Designer, i.e., ethics, contracts, fees, purchase orders, letters of agreement, business formations and terminology of business practice. Job seeking skills will also be covered, along with professional licensing and certification. An interdisciplinary design charrette is featured as part of this course.

ID 3040 - Design Rendering

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course Adobe, AutoDesk products licensure, printers, computers. Licensing fees annually.

Description: Manual and computer-generated rendering techniques are explored and utilized.. An interdisciplinary design charrette may be featured as part of this course.

Pre-requisite(s): ID 2080.

ID 3045 - Residential Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on projects that apply the design process to residential interiors. Kitchen and Bath curriculum and NKBA standards are introduced. 20/20 Technologies software is introduced. Design charettes, local or national competition participation, and/or three-dimensional projects may be featured as part of this course.

Pre-requisite(s): ID 3000 and ID 3040.

ID 3060 - Kitchen & Bath

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course Adobe, AutoDesk products licensure, printers, computers. Licensing fees annually.

Description: A continuation of residential design is explored in which NKBA guidelines for kitchens and baths is applied to projects. In-depth study of the design of kitchens and baths is the focus. Kitchen and bath-specific 20/20 Software is utilized. Design charettes and national competition participation are featured as part of this course. Prepares the student for NKBA (National Kitchen and Bath Association) certification exams.

Pre-requisite(s): ID 3045.

ID 4010 - Commercial Studio

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course Adobe, AutoDesk products licensure, printers, computers. Licensing fees annually.

Description: Application of codes as they pertain to egress, accessibility, and fire in commercial interiors. Emphasis on NCIDQ-based commercial projects are featured in this studio course.

Pre-requisite/Co-requisite: ID 4020.

ID 4020 - Commercial Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course Adobe, AutoDesk products licensure, printers, computers. Licensing fees annually.

Description: Applying the design process to commercial design projects is the focus of this course. Contract, hospitality, healthcare, and global projects are emphasized in which students apply codes knowledge and commercial design strategies and specification of commercial-grade finishes and furnishings. Design charettes and national competition participation are featured as part of this course.

Pre-requisite(s): ID 2035, ID 2050, ID 3000, ID 3040.

ID 4025 - Senior Program Development

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course Adobe, AutoDesk products licensure, printers, computers. Licensing fees annually.

Description: The first of a two-part series for the senior student that produces a comprehensive project that features residential, contract, hospitality and healthcare design emphasis along with a research component. The first four phases of the design process are embarked upon in this semester. The senior student must take ID 4030 in the same academic year following completion of IDT 4025. Local and national competition participation are featured as part of this course. Instructor approval required for registration for this course.

Pre-requisite(s): ID 4020.

ID 4030 - Senior Project

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course Adobe, AutoDesk products licensure, printers, computers. Licensing fees annually.

Description: The second of a two-part series for the senior student that produces a comprehensive project that features residential, contract, hospitality and healthcare design emphasis along with a research component. The design process continues in this semester including presentation of the capstone project. The senior student must take IDT 4025 in the same academic year preceding IDT 4030. Local and national competition participation are featured as part of this course. Instructor approval required for registration for this course.

Pre-requisite(s): ID 4025.

May be taken twice.

ID 4040 - Portfolio Design

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Specialized software used in this course Adobe, AutoDesk products licensure, printers, computers. Licensing fees annually.

Description: Developing and presenting both a hard-copy and digital portfolio for job searching in the field of interior design. In addition to the portfolio, student will create a customized resume, business card, and letter of introduction to accompany both the hard-copy and digital portfolio for presentation to prospective employers and clients. Adobe Creative Suite software is used extensively in this course. Local and national competitions are featured as part of this course.

Pre-requisite(s): ID 4025 or ARCH 4350.

ID 4830 - Directed Readings

Credits: (1-3)

Typically Taught Spring Semester: *Full Sem*

Description: Individual readings supervised by a faculty member. Junior/Senior level course. Must be taken with the approval of the instructor. This course may be listed among credits for the IDT Study Abroad program. May be repeated twice for a maximum of 3 credit hours.

ID 4860 INT - Internship for Interior Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Computer lab/studio equipment including but not limited to computers, printers, print cartridges, paper. replaced as needed. Basic computer software needed for this course (Microsoft Office, internet access)

Description: A structured professional-level field experience where the interior design major applies skills through work experience with a qualified interior designer, architect, or design firm. The curriculum also involves research into the field of interior design, professional practice and professional certification. Tours, activities, and field trips may be featured as part of the course curriculum in addition to the on-site experience in the design field. Internship must be approved by the instructor within the first two weeks of the semester.

ITLN 1010 - First Semester

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Introductory course assuming no significant previous experience with the language. Beginners and students with less than two years of high school language should register for this class. Emphasis on everyday conversation and exposure to cultural perspectives.

ITLN 1020 - Second Semester

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Continuation of ITLN 1010. Basic language skills including listening, speaking, reading, writing and culture.

ITLN 2010 - Third Semester

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of ITLN 1020. Assumes completion of first-year or equivalent experience. Students learn to understand and express ideas about their community and the world. Includes listening, speaking, reading, writing and culture.

ITLN 2020 HU - Fourth Semester Italian

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of ITLN 2010. The learning and application of strategies for acquiring a foreign language. Students also learn how cultural products and practices reflect a culture's attitudes, values, ideas and meaning. The process of language acquisition and the seeking of cross-cultural understanding provide insights into the commonalities of how the human family learns, thinks and communicates.

ITLN 2021 - Second Year II

Credits: (3)

Description: (NH=Novice High) Continuation of ITLN 2010 without General Education Humanities credit. Offered through examination only.

Pre-requisite(s): Only available through testing.

JPNS 1000 - Proficiency Development

Credits: (1-2)

Description: (N=Novice) (Cr/NCr) Non-graded courses for entry-level students to augment foreign language instruction in stress-free activities such as reading children's literature, learning and performing skits, folk dancing, singing, cooking, etc.

May be repeated for credit under different titles.

Note: Course not currently being offered.

JPNS 1010 - First Semester Japanese

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Introductory course assuming no significant previous experience with the language. Beginners and students with less than two years of high school language should register for this class. Emphasis on everyday conversation and exposure to cultural perspectives.

JPNS 1020 - Second Semester Japanese

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Continuation of JPNS 1010. Basic language skills including listening, speaking, reading, writing and culture.

JPNS 1700 - Conversational Skills

Credits: (1-3)

Course Fee: \$8.00

Course Fee Purpose: Cover the costs of classroom equipment maintenance and replacement such as desktops, projectors, projector screens, and software, including the tutoring suite (EH 244) and the language lab (EH 408); consumable materials and supplies; and support for student tutors, and online instructional resources.

Description: Specific vocabulary and speaking skills in one semester (e.g., nursing, law enforcement, medical, tourism, family language courses, etc.). May be repeated for credit under different titles.

JPNS 1852 - Study Abroad

Credits: (1-3)

Description: (N=Novice) Language and culture studies for students with no previous experience in the target language and culture. Most assignments are performed in English. Prior travel experience does not apply.

May be repeated twice with a maximum of 3 credit hours.

Note: Check with Department for course availability.

JPNS 2010 - Third Semester Japanese

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of JPNS 1020. Assumes completion of first-year or equivalent experience. Students learn to understand and express ideas about their community and the world. Includes listening, speaking, reading, writing and culture.

JPNS 2020 HU - Fourth Semester Japanese

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of JPNS 2010. The learning and application of strategies for acquiring a foreign language. Students also learn how cultural products and practices reflect a culture's attitudes, values, ideas and meaning. The process of language acquisition and the seeking of cross-cultural understanding provide insights into the commonalities of how the human family learns, thinks and communicates.

JPNS 2021 - Second Year II

Credits: (3)

Description: (NH=Novice High) Continuation of JPNS 2010 without General Education Humanities credit. Offered through examination only.

Pre-requisite(s): Only available through testing.

JPNS 2030 - Second Year Language Review

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) This course will prepare students who wish to continue language study. Emphasis on conversational skills and a review of language structure and usage.

Note: Check with department for course availability.

JPNS 2851 HU - Study Abroad

Credits: (3)

Description: (NH=Novice High) Language and culture studies for students whose minimal proficiency is Novice High. Language assignments at the Novice or Intermediate-Low levels are performed in the target language. All other assignments are performed in English. Prior travel experience does not apply.

Note: Check with Department for course availability.

JPNS 2852 - Study Abroad

Credits: (1-3)

Description: (NH=Novice High) Language and culture studies for students whose minimal proficiency is at Novice High. Language assignments at the Novice or Intermediate-Low levels are performed in the target language. All other assignments are performed in English. Prior travel experience does not apply.

Twice with a maximum of 3 credit hours.

Note: Check with Department for course availability.

JPNS 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

JPNS 3000 - Proficiency Development

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) This is a transition course to upper division. The course focuses on oral proficiency development. Students will learn a variety of techniques and strategies to increase their oral proficiency in a variety of social, educational and cultural settings. Native-speaking students or those who have acquired proficiency through residence in the target language community are not eligible to take this class.

Note: Check with department for course availability.

JPNS 3060 - Grammar & Composition

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Students will read examples of writing in various modes (such as description, narration, exposition, and argument), write short compositions in those modes, and review the necessary grammar to

write correctly in those modes.

Note: Check with department for course availability.

JPNS 3116 - DLI Bridge Course I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): JPNS 2020 or AP exam with a score of 4 or better.

JPNS 3117 - DLI Bridge Course II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): JPNS 2020 or AP exam with a score of 4 or better.

JPNS 3118 - DLI Bridge Course III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): JPNS 2020 or AP exam with a score of 4 or better.

JPNS 3160 - Introduction to Literature

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Required of all majors and minors. 3160 may be taken concurrently with other literature courses. One sheltered section may be offered to students who have not had extensive in-country experience.

Note: Check with department for course availability.

JPNS 3220 - Phonetics and Phonology

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (IL=Intermediate Low) Analysis of the sounds of language and word formation: practice of native like speech patterns. Required of all teaching majors and minors.

Note: Check with department for course availability.

JPNS 3270 - Special Topics in Linguistics

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) An introduction to linguistic structures and semantic elements. The course provides useful information and practice in the language, its structures and usage. The sub-disciplines of linguistics, other than phonetics and phonology (covered in FL 3220), will be studied. These may include lexical analysis, semantics, morphology, syntax, linguistic change and dialectal variation.

Note: Check with department for course availability.

JPNS 3320 - Applied Language Studies

Credits: (1-3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Minimal proficiency level varies with content).

May be repeated up to 10 times under different titles.

JPNS 3360 - Advanced Grammar

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Analysis and application of syntactic principles and discourse structure.

Note: Check with department for course availability.

JPNS 3550 - Cultural Heritage I

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and civilization. May be repeated up to 7 times for credit and for other non-English speaking cultures.

JPNS 3560 - Cultural Heritage II

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Med) Studies in culture, history, geography, social customs, fine arts, and civilization. May be repeated 3 times for other non-English speaking cultures.

JPNS 3570 - Special Topics in Culture

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and civilization.

May be repeated up to 7 times for credit and for other non-English speaking cultures.
Note: Check with Department for course availability.

JPNS 3610 - Literature Survey I

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) A survey of the authors and works of a particular period or place. May be repeated under different titles.

JPNS 3620 - Literature Survey II

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) A survey of the authors and works of a particular period or place. May be repeated under different titles.

JPNS 3630 - Literature Poetry

Credits: (3)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM= Intermediate Mid) One literature course is required for regular and teaching majors. May be taken concurrently with JPNS 3160. May be repeated under different titles.

JPNS 3631 - Literature: Prose

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of works in prose by one or various authors of a particular period or place, or spanning several literary movements and geographical regions. May be taken 3 times up to 9 credits under different titles.

JPNS 3632 - Literature: Drama

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of theater plays by one or various authors of a particular period or place, or spanning several literary movements and geographical regions. May be taken 3 times up to 9 credits under different titles.

JPNS 3650 - Literature Periods

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with JPNS 3160.

JPNS 3670 - Literature Authors

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IN=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with JPNS 3160.

JPNS 3680 - Literature: Film

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of film by one or various filmmakers of a particular period or place, or spanning several literary movements and geographical regions.
May be taken 3 times up to 9 credits under different titles.

JPNS 3710 - Business Language I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) Business Language and Practices. Required of all commercial majors.

JPNS 3715 - Business Language II

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate High) Advanced Business Language and Practices. Required of all commercial majors.

JPNS 3720 - Language for Specific Purposes I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) This course is content, vocabulary and culture-based. The course focuses on practical vocabulary, idiomatic expressions, professional terminology and cultural interactions on a variety of topics such as language for the medical professions, social workers, law enforcement or tourism.

JPNS 3730 - Language for Specific Purposes II

Credits: (3)**Course Fee:** \$8.00**Course Fee Purpose:** Maintain technology in the FL lab, EH 408, and classroom technology.**Description:** (IM=Intermediate Mid) This course is content, vocabulary and culture-based. The course focuses on practical vocabulary, idiomatic expressions, professional terminology and cultural interactions on a variety of topics, such as language for medical professions, social work, law enforcement or tourism.**JPNS 3740 - Translation I****Credits: (3)****Course Fee:** \$8.00**Course Fee Purpose:** Maintain technology in the FL lab, EH 408, and classroom technology.**Description:** (IM=Intermediate Mid) Introduction to basic techniques and skills needed for bilingual translation of non-fiction texts. Emphasis will be on the translation into English, and on the stylistic, syntactic, cultural, lexical, and terminological problems. Students are given ample opportunity to apply these techniques through a series of written translation assignments, which form the basis for class discussion.**JPNS 3750 - Introduction to Interpreting****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Course Fee:** \$8.00**Course Fee Purpose:** Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.**Description:** Introduction to basic techniques and skills needed for bilingual interpretation in a variety of professional settings. The course includes an overview and history of the interpreting industry and work of interpreters, certification and licensure, and the variety of consumers and modalities with which interpreters work. Ethical decision-making models and the Code of Ethics for interpreters are explored.**JPNS 3850 - Study Abroad****Credits: (1-6)****Description:** (IM=Intermediate Mid) Language and culture studies for students whose language proficiency is Intermediate Low to Intermediate High. All Intermediate and Advanced tasks will be performed in the target language. All Superior tasks may be performed in English. Prior travel experience does not apply. May be repeated up to 10 times for credit.**JPNS 4620 - Survey of Literature I****Credits: (3)****Course Fee:** \$8.00**Course Fee Purpose:** Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.**Description:** (IH=Intermediate High) One literature course is required of regular and teaching majors.**Pre-requisite(s):** JPNS 3160.**JPNS 4630 - Survey of Literature II****Credits: (3)****Course Fee:** \$8.00**Course Fee Purpose:** Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (IH=Intermediate High) One literature course is required of regular and teaching majors.
Pre-requisite(s): JPNS 3160.

JPNS 4690 - Special Topics in Literature

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (IH=Intermediate High) Detailed analysis of a particular body of literature. For students whose proficiency in the target language is at least Intermediate High.

Pre-requisite(s): JPNS 3160.

JPNS 4740 - Translation II

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) Development of techniques and skills needed for bilingual translation of non-fiction texts. Emphasis will be on the translation into the target language. Methods of contrastive linguistics to analyze pertinent aspects of language structure, involving syntax, vocabulary and style, as well as basic theoretical-historical concepts are employed. Students are given ample opportunity to apply these techniques and concepts through a series of written translation assignments, which form the basis for class discussion. Prerequisite/Co-requisite: FL 3740 is strongly advised, but not required.

JPNS 4830 - Directed Readings

Credits: (1-3)

Description: (IH=Intermediate High) Independent readings under the direction of a faculty member.

May be repeated up to 10 times.

Note: Check with Department for course availability.

JPNS 4850 - Study Abroad

Credits: (3)

Description: (A=Advanced) Language and culture studies for students whose language proficiency is Advanced or Superior. All tasks are performed in the target language. Prior travel experience does not apply.

JPNS 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: (Minimal proficiency level; varies with content). Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Course not currently being offered.

KOR 1010 - First Semester Korean

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Introductory course assuming no significant previous experience with the language. Beginners and students with less than two years of high school language should register for this class. Emphasis on everyday conversation and exposure to cultural perspectives.

KOR 1020 - Second Semester Korean

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (N=Novice) Continuation of KOR 1010. Basic language skills including listening, speaking, reading, writing and culture.

Suggested Requisite(s): KOR 1010.

KOR 2010 - Third Semester Korean

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of KOR 1020. Assumes completion of first-year or equivalent experience. Students learn to understand and express ideas about their community and the world. Includes listening, speaking, reading, writing and culture.

Suggested Requisite(s): KOR 1020.

KOR 2020 HU - Fourth Semester Korean

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (NH=Novice High) Continuation of KOR 2010. The learning and application of strategies for acquiring a foreign language. Students also learn how cultural products and practices reflect a culture's attitudes, values, ideas and meaning. The process of language acquisition and the seeking of cross-cultural understanding provide insights into the commonalities of how the human family learns, thinks and communicates.

Suggested Requisite(s): KOR 2010.

KOR 2030 - Second Year Language Review

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem-Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: (NH=Novice High) This course will prepare students who wish to continue language study. Emphasis on conversational skills and a review of language structure and usage.

Note: Check with department for course availability.

KOR 3060 - Grammar & Composition

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: (IL=Intermediate Low) Students will read examples of writing in various modes (such as description, narration, exposition, and argument), write short compositions in those modes, and review the necessary grammar to write correctly in those modes.

Pre-requisite(s): KOR 2020 or equivalent proficiency.

KOR 3160 - Introduction to Literature

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: (IL=Intermediate Low). This is an introductory literature class. In this class, students will learn about Korean authors, about different literary genres and literary movements, and about the cultures and social environments within which these literary works are produced. Students will also learn how to analyze a literary text and how to express those ideas both in oral form and in writing. KOR 3160 may be taken concurrently with other literature courses.

Pre-requisite(s): KOR 2020 or equivalent proficiency.

KOR 3550 - Cultural Heritage I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: (Intermediate Mid) In-depth studies in Korean culture, history, geography, social customs, fine arts and civilization.

Pre-requisite(s): KOR 2020 or equivalent proficiency.

KOR 3810 - Experimental Course

Credits: (3)

Experimental Course, Contact Department for More Information

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

KOR 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

KOR 4830 - Directed Readings

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: (IH=Intermediate High) Independent readings under the direction of a faculty member.

Note: Check with Department for course availability.

LIBS 1704 - Information Navigator

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Description: Students completing this course will be able to use an academic library and the Internet to successfully identify, access, evaluate and use information resources to support academic success and lifelong learning.

LIBS 2504 - Information Resources in History

Credits: (1)

Typically Taught Spring Semester: *Full Sem, Online*

Description: Intended for students interested in history, this one credit hour course will assist them in developing information literacy and basic research skills to support life-long learning. Students will develop skills in identifying, locating, retrieving, documenting and critically evaluating both electronic and print resources that are appropriate for undergraduate research, with an emphasis on resources in history.

LIBS 2604 - Information Resources in Education

Credits: (1)

Typically Taught Summer Semester: *1st Blk, Online*

Typically Taught Fall Semester: *1st Blk, 2nd Blk, Online*

Typically Taught Spring Semester: *1st Blk, 2nd Blk, Online*

Description: Intended for students interested in education, this one-credit hour course will assist in developing information literacy and academic research skills, and an understanding of academic integrity issues unique to the field of education. Students will develop skills in identifying, locating, retrieving, documenting, and critically evaluating both electronic and print resources that are appropriate for undergraduate research, with emphasis in education and related disciplines.

Cross-Listed with EDUC 2604.

LIBS 2704 - Information Resources in the Business Disciplines

Credits: (1)

Typically Taught Fall Semester: *1st Blk, 2nd Blk, Online*

Typically Taught Spring Semester: *1st Blk, 2nd Blk, Online*

Description: Information Resources in the Business Disciplines is a one credit hour course that will assist students in developing information literacy and basic research skills to support life-long learning. Students will develop skills in identifying, locating, retrieving, documenting, and critically evaluating both electronic and print resources that are appropriate for undergraduate research, with emphasis in the business disciplines.

Cross listed with BSAD 2704.

LIBS 2804 - Information Resources in the Social Sciences

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Intended for students interested in the social sciences, this one credit hour course will assist them in developing information literacy and basic research skills to support life-long learning. Students will develop skills in identifying, locating, retrieving, documenting and critically evaluating both electronic and print resources that are appropriate for undergraduate research, with an emphasis on resources in the social sciences.

LIBS 2904 - Information Resources in the Health Professions

Credits: (1)**Typically Taught Summer Semester:** *Full Sem, Online***Typically Taught Fall Semester:** *Full Sem, Online***Typically Taught Spring Semester:** *Full Sem, Online*

Description: Intended for students interested in the health professions, this one-credit hour course will assist in developing information literacy and research skills. Students completing this course will be able to use an academic library and the Internet to successfully identify, access, evaluate and use information resources to support academic and clinical success and lifelong learning. Emphasis is placed on resources in the health sciences.

Cross-listed as HTHS 2904.

LING 4830 - Directed Readings in Linguistics**Credits: (1-3)**

Description: Directed readings may be undertaken in the general area of linguistics, whether theoretical or applied. Specific topics are to be selected in consultation with the instructor and the linguistics minor program coordinator. The amount of material to be read, and any written assignments based on the reading, will be at the discretion of the instructor; it will be based on the level of the topic and the degree of difficulty of the reading, consistent with existing departmental or university guidelines.

Pre-requisite(s): ENGL 3010 Introduction to Linguistics is a prerequisite for this course. The prerequisite may be waived or replaced by an equivalent at the discretion of the instructor in consultation with the linguistics minor program coordinator.

May be repeated twice with a maximum of 3 credit hours.

Note: This course is offered as needed.

LING 4900 - Variable Topics in Linguistics**Credits: (1-3)****Variable Title****Typically Taught Spring Semester:** *Full Sem*

Description: This course will offer opportunities for classroom study beyond those available in the regular course offerings for the linguistics minor. Topics will vary according to the interests of students and the expertise of the instructor; for example, advanced syntax, sociolinguistics, language typology, language and the law, artificial intelligence, neurolinguistics, and language death. The course may be taken more than once with different content.

Pre-requisite(s): ENGL 3010 Introduction to Linguistics is a prerequisite for this course. The prerequisite may be waived or replaced by an equivalent at the discretion of the instructor in consultation with the linguistics minor program coordinator.

May be repeated twice with a maximum of 3 credit hours.

Note: This course is offered as needed.

LING 4990 - Centering Experience**Credits: (.5)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: The Centering Experience is the final requirement for the minor in linguistics at Weber State. Students will assemble a portfolio of their work in linguistics and write a reflection paper.

Note: This course is credit/no credit.

MACC 6120 - Financial Accounting & Reporting**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: In-depth coverage of financial accounting and reporting topics from a theoretical and practical standpoint through a combination of lectures, research projects, case studies, and other homework assignments. Topics include accounting for leases, income taxes, investments, consolidations, foreign currency transactions, FASB Accounting Standards Codification, etc.

MACC 6130 - Governmental and Nonprofit Accounting

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A study of governmental and nonprofit accounting concepts including revenue and expense recognition; asset and liability valuation; and reporting, disclosure, and financial analysis. Includes in-depth discussion of the new GASB reporting model for governments and analysis of actual government financial statements produced using the new model. Not currently taught.

MACC 6141 - Accounting for Global and Complex Entities

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Issues in international accounting not covered in Intermediate Accounting are covered in this course. The course also covers concepts related to accounting for complex entities, consolidated entities and partnerships. Students who have taken ACTG 4140 - Accounting for Global and Complex Entities will not be permitted to take this course.

Suggested Requisite(s): ACTG 3120.

MACC 6160 - Financial Statement Analysis

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Comprehensive study of the analysis and interpretation of financial statements by external decision makers and the impact of accounting conventions and alternative standards on analytical measures.

MACC 6180 - Advanced Accounting Data Analytics

Credits: (3)

Description: Prepare students to apply data analytics in a systematic fashion to different domains of accounting and develop key skills required for an analytics mindset that are valued significantly by industry. The skills we will focus in developing are data preparation and understanding quality of data, performing descriptive data analysis, data manipulation, addressing business and accounting problems using statistical analysis, and creating visualizations that allow business users to see data with new insights.

Pre-requisite(s): QUAN 2600, MBA 6050 , and ACTG 2010 or MBA 6020 or instructor's permission.

MACC 6210 - Business Law and Legal Liability

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: A study of important business law topics accounting and taxation professionals should be familiar with including contracts, business organizations, securities, discrimination, banking, and property will be discussed. Legal liability of accounting and taxation professionals will also be addressed.

MACC 6310 - Advanced Cost Accounting

Credits: (3)

Description: Advanced cost accounting topics including cost accounting for non-manufacturing organizations, human information processing, activity resource usage, pricing, performance measurement, and non-routine decisions.

Note: This course is not currently offered.

MACC 6330 - Strategic Management Accounting**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: A study and analysis of advanced managerial accounting subjects. Examines the impact of accounting information on managerial processes including planning, organizing, and controlling.

MACC 6510 - Auditing**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Generally-accepted auditing standards, professional responsibilities, evidence, internal control, sampling, audit tests, and audit reports. Students who have taken ACTG 4510 - Auditing will not be permitted to take this course.

MACC 6560 - Advanced Auditing & Assurance Services**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: Advanced topics of auditing and assurance services including professional and technical aspects of auditing practice, introduction to SEC, ethics and legal responsibilities, fraud, recent auditing developments, sampling techniques for decision making, internal control, and risk assessment. This course includes preparation for CPA AUD exam, utilizing exam preparation materials.

Pre-requisite(s): ACTG 4510.

MACC 6570 - Information Systems Auditing**Credits: (3)**

Description: Methods, techniques, controls, and procedures used in the audit of computerized accounting systems.

Note: This course is not currently offered.

MACC 6580 - Internal Auditing**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: Internal audit profession, internal control, risk assessment, evidence gathering, audit management, internal/external auditor relations, environmental auditing and federal sentencing guidelines, and audit reporting.

MACC 6590 - Risk Assessment, and Internal Controls**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: Enterprise risk management, risk modeling, fraud risks, internal controls in business and IT processes.

MACC 6610 - Advanced Accounting Information Systems

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$80.00

Course Fee Purpose: Online software training modules in Percipio by Skillport. Receive an access key at the first of the semester.

Description: An advanced study of accounting information systems including general ledger, principles, tools, and techniques for controls, database systems, management query, and data analysis tools and systems. Course integrates projects and case studies where applicable.

MACC 6695 INT - Graduate Accounting Internship

Credits: (1-3)

Typically Taught: **Various**

Description: A significant professional-level field experience in the area of accounting or taxation. The student will be counseled and supervised as he/she applies and integrates the knowledge and skills obtained through MAcc/MTax courses.

Pre-requisite(s): Admission to the MAcc or MTax program; approval by department chair and program director. Can be repeated once up to 6 credit hours.

MACC 6700 - CPA Examination Review: FAR

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is a directed self-study course designed to help students prepare for the Financial Accounting and Reporting (FAR) section of the CPA examination. This is a review course and assumes that the student has already taken a number of financial accounting courses. A faculty member will monitor the student's progress and a grade will be determined by the student's performance on weekly quizzes and a final examination. This course should not be taken concurrently with MAcc 6560 without instructor approval as both are using CPA exam preparation materials.

Pre-requisite(s): The student must be admitted to the Master of Accounting (MAcc) or Master of Taxation (MTax) program.

MACC 6750 - Study Abroad

Credits: (3)

Variable Title

Description: This course integrates international travel and site visits with the study of accounting and international business practices. Through readings, assignments, discussions, and visits to important business and cultural sites, the course builds understanding and competence as it relates to the history of accounting, the global accounting profession, and the business and cultural environment in the host countries.

Pre-requisite(s): The student must be admitted to the MAcc or MTax program.

MACC 6801 - Individual Study

Credits: (1-3)

Description: Individual work or work in small groups, by arrangement, on special topics not included in the announced course offerings.

Pre-requisite(s): Approval of Graduate Coordinator and Instructor.

MACC 6802 - Individual Study

Credits: (1-3)

Description: Individual work or work in small groups, by arrangement, on special topics not included in the announced course offerings.

Pre-requisite(s): Approval of Graduate Coordinator and Instructor.

MACC 6803 - Individual Study

Credits: (1-3)

Description: Individual work or work in small groups, by arrangement, on special topics not included in the announced course offerings.

Pre-requisite(s): Approval of Graduate Coordinator and Instructor.

MACC 6810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MACC 6991 - Lecture Seminar

Credits: (1-3)

Description: Lecture and discussion of current accounting topics by individuals from business and industry.

MACC 6992 - Lecture Seminar

Credits: (1-3)

Description: Lecture and discussion of current accounting topics by individuals from business and industry.

MACC 6993 - Lecture Seminar

Credits: (1-3)

Description: Lecture and discussion of current accounting topics by individuals from business and industry.

MATH 0810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

MATH 0940 - Math Foundations

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course includes mastery of the contextual, conceptual, and procedural understanding of whole numbers, fractions, with an introduction to mixed numbers, integers, and decimals. This includes learning the

language of mathematics, numeracy, and problem solving, with a focus on developing a growth mindset for mathematics. This course prepares students for success in MATH 0950.

MATH 0950 ND - Pre-algebra

Credits: (4)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$19.00

Course Fee Purpose: Course fee pays for academic support services, such as math tutoring and testing services.

Description: An introduction to mathematical literacy including number sense, algebraic thinking, proportional reasoning, and math learning strategies. Topics include properties of and operations with whole numbers, integers, decimals, fractions and percent; introductory operations and applications with exponents, algebraic expressions, linear equations, and basic geometry. Course fees include math assistance from tutoring services. Does not count toward graduation. Prerequisite: none.

MATH 0970 ND - Pathway to Contemporary Mathematics

Credits: (5)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$19.00

Course Fee Purpose: The course fee pays for Academic Support Centers and Programs, such as math tutoring and testing services.

Description: This course integrates geometry, numeracy, proportional reasoning, algebraic reasoning, and topics in statistics and functions (linear, quadratic, rational, radical, exponential and logarithmic) using modeling, problem solving, and critical thinking. The course fee for this course includes homework software and math assistance from tutoring services. This course may not be transferred to other USHE schools.

Pre-requisite(s): MATH 0950 or Level 2 placement.

MATH 0990 ND - Beginning Algebra

Credits: (4)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$19.00

Course Fee Purpose: Course fee pays for academic support services, such as math tutoring and testing services.

Description: An introduction to algebraic literacy using properties of real numbers, solving linear equations and inequalities, geometry, ratio and proportion, applications, graphing, solving linear systems, exponents, scientific notation, polynomials, factoring, and solving quadratic equations. Learning strategies for mathematics success, including development of a mathematical growth mindset are integrated into the course.

Pre-requisite(s): MATH 0950 or equivalent placement.

Note: Does not count toward graduation.

MATH 1010 - Intermediate Algebra

Credits: (4-5)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$19.00

Course Fee Purpose: Course fee pays for academic support services, such as math tutoring and testing services.

Description: Inequalities (including absolute value and systems), systems of equations, applications, functions (inverse, exponential, and logarithmic), variation, factoring, rational expressions, radicals, complex numbers, quadratic equations, parabolas, circles, quadratic formula, formulas, properties and applications of logarithms. The course fee for this course includes homework software and math assistance from tutoring services.

Pre-requisite(s): MATH 0990 or Level 3 placement.

MATH 1020 - Fundamentals of Geometry

Credits: (3)

Description: An introduction to the definitions, methods, and logic of geometry.

Pre-requisite(s): MATH 0990 or placement test.

Note: This course is offered as needed.

MATH 1030 QL - Contemporary Mathematics

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Topics from mathematics which convey to the student the beauty and utility of mathematics, and which illustrate its application to modern society. Topics include geometry, statistics, probability, and growth and form.

Pre-requisite(s): MATH 0970 or MATH 1010 or ACT Math score 21 or higher or placement test.

MATH 1035 QL - Contemporary Mathematics with Prerequisite Topics

Credits: (6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will center on topics including: proportional reasoning, financial mathematics, linear and exponential modeling, geometry, probability and statistics. Material will be introduced in the form of real-life problems. Pre-requisite material will be incorporated as appropriate.

Pre-requisite(s): MATH 0950 or ALEKS score of 14 or ACT score of 17 or instructor approval.

MATH 1036 QL/CC - Mathematics and Movement for the Whole Person

Credits: (6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will center on topics including proportional reasoning, financial mathematics, linear and exponential modeling, geometry, and probability and statistics. Material will be introduced in the form of movement and choreographic tasks. The course also investigates how agency and creativity open access to learning for a diverse group of students. Prerequisite material will be incorporated as appropriate.

Pre-requisite(s): MATH 0950 with C or better or ALEKS score of 14 or ACT score of 17 or MATH 0970 or MATH 0990 or MATH 1010 or MATH 1020 or MATH 1030.

MATH 1040 QL - Introduction to Statistics

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Basic concepts of probability and statistics including data collection and analysis, correlation and regression, probability, discrete and continuous distributions (binomial, normal and t distributions), estimation and hypothesis testing, with an emphasis on applications and understanding of the main ideas.

Pre-requisite(s): MATH 1010, Math ACT score 23 or higher, Placement Test, MATH 1050, MATH 1080 or MATH 1210 and above.

MATH 1050 QL - College Algebra

Credits: (4)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: This course covers a survey of college mathematics and is also a preparatory course for calculus. Topics from continuous mathematics include polynomial, rational, exponential and logarithmic functions, equations and their applications, absolute value, polynomial and rational inequalities, and nonlinear systems. Topics from discrete mathematics include matrices, matrix algebra and inverses, and determinants.

Pre-requisite(s): MATH 1010 or Math ACT score of 23 or higher or placement test.

MATH 1060 QL - Trigonometry

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is true to its Greek title root "triangle-measure" and is a preparatory course for calculus. Topics include trigonometric functions and their graphs, trigonometric identities, inverse trigonometric functions, trigonometric equations, solving triangles, and applications of trigonometry. Complex numbers, polar coordinates and vectors are also introduced.

Pre-requisite(s): MATH 1010 or MATH 1050 or Math ACT score of 23 or higher or placement test.

MATH 1080 QL - Pre-calculus

Credits: (5)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is an accelerated course that covers the main topics of College Algebra and Trigonometry. It is a single course prerequisite to calculus and is primarily for those students that need a review. Topics include polynomial, rational, exponential and logarithmic functions, equations and their applications, absolute value, polynomial and rational inequalities, and nonlinear systems; matrices, matrix algebra and inverses, determinants, sequences and series; trigonometric functions and their graphs, trigonometric identities, inverse trigonometric functions, trigonometric equations, solving triangles, and applications of trigonometry. In addition, conics and polar coordinates are also covered.

Pre-requisite(s): MATH 1010 or Math ACT score of 23 or higher or placement test.

MATH 1090 QL - Business College Algebra

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Concepts and applications of functions and graphs, polynomial and rational functions, matrices,

Gaussian elimination, exponential and logarithmic functions, growth, periodic and continuously compounded interest, arithmetic and geometric series, annuities and loans. Applications mainly to business and economic problems.

Pre-requisite(s): MATH 1010 with a grade of C or better or ACT math score of at least 23, or placement test. Math prerequisites (courses and test scores) expire after 24 months (see www.weber.edu/placement/math-details.html).

MATH 1110 QL - Calculus Concepts and Applications

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A conceptual understanding of the fundamental notions of calculus (limits, continuity, differentiation and integration). Application of these ideas to economics, the social and life sciences, and natural resource modeling is central to the course.

Pre-requisite(s): MATH 1050 QL or MATH 1080 QL or placement test.

MATH 1120 QL - Foundations of Data Science

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students will acquire the knowledge and skills used in data science at an introductory level. The course will focus on interaction between statistical and mathematical reasoning and their application to the collection, preparation, and presentation of data and underlying data management skill for such analysis. Access to a computer is required.

Pre-requisite(s): MATH 1010, or ACT math score of 23 or higher, or a placement test.

MATH 1200 - Mathematics Computer Laboratory

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Solving mathematics problems at the appropriate level for students' backgrounds using a computer algebra system.

Pre-requisite(s): MATH 1050 and MATH 1060, or MATH 1080, or

Pre-requisite/Co-requisite: MATH 1210.

MATH 1210 - Calculus I

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Limits, continuity, differentiation, integration.

Pre-requisite(s): MATH 1050 and MATH 1060 or MATH 1080 or placement test.

Co-Requisite(s): The ability to use a computer algebra system.

MATH 1216 - Integral Calculus

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Definite, indefinite, and improper integrals, transcendental functions, inverse functions, techniques of integration, applications of integration.

Pre-requisite(s): MATH 1210.

MATH 1220 - Calculus II

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Transcendental functions, techniques of integration, analytic geometry, infinite series.

Pre-requisite(s): MATH 1210.

Co-Requisite(s): The ability to use a computer algebra system.

MATH 1630 - Discrete Mathematics Applied to Computing

Credits: (4)

Description: An overview of the fundamentals of algorithmic, discrete mathematics applied to computation using a contemporary programming language. Topics include logic, proofs, sets, functions, counting, relations, graphs, trees, Boolean algebra, and models of computation. This course includes programming.

Pre-requisite(s): MATH 1050 or MATH 1080, and CS 1400 or ability to program in a contemporary computer language and the consent of the instructor.

Note: This course is offered as needed.

MATH 1810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MATH 2010 - Arithmetic for Elementary Teachers

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Prospective school teachers revisit mathematics topics from the K-8 school curriculum and examine them from an advanced perspective including arithmetic, number theory, and problem solving.

Pre-requisite(s): ACT score of 23 or better, Accuplacer CLM of 50 or better, MATH 1010 with a C or better, MATH 0970 with a C or better or completion of any math course MATH 1030 or above with a C or better.

MATH 2015 - Algebra for Elementary Teachers

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Prospective school teachers revisit mathematics topics from the K-8 school curriculum and examine them from an advanced perspective including variables, expressions, equations and inequalities, and functions. This course includes recitation and hands on activities. The goal is to present mathematical concepts and effective teaching strategies in an integrated manner. Underlying goals are to stimulate variety in solution processes, provide concrete, pictorial and abstract models, develop communication, collaboration and math reading skills in an

environment rich with manipulatives and technology.

Pre-requisite(s): MATH 2010.

MATH 2020 QL - Geometry for Elementary Teachers

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Prospective elementary school teachers revisit mathematics topics from the elementary school curriculum and examine them from an advanced perspective including probability, statistics, geometry and measurement.

Pre-requisite(s): MATH 2015.

MATH 2120 - Euclidean Geometry

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Exploration of Euclidean geometry, from basic concepts to advanced theorems.

Pre-requisite(s): MATH 1210 or consent of instructor.

MATH 2210 - Calculus III

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Vector algebra, vector valued functions, multivariable functions, partial derivatives, multiple integrals, line integrals, integration in vector fields.

Pre-requisite(s): MATH 1220.

MATH 2250 - Linear Algebra and Differential Equations

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: Introduction to Linear Algebra and Differential Equations. Systems of linear equations, matrices, vector spaces, eigenvalues. First and second order differential equations and models, higher order linear equations, linear systems.

Pre-requisite(s): MATH 1220.

MATH 2270 - Elementary Linear Algebra

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Systems of linear equations, matrices, vector spaces, eigenvalues linear transformations, orthogonality.

Pre-requisite(s): MATH 1220 OR MATH 1210 and a choice of MATH 3110 or MATH 3160.

MATH 2280 - Ordinary Differential Equations

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Methods of solution for ordinary differential equations. Exact equations, linear equations Laplace Transforms, series solutions.

Pre-requisite(s): MATH 1220.

MATH 2410 - Foundations of Probability and Statistics

Credits: (3)

Description: An introduction to probability and statistics with special emphasis on concepts in the K-12 school curriculum.

Pre-requisite(s): MATH 1210 or MATH 1050 and consent of instructor.

Note: This course is offered as needed.

MATH 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

MATH 2925 - Mathematics Monday

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A high impact mathematical educational experience through diverse topics and methods of learning. To form a mathematical community for appreciation and dissemination of mathematics. To develop skills of independent learning, critical thinking, effective verbal and written communication skills, and working within a group.

Learning Outcomes:

1. Exposure to a variety of mathematical topics.
2. Opportunity for mathematical and interpersonal growth.

Topics not typically covered in standard mathematics courses. Topics and activities are at the discretion of the instructor.

Pre-requisite(s): MATH 1220 Calculus II with a grade of C or better.

This course may be taken three times for a total of 3 credit hours.

MATH 2990 - Seminar in Mathematics

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Joint sessions of students and faculty dedicated to the discussion of topics in mathematics and mathematics education. Students will attend seminars, participate in discussions, and write reviews of the presentations.

Pre-requisite(s): MATH 1210 and ENGL 2010, or consent of instructor.

The course may be taken 5 times and up to 6 credits.

MATH 3040 - Applied Statistical Computing

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Computational methods for collecting, manipulating, exploring, and graphing data. Basic principles of exploratory data analysis and statistical graphical methods. Numerical optimization and integration pertinent for statistical calculations; simulation and Monte Carlo methods; bootstrapping; and other modern topics. All the computing methods will be illustrated using version control, R, SAS, SQL, Python, and appropriate choice of data visualization.

Pre-requisite(s): MATH 1040 or MATH 3410 or MATH 1120 or PSY 3600 or QUAN 2600 or SOC 3600 or CJ 3600 or permission of instructor.

MATH 3050 - History of Mathematics

Credits: (3)

Description: A survey of the history of mathematics and its impact on world culture with emphasis on mathematical motivations, original methods and applications.

Pre-requisite(s): MATH 1220.

Note: Check with Department for course availability.

MATH 3110 - Foundations of Algebra

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to Abstract Algebra, Number Theory and Logic with an emphasis on problem solving and proof writing.

Pre-requisite(s): MATH 1210.

MATH 3120 - Foundations of Euclidean and Non-Euclidean Geometry

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Axiomatic development of geometry; Euclidean and non-Euclidean.

Pre-requisite(s): MTHE 3117 or instructor consent.

MATH 3160 - Number Theory

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: An overview of beginning number theory including the integers, modulo arithmetic, congruencies, Fermat's theorem and Euler's theorem.

Pre-requisite(s): MATH 1210.

MATH 3270 - Linear Algebra

Credits: (3)

Typically Taught Spring Semester: *Full Sem, alternate years*

Description: Theory and applications of linear algebra including abstract vector spaces and canonical forms of matrices.

Pre-requisite(s): MATH 2270.

MATH 3280 - Dynamical Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem, alternate even years*

Description: Linear and nonlinear systems of differential equations, qualitative behavior and stability of solutions, applications.

Pre-requisite(s): MATH 2270 and MATH 2280.

MATH 3310 - Statistical Data Mining and Text Analytics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will equip students with the advanced knowledge and practical skills necessary to navigate the vast landscapes of modern datasets. Recognizing the critical role of data in contemporary scientific research, this course aims to empower students with a deep understanding of data mining techniques and predictive analytics methodologies for all Statisticians and Data Scientists.

Pre-requisite(s): MATH 1210 or MATH 1040 or MATH 1120 or permission from instructor.

MATH 3410 - Probability and Statistics I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introductory probability theory and mathematical statistics, including applications.

Pre-requisite(s): MATH 1220.

MATH 3420 - Probability and Statistics II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A continuation of MATH 3410-Introductory probability theory and mathematical statistics, including applications.

Pre-requisite(s): MATH 2210 and MATH 3410.

MATH 3450 - Advanced Statistical Methods

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: This applied statistics course discusses study design, data exploration and visualization, choosing among statistical techniques, and the interpretation of statistical results. Analyses, including T-tests, ANOVA, regression and their non-parametric versions, will be performed on real-world data sets using statistical software.

Pre-requisite(s): MATH 3410 or MATH 1120 or (MATH 1040 and a three-credit 3000 or 4000 level course with one of the following designations: MATH, BTNY, CHEM, PHYS, GEO, MICR, ZOOL, CS, ECE, ME, FIN, ECON). Students may also enroll with permission of instructor.

MATH 3550 - Introduction to Mathematical Modeling

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Formulation, solution and interpretation of mathematical models for problems occurring in areas of physical, biological and social science.

Pre-requisite(s): MATH 1200 and (MATH 2270 or MATH 2280).

MATH 3610 - Graph Theory

Credits: (3)

Typically Taught Fall Semester: *Full Sem, odd years*

Description: Principles of Graph Theory including methods and models, special types of graphs, paths and circuits, coloring, networks, and other applications.

Pre-requisite(s): MATH 1220 OR MATH 1210 and a choice of MATH 3110 or MATH 3160.

MATH 3620 - Enumeration

Credits: (3)

Typically Taught Spring Semester: *Full Sem, even years*

Description: Principles of Enumeration including counting principles, generating functions, recurrence relations, inclusion-exclusion, and applications.

Pre-requisite(s): MATH 1220 OR MATH 1210 and a choice of MATH 3110 or MATH 3160.

MATH 3710 - Boundary Value Problems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Fourier series and the method of separation of variables. Heat, wave, and potential equations, Sturm-Liouville problems, orthogonal functions, special functions.

Pre-requisite(s): MATH 2210 and [MATH 2250 or MATH 2280].

MATH 3810 - Complex Variables

Credits: (3)

Typically Taught Fall Semester: *Full Sem, odd years*

Description: Analysis and applications of a function of a single complex variable. Analytic function theory, path integration, Taylor and Laurent series and elementary conformal mapping are studied.

Pre-requisite(s): MATH 2210.

May be repeated for a total maximum of 6 credit hours.

MATH 4010 - Capstone Mathematics for High School Teachers

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Prospective high school teachers revisit mathematics topics from the secondary school curriculum and examine them from an advanced perspective. The major emphasis is on topics from algebra and geometry.

Pre-requisite(s): MATH 3110 and MATH 3120.

MATH 4075 - Time Series Data Analysis

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Time series analysis is a fundamental technique in statistics to model data that is common in many applications and tasks for statisticians. Time series allows statisticians to model data with dependencies or with seasonal trends in the data to accurately use predictive models to form predictions. Common examples include financial, travel, health, and weather data.

Pre-requisite(s): MATH 3450 or MATH 3410 or (MATH 1210 and (MATH 1040 or MATH 1120)).

MATH 4110 - Modern Algebra I

Credits: (3)

Typically Taught Fall Semester: *Full Sem, odd years*

Description: Logic, sets, and the study of algebraic systems including groups, rings, and fields.

Pre-requisite(s): MATH 2270 and MATH 3110.

MATH 4120 - Modern Algebra II

Credits: (3)

Typically Taught Spring Semester: *Full Sem, even years*

Description: A continuation of MATH 4110: advanced topics from groups, rings, and fields including the Sylow theorems and Galois theory.

Pre-requisite(s): MATH 4110.

MATH 4160 - Introduction to Mathematical Cryptography

Credits: (3)

Description: An introduction to the mathematical concepts on which cryptography is based and an introduction to basic cryptographic systems. The course will typically be offered every other year.

Pre-requisite(s): (MATH 3110 or 3160 or 4110 or 3410) and CS 1400.

Note: This course is offered as needed.

MATH 4210 - Introductory Real Analysis I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Develop the analysis underlying calculus. In-depth study of limits, continuity, integration, differentiation, sequences and series. Other topics may include Lebesgue measure and integration and Fourier Analysis.

Pre-requisite(s): MATH 2210, MATH 2270, and MATH 3110.

MATH 4220 - Introductory Real Analysis II

Credits: (3)

Typically Taught Spring Semester: *Full Sem, odd years*

Description: A continuation of MATH 4210-Develop the analysis underlying calculus. In-depth study of limits, continuity, integration, differentiation, sequences and series. Other topics may include Lebesgue measure and integration and Fourier Analysis.

Pre-requisite(s): MATH 4210.

MATH 4320 - Topology

Credits: (3)

Typically Taught Fall Semester: *Full Sem, even years*

Description: Introduction to point-set topology, including metric and topological spaces, continuity, homeomorphisms, compact and connected spaces, and complete metric spaces. Other topics may include the Baire Category Theorem and Tietze Extension Theorem.

Pre-requisite(s): MATH 2210, MATH 2270 and MATH 3110.

MATH 4400 - Statistical Learning

Credits: (3)

Description: Students will learn about Statistical Learning and Data Science. Specifically you will learn about

common statistical methods and algorithms used by Amazon, Facebook, and Google to make predictive models for data. This course will have an emphasis on modeling (numeric and non numeric) data, model selection, and neural networks.

Pre-requisite(s): MATH 3450, or MATH 3410 or {MATH 1210 and (MATH 1040 or MATH 1120)}.

Pre-requisite/Co-requisite: CS 1400 or CS 2550.

Note: This course is offered as needed.

MATH 4610 - Numerical Analysis I

Credits: (3)

Typically Taught Fall Semester: *Full Sem, even years*

Description: Introduction to numerical methods. Use of the digital computer in solving otherwise intractable problems.

Pre-requisite(s): MATH 2270 and an ability to use a programming language

MATH 4620 - Numerical Analysis II

Credits: (3)

Typically Taught Spring Semester: *Full Sem, odd years*

Description: A continuation of MATH 4610-Introduction to numerical methods. Use of the digital computer in solving otherwise intractable problems.

Pre-requisite(s): MATH 4610.

MATH 4650 - Probabilistic Deep Learning

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: This advanced course is designed to bridge the gap between theoretical machine learning (ML) concepts and their practical applications, particularly in the field of Deep Learning & Pattern Recognition. Students will gain firsthand experience in applying cutting-edge techniques to tackle challenges with real-world datasets, focusing on both the theory and the statistical aspects of Deep Learning.

Pre-requisite(s): MATH 2270 and (one of these courses: MATH 3410 or MATH 1040 or MATH 1120).

MATH 4710 - Partial Differential Equations

Credits: (3)

Typically Taught Spring Semester: *Full Sem, odd years*

Description: Partial differential equations. First and second order equations, characteristics and classifications, methods of solution, applications.

Pre-requisite(s): MATH 3710.

MATH 4750 - Topics in Mathematics

Credits: (2-4)

Variable Title

Description: This course will vary with the demand.

Pre-requisite(s): Consent of the instructor.

May be taken more than once for a maximum of 8 credit hours.

Note: This course is offered as needed.

MATH 4910 - Senior Research Project

Credits: (3)

Description: Mathematical research project for seniors. Students may not register for this course the last semester before they intend to graduate.

Pre-requisite(s): Instructor approval.

Note: This course is offered as needed.

MATH 4920 - Short Courses, Workshops, Institutes and Special Programs**Credits: (1-4)****Variable Title**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

Note: This course is offered as needed.

MATH 4925 - Problems, Journals, and Research in Mathematics**Credits: (1)**

Typically Taught Fall Semester: *Full Sem, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 2nd Blk*

Description: Development and demonstration of independent learning and communication skills through advanced problems solving, presenting journal articles, or undergraduate research under guidance of an advisor.

Pre-requisite/Co-requisite: MATH 2925.

This course may be repeated once for a total of 2 credit hours.

MATH 6400 - Advanced Statistical Learning**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: Students will learn about Statistical Learning and Data Science which are so widely used in the technology sector and beyond. You will learn about common statistical methods and algorithms used by Amazon, Facebook, and Google to make predictive models for data. This course will have an emphasis on modeling (numeric and non-numeric) data, model selection, and neural networks.

Pre-requisite(s): MATH 3410 or MATH 3450 or (MATH 1220 and MATH 1040).

MATH 6450 - Applied Statistics & Regression**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: Students learn the knowledge and skills necessary for applied statistical analysis. These methods allow focus typically on a selection of advanced regression analysis, missing data, categorical data analysis, time series in relation to regression, colinear data, and model and variable selection. This course also focuses on Applied Statistics & Regression in the context of both a statistical and data scientist view point as this course is part of the Masters of Data Science.

Pre-requisite(s): MATH 3450 or MATH 3410 or MATH 4400 or CS 4580.

MATH 6500 - Factor and Cluster Analysis**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: Students learn the methodology used in big data applications, learn how to make sense out of large data, understand how to analyze survey data with factor analysis, determine distinct groups with the data using cluster analysis, and understand relationships within data. The course will make use of statistical analysis software, and students will be expected to understand both the results of the output and theoretical considerations of the

analysis.

Pre-requisite(s): MATH 2270 and (MATH 3450 or MATH 3410 or MATH 4400 or CS 4580) or permission of instructor.

MATH 6900 - Capstone in Statistics and Data Science

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students are required to complete a substantial statistical or data science project. Students must demonstrate proficiency in data analysis, presentation, solving an applied data problem. Students receive T (temporary) grades until successful completion of the project and dissemination, after which the course grade will be changed retroactively.

Pre-requisite(s): Permission of the instructor.

MATH 6920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): Permission of the instructor.

May be repeated for a total maximum of 6 credit hours.

MBA 6010 - Legal and Regulatory Environment of Business

Credits: (3)

Typically Taught Spring Semester: *2nd Blk*

Description: This course is an introduction to business law, emphasizing basic legal principles and the broad application of domestic and international public and private law. Its overriding objective is to provide a working understanding of the legal environment of business for MBA students. Its focus is on regulatory law, business organizations, and other legal topics of special importance to managers of businesses.

Note: Course offerings are subject to change.

MBA 6020 - Financial and Managerial Accounting

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Description: A general study of the use of accounting information by internal and external decision makers with emphasis on the use of accounting information by managers of an entity. Topics covered include the accounting cycle, the basic financial statements, inventories, long-term liabilities, cost concepts and behaviors, cost-volume-profit analysis, and financial statement analysis.

Note: Course offerings are subject to change.

MBA 6040 - Managerial Economics

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Description: This course develops the basic concepts and analytical tools of economics which include opportunity

cost, marginal analysis, constraints, and optimizing behavior. Applications include theories of the firm, its organizational architecture, transactions costs, markets, pricing, and other managerial issues.

Note: Course offerings are subject to change.

MBA 6050 - Quantitative Methods I

Credits: (3)

Typically Taught Fall Semester: *1st Blk-Online*

Course Fee: \$50.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures such as tutoring for statistics (MBA 6050/6051) courses and paper/toner and small repairs in the MBA computer lab.

Description: This class will give students the opportunity to learn how to write, read, and analyze statistical data as it pertains to business and society. The basic premise of this course is to provide the student with an understanding of statistics as it is used in business and economics. This course will give special emphasis to understanding, interpreting and communicating statistics. Topics covered include descriptive statistics, probability, probability distributions, sampling distributions and hypothesis testing.

Pre-requisite(s): Additional course work in College Algebra may be required prior to course registration as per department advisement and student's program of study requirements.

Note: Course offerings subject to change.

MBA 6051 - Quantitative Methods II

Credits: (3)

Typically Taught Fall Semester: *2nd Blk*

Description: This course will build on the first foundation course on descriptive statistics by emphasizing inferential statistics. This course will be application oriented and will focus on hypothesis testing and regression analysis. Students will learn how to design a survey and evaluate the data in order to test theories learned in other MBA classes. Students will also learn basic concepts and methods of optimization using elementary concepts in differential calculus. Additional foundation course work in statistics may be required prior to course registration as per department advisement and student's program of study requirements.

Pre-requisite(s): MBA 6050, or equivalent course in statistics.

Note: Course offerings are subject to change.

MBA 6110 - Fundamentals of Ethical Leadership

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *2nd Blk*

Typically Taught Spring Semester: *1st Blk*

Course Fee: \$12.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MBA conference room, MBA student computer lab, and hybrid/virtual classrooms, guest speaker costs, software licenses, and program assessment materials.

Description: This course is designed to be taken at the beginning of formal course work in the MBA program. Students will explore various aspects of moral reasoning and apply these concepts to common ethical issues faced in business. Students will work individually and in groups to explore issues of personal values, self-awareness, teamwork, communication, managing differences, and career management. Students in this course will be introduced to analytical, communication, and technological tools used throughout the program.

Note: Course offerings are subject to change.

MBA 6120 - Organizational Behavior

Credits: (3)**Typically Taught Fall Semester:** *1st Blk***Typically Taught Spring Semester:** *1st Blk***Course Fee:** \$12.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MBA conference room, MBA student computer lab, and hybrid/virtual classrooms, guest speaker costs, software licenses, and program assessment materials.

Description: This is a course for graduate students who have already been exposed to the principles of management and organizational behavior and who are now seeking a more advanced preparation for the behavioral role of the manager. It offers a critical review of the factors that influence behavior within the organizational setting. Behavioral concepts are emphasized which particularly relate to group dynamics, interpersonal relations, and ultimately, organizational effectiveness. In short, this course deals with the human aspects of management--the kinds of problems most frequently experienced in day-to-day interaction with others. The format will include discussions, group and individual exercises, case studies, and student reports.

Note: Course offerings are subject to change.

MBA 6130 - Financial Management**Credits: (3)****Typically Taught Fall Semester:** *1st Blk***Typically Taught Spring Semester:** *1st Blk***Course Fee:** \$12.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MBA conference room, MBA student computer lab, and hybrid/virtual classrooms, guest speaker costs, software licenses, and program assessment materials.

Description: Financial Management is a detailed presentation of the practices, techniques, and applications of theory in corporate finance. The focus is an understanding of how companies operate and acquire the tools necessary to analyze and evaluate corporate financial policies. Cases and applied research in the form of outside readings will assist students to focus on key issues. The purpose of the course is to assist current and prospective managers in making better investment and financing decisions. The course addresses (1) the investment decision (capital budgeting) as well as (2) the financing decision. Class discussion and cases will focus on capital budgeting and specifically on the establishment of goals, development of strategy, identification of investment opportunities, evaluation of projects, implementation of projects, and the monitoring processes. Shareholder wealth maximization is the standard for determining why one decision is "better" than another. The ethical considerations of wealth maximization will also be addressed. Additional foundation course work in accounting and statistics may be required prior to course registration as per department advisement and student's program of study requirements.

Pre-requisite(s): MBA 6020 and MBA 6050 and MBA 6051, or equivalent courses in accounting and statistics.

Note: Course offerings are subject to change.

MBA 6140 - Marketing Management**Credits: (3)****Typically Taught Fall Semester:** *1st Blk***Typically Taught Spring Semester:** *2nd Blk***Course Fee:** \$12.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MBA conference room, MBA student computer lab, and hybrid/virtual classrooms, guest speaker costs, software licenses, and program assessment materials.

Description: This course centers on creating customer value profitability in competitive markets. In an integrative fashion, it covers analyzing customer needs and preferences; estimating market potential; assessing market opportunities and threats in view of the focal company's and its competitors' resources and capabilities; developing

market and marketing strategies; making astute product, pricing, distribution, and promotion decisions; and measuring marketing performance.

Pedagogical vehicles include lectures, reading assignments, and case-based discussions and reports.

Note: Course offerings are subject to change.

MBA 6150 - Operations/Supply Chain Management

Credits: (3)

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Course Fee: \$12.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MBA conference room, MBA student computer lab, and hybrid/virtual classrooms, guest speaker costs, software licenses, and program assessment materials.

Description: "Manufacturing of the future will be required to meet customer-driven demand instantaneously." The future is now! The requirements for faster response, more customer input, and greater product variety have not diminished, but instead have escalated. This course builds upon basic production and operations management knowledge to meet the needs of customers generated in today's global market. It is designed to enhance the student's understanding of how to analyze problems related to design, planning, control, and improvement of manufacturing and service operations. Topics include, but are not limited to, supply chain management, materials management, production planning and control, scheduling, capacity and facilities planning, manufacturing strategy, and global operations. Additional foundation course work in statistics may be required prior to course registration as per department advisement and student's program of study requirements.

Pre-requisite(s): MBA 6050 and MBA 6051, or equivalent courses in statistics.

Note: Course offerings are subject to change.

MBA 6160 - Applications of Decision Models

Credits: (3)

Typically Taught Fall Semester: *2nd Blk*

Description: This course presents a rigorous treatment of quantitative decision-making with emphasis on data collection, analysis, and model building. This course emphasizes experience in structuring realistic business problems, collecting data, developing an appropriate model for analysis, and interpreting and defending results. A number of cases are employed. Additional foundation course work in statistics may be required prior to course registration as per department advisement and student's program of study requirements.

Pre-requisite(s): MBA 6050 and MBA 6051, or equivalent courses in statistics.

Note: Course offerings are subject to change.

MBA 6170 - Corporate Communications

Credits: (3)

Description: The focus of this course is to develop an integrated corporate communications program in organizations which will provide effective communication both to internal and external stakeholders. Among the topics to be discussed are corporate image and identity, corporate advertising and advocacy, media relations, marketing, communication, financial communication, community relations, corporate philanthropy, government affairs and crisis communication. Attention will also be given to effective communication internally through various methods, such as meetings, programs and publications.

Note: This course is not currently offered.

MBA 6180 - Strategic Management

Credits: (3)**Typically Taught Summer Semester:** *1st Blk***Typically Taught Fall Semester:** *2nd Blk***Typically Taught Spring Semester:** *2nd Blk*

Description: This course takes a broad view of the entire organization. In some instances, the organization will have one line of business. In other cases, the organization may be a large diversified corporation with many lines of business. We will examine the strategic issues facing diversified corporations including: vertical integration, diversification into related and unrelated businesses, and operating synergies.

Pre-requisite(s): MBA 6130, MBA 6140, MBA 6150, MBA 6110.

Note: Course offerings are subject to change.

MBA 6210 - Management Accounting and Control**Credits: (3)****Typically Taught Fall Semester:** *2nd Blk***Typically Taught Spring Semester:** *2nd Blk***Course Fee:** \$12.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MBA conference room, MBA student computer lab, and hybrid/virtual classrooms, guest speaker costs, software licenses, and program assessment materials.

Description: This course is designed to introduce the student to the concepts and procedures of managerial accounting through readings and case studies. The course emphasizes the use of accounting data in the decision-making process by internal decision-makers (e.g., management), rather than external decision-makers (e.g., stockholders, investors, creditors, and regulatory bodies). The course topics include cost terms and concepts, job-order costing, activity-based costing, quality management, cost behavior, cost-volume-profit analysis, profit planning, relevant costs, capital budgeting, cost allocation, and pricing. Additional foundation course work in accounting may be required prior to course registration as per department advisement and student's program of study requirements.

Pre-requisite(s): MBA 6020, or equivalent courses in accounting.

Note: Course offerings are subject to change.

MBA 6260 - Data Visualization Using Tableau**Credits: (3)****Typically Taught Summer Semester:** *1st Blk, 2nd Blk***Typically Taught Fall Semester:** *1st Blk, 2nd Blk***Typically Taught Spring Semester:** *1st Blk, 2nd Blk*

Description: This course will provide a solid foundational understanding of data visualization with plenty of opportunities to practice and develop visualization skills. This course aims to provide students with a foundational understanding of data visualization and enable them to think through and interact with big data. The overall goal of the course is to teach problem-solving and analysis skills that can be applied to any type of data with any of the numerous tools available.

MBA 6310 - Information Technology in the Enterprise**Credits: (3)****Typically Taught Summer Semester:** *1st Blk***Typically Taught Fall Semester:** *2nd Blk*

Description: Information technology from an enterprise perspective with an orientation toward the management of technology for competitive/ strategic advantage. Managers will be increasingly responsible for making decisions with respect to implementing new technology. This course will provide the background knowledge to enable managers in traditional business units to function as full participants in decisions involving the purchase and application of technology to create a business advantage.

Note: Course offerings are subject to change.

MBA 6320 - Strategic Procurement

Credits: (3)

Typically Taught Spring Semester: *1st Blk*

Description: In this course, students learn about the crucial role of procurement as a strategic function that drives competitive advantage in global markets. Students will explore the strategic frameworks, analytical tools, and decision-making processes essential for effective procurement management. The course covers the entire procurement lifecycle, from supplier selection and relationship management to risk mitigation and sustainable sourcing. Key topics include strategic sourcing, procurement analytics, supply chain integration, contract negotiation, and global sourcing strategies.

MBA 6330 - Logistics

Credits: (3)

Typically Taught Fall Semester: *2nd Blk*

Description: As companies increasingly operate across borders, efficient logistics and effective supply chain strategies are essential for sustainable competitive advantage. In this course, students explore global logistics and supply chain management and develop strategic insights and practical skills to optimize the movement of goods and information across complex national and international networks. Through case studies, simulations, and interactive discussions, students will examine how global supply chains are designed, managed, and optimized to balance cost, speed, flexibility, and sustainability. Topics include demand forecasting, inventory management, transportation planning, risk mitigation, and the impact of emerging technologies.

Pre-requisite(s): MBA 6150.

MBA 6360 - Aerospace Program Management

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Description: Within the context of the aerospace industry, students will be taught how to manage change across multiple projects using program management techniques. In organizations in which multiple strategic initiatives as well as continuous improvement projects are ongoing, understanding how to successfully plan and execute is vital. Note: Course offerings are subject to change.

MBA 6370 - CPI & Strategy in Aerospace Management

Credits: (3)

Typically Taught Spring Semester: *2nd Blk*

Description: This management course is designed to teach aerospace business managers how to use the tools in Continuous Process Improvement (CPI) to attain and maintain operational excellence. The course includes relevant CPI tools such as Lean, Six Sigma, Theory of Constraints and Benchmarking. The course will also show managers how to conduct a strategic planning session with senior leadership and strategically align their organizations to maximize the use of CPI tools.

Pre-requisite(s): Admission to the MBA Program or approval to seek the stand-alone Graduate Certificate in Aerospace Management. This course is an elective for all MBA students, but is a required course for students seeking the Graduate Certificate in Aerospace Management. Students must complete prerequisites of MBA 6050, 6051 and MBA 6150 prior to registering for this course.

Note: Course offerings are subject to change.

MBA 6410 - Global Macroeconomic Conditions

Credits: (3)

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Course Fee: \$12.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MBA conference room, MBA student computer lab, and hybrid/virtual classrooms, guest speaker costs, software licenses, and program assessment materials.

Description: This course will focus on the impact of global macroeconomic conditions on firm decision-making. To review and analyze current macroeconomic topics, a theoretical framework is developed, from the start showing the linkages among national economies. This framework is used to analyze and forecast business cycles, interest rates, exchange rates, causes of trade deficits, short- and long-term consequences of fiscal and monetary policy decisions, and the globalization of financial markets. Examples from different countries are used to enhance knowledge of the world economy. Additional foundation course work in economics may be required prior to course registration as per department advisement and student's program of study requirements.

Pre-requisite(s): MBA 6040, or equivalent course in economics.

Note: Course offerings are subject to change.

MBA 6420 - The Economics of Industry

Credits: (3)

Description: This course will focus on the behavior of the individual firm in different market settings, competitive and imperfectly competitive. We are concerned with the strategic behavior of firms under different industry structures as they struggle with the pressures of competition. Students will study how differing levels of the firm's market power impacts pricing and output policies, product differentiation, and barriers to entry. In addition, the student will learn the basics of game theory and use it to analyze the strategic behavior of firms. Topics will include different types of pricing strategies including price discrimination, pricing of product lines, predatory pricing, peak load pricing, and entry deterrence. Issues of non-price competition such as research and development, information, externalities, moral hazard, and firm structure will also be discussed. The course includes both supplemental readings designed to illustrate real-world applications of the theoretical principles developed as well as in-class experiments in strategic behavior designed to illustrate certain theoretical conclusions. Additional foundation course work in economics may be required prior to course registration as per department advisement and student's program of study requirements.

Pre-requisite(s): MBA 6040, or equivalent course in economics.

Note: This course is not currently offered.

MBA 6430 - International Marketing

Credits: (3)

Typically Taught Spring Semester: 1st Blk

Description: The course provides foundational knowledge and practical application of international marketing principles and practices so as to prepare participants for entry-level marketing positions in the global context.

Note: Course offerings are subject to change.

MBA 6440 - Strategic Leadership

Credits: (3)

Typically Taught Fall Semester: 1st Blk

Description: This course will expose students to the strategic nature of leadership. Students will evaluate and discuss key principles and frameworks of leadership through the case method. Students will study leadership styles, situational leadership, personal leadership, and power & influence, as they relate to strategy.

Note: Course offerings are subject to change.

MBA 6450 - Leadership Through People Skills

Credits: (3)**Typically Taught Fall Semester:** *1st Blk***Typically Taught Spring Semester:** *1st Blk*

Description: This course will provide a highly applied introduction to the interpersonal dynamics of leading and motivating others. Emphasis will be placed on the development and acquisition of key behaviors, skills, techniques and mental models for influencing others through sound people skills. By means of hands-on application, role-playing and "learning-by-doing" activities, students will learn to listen for understanding and insight; gain commitment rather than compliance; manage conflict; adapt their style to different people; apply influence skills in all directions; and develop insights into their impact on others.

Note: Course offerings are subject to change.

MBA 6460 - Leadership Through Character**Credits: (3)****Typically Taught Spring Semester:** *1st Blk Online, 2 Blk Online*

Description: This course takes a character and values-based focus to developing students' understanding of and capacity for effective leadership. Covered concepts include: identifying and understanding one's own core values and capabilities; a deeper understanding of leadership as it pertains to power, influence and motivation; and the socio-psychological aspects of successfully leading and interacting with others. The course also includes a deeply immersive experiential component whereby students are coached through a self-guided development planning and application process focused on improving on a leadership competency that is mutually selected by the student and instructor. An in-depth personal exploration of each student's unique leadership capabilities and growth opportunities is central to the learning objectives for this course.

MBA 6510 - Investment Analysis and Portfolio Management**Credits: (3)**

Description: This course engages class participants in a detailed study of the practices, techniques, policies and applications of theory in investments. Emphasis will be on an understanding of security markets, analysis, asset allocation, portfolio management and evaluation. Students will examine and apply investment tools and evaluate financial policies. Cases and applied research in the form of outside readings will assist students to focus on key issues and current topics. Course work in finance may be required prior to course registration as per department advisement and student's program of study requirements.

Pre-requisite(s): MBA 6130.

Note: This course is not currently offered.

MBA 6520 - International Business Field Studies**Credits: (3)****Typically Taught Summer Semester:** *1st Blk*

Description: This course integrates international travel and site visits with the study of international business topics. Through readings, assignments, discussions, and visits to important business and cultural sites in the destination countries, the course builds understanding and competence in international business practices and managing across cultures. This course entails travel expenses beyond regular tuition and may be repeated when offered to a different world region.

May be repeated 3 times with a maximum of 9 credit hours.

Note: Course offerings are subject to change.

MBA 6530 - E-Business**Credits: (3)****Typically Taught Spring Semester:** *2nd Blk*

Description: The Internet has become an important influence in the world. Business on the internet, in terms of

operations, marketing, security, etc., has increased concomitantly in influence. This course will provide a foundation for understanding the possibilities and potential pitfalls for doing e-business.

Note: Course offerings are subject to change.

MBA 6540 - Negotiations

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Description: The purpose of this course is to provide opportunities for class participants to develop their negotiating abilities for use in organizational and other settings. The course is premised on the assumption that negotiating concepts are best learned through practice which is grounded in rigorous analysis and reflection. While theoretical principles and concepts from various reference disciplines (such as social psychology, sociology, and economics) will be presented through lectures and readings, this course will focus primarily on improving practical skills. Class participants will not only learn to enhance their individual abilities in dyadic and group situations, but also to analyze contexts for the most effective application of these skills.

Note: Course offerings are subject to change.

MBA 6550 - Managing and Improving Quality

Credits: (3)

Description: This course examines how organizations can gain competitive advantage by improving the quality and productivity of their business processes, manufactured goods and service outputs. Customer-focused approaches for designing, controlling and improving processes are emphasized, together with other concepts and approaches of quality management. Specific topics include process analysis, problem-solving methods, variability and statistical process control, performance measurement, and quality management systems. Guest lectures from industry professionals, experiential learning exercises and cases from manufacturing and service industries will assist students in understanding key issues and current topics.

Pre-requisite(s): MBA 6050 & MBA 6051, or equivalent courses in statistics.

Note: Courses offered as needed.

MBA 6560 - Business/Market Planning Using Online Resources

Credits: (3)

Typically Taught Summer Semester: *1st Block, 1st Blk Online*

Description: In this hands-on project-oriented course, students learn to (1) develop and write effective business/marketing plans and (2) use online resources to gather pertinent market, competitor, and environmental information. Students may develop a business/marketing plan for an existing business or for a potential start-up of interest to them. Alternatively, they may write a business/marketing plan and conduct requisite research and data analyses for a business suggested by the course instructor. Learning is facilitated primarily via practical discovery exercises, an extensive term project, and coaching.

Although lectures and reading assignments serve to convey essential background knowledge, especially during the first half of the course, much class time is devoted to working on plans in teams under the instructor's guidance.

Note: This course is not currently offered.

MBA 6580 - Project Management

Credits: (3)

Typically Taught Spring Semester: *1st Blk*

Description: This course is a study of topics involved with managing projects. It examines the roles and skills of the project manager and the project office. Students will study the phases of the project life cycle, specifically the activities, requirements, methodologies, and tools common in project management.

Note: Course offerings are subject to change.

MBA 6590 - Strategic Business Tax Planning

Credits: (3)

Description: This course examines tax strategy and planning topics related to making important business decisions. The course addresses business formations, operations, terminations, reorganizations, acquisitions, and divisions. The course also covers tax issues related to multi-state and multi-national business transactions. Unique issues related to executive compensation, partnerships, limited liability companies, S corporations and C corporations are also addressed.

Pre-requisite(s): MBA 6010 or equivalent course in business law; MBA 6020 or equivalent courses in accounting.

Note: This course is not currently offered.

MBA 6620 - Data Mining for Business

Credits: (3)

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Description: The broad availability of data, either within organization or about market trends, has led to increasing interest in the methods for extracting useful information and knowledge from data. This course will change the way you think about data and its role in organization. We will examine how data mining technologies can be used to improve decision-making. We will study the principles and techniques of data mining, and we will examine real-world examples and cases to place data-mining techniques in context, to develop data-analytic thinking, and to illustrate that proper application is as much an art as it is a science.

Pre-requisite(s): MBA 6050 & MBA 6051 or equivalent courses in statistics or instructor approval.

MBA 6630 - Networking

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course covers the role of networking technology in information systems. Through hands-on and conceptual knowledge, students will learn how data communications and networks are used to facilitate decentralized and distributed systems in support of decision making. Various aspects of networking including standards, media, network design and applications will be covered. Students will gain hands-on familiarity with a local area network and the Internet.

Pre-requisite(s): Admittance to MACC, MBA or MHA program.

Note: Course offerings are subject to change.

MBA 6640 - Cyber Security

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course covers the basic principles and concepts in information assurance. It examines the managerial, operational, and organizational issues of securing information systems. Topics include legal and ethical issues in computer security; privacy concerns; malware; security awareness at the executive, technical and user levels; physical security, personnel security issues; policies and procedures; the need for enterprise security awareness; and the need for an enterprise security organization. Case studies and exercises in the computer lab will be used to provide examples of the need for organizations to develop security procedures and policies.

Pre-requisite(s): Admittance to MACC, MBA or MHA program.

Note: Course offerings are subject to change.

MBA 6650 - Penetration Testing

Credits: (3)**Typically Taught Fall Semester:** *1st Block***Typically Taught Spring Semester:** *1st Block*

Description: This course looks at how penetration testing can help improve information security within organizations. This course will discuss issues related to ethical hacking, scanning, enumeration, systems hacking, social engineering, malware, vulnerability analysis, session hijacking, denial of service attacks, Web attacks, ID, cryptographic attacks, and IoT vulnerabilities.

Pre-requisite(s): MBA 6630 and MBA 6640, or instructor approval.

MBA 6660 - Forecasting and Time Series**Credits: (3)****Typically Taught Spring Semester:** *Full Sem, 1st Blk, 2nd Blk*

Description: This course is intended to provide students with applied interest with up to date techniques used in the forecasting of time series. These techniques will be motivated by specific practical problems and will be used in forecasting practices. Although the flavor of this course will be mainly applied, we will need to review and develop some technical background. The emphasis of the class is on practical application and computer implementation.

Pre-requisite(s): MBA 6050 & MBA 6051 or equivalent courses in statistics or instructor approval.

MBA 6670 - Cloud Computing**Credits: (3)****Typically Taught Fall Semester:** *Full Sem, 1st Blk, 2nd Blk*

Description: Cloud computing is widely used by nearly all organizations to store and process data, host applications, and scale growth effectively. This course will look at how cloud providers (AWS) operate. It will also discuss issues related to security, maintenance, scalability, cost effectiveness, service models, architecture, and deployment models.

MBA 6680 - Graduate Consulting Project**Credits: (3)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Graduate students are given the opportunity to consult with an existing organization, make recommendations for improvements, and assist in implementing changes in the organization. Students meet periodically with supervising faculty to review results.

Pre-requisite(s): Instructor approval.

Note: Course offerings are subject to change.

MBA 6700 SUS - Managing for Sustainability**Credits: (3)**

Description: This course explores how business organizations can address environmental issues to meet societal needs and create competitive advantages. Emphasis is placed on understanding the impacts of businesses on the natural environment; identifying the opportunities for businesses to align their strategies and practices toward more sustainable business models; and using various methods and tools for measuring and improving the environmental performance of individual business organizations and the business system as a whole. Major topics include frameworks for understanding business and environmental sustainability; innovation, design and assessment of green products/services; green marketing issues; green purchasing; environmental management systems; operations and supply chain management issues for environmental sustainability.

Pre-requisite(s): Admission to MBA program; or graduate standing with permission of the MBA program.

Note: This course is not currently offered.

MBA 6710 - Accounting and Finance for Environmental Sustainability

Credits: (3)

Description: This course will expose MBA students to contemporary accounting and finance thought on environmental sustainability. The course will be divided into accounting and finance modules. The focus of the accounting module will include measurement and reporting of the environmental sustainability of business practices. The focus of the finance module will include capital budgeting for sustainability, financial assessment of sustainable business practices, and investing in environmental sustainability.

Note: This course is not currently offered.

MBA 6715 - Sustainability Tools and Methods

Credits: (3)

Description: This hybrid 8-week course consists of weekly modules, each of which addresses key aspects of sustainability-related business practices. Weekly topics are designed to explore in more depth specific sustainability-related tools and methods as they relate and add value to various aspects of business operations, including finance, accounting, supply chain management, information technology, stakeholder relations, and strategic planning. Secondly, students will gain an overview of the tools, techniques and bodies of knowledge through which they may pursue sustainability-related projects or entrepreneurship within their organizations. The course will utilize sustainability practitioners and subject-matter experts from a variety of organizational backgrounds.

Pre-requisite(s): MBA 6700; Admission to the MBA Program or Graduate Certificate in Sustainability in Business.

Note: This course is not currently offered.

MBA 6720 - Business, Economics, and the Environment

Credits: (3)

Description: Environmental economics considers the efficient and equitable use of society's scarce environmental resources. Environmental resources include air, water, land, wildlife, biodiversity, and ecological systems. The allocation of environmental resources will be considered from different perspectives: (1) market allocations; (2) efficient allocations; (3) equitable allocations; and (4) government attempts to allocate these resources efficiently. Topics of the course include property rights, market failures, benefit-cost analysis, welfare economics, non-market valuation, environmental regulation, and sustainable development and business practices. Emphasis will be placed on the impacts on the firm resulting from environmental problems and regulations; and on sustainable business practices.

Pre-requisite(s): MBA 6040, MBA 6051 or equivalent.

Note: This course is not currently offered.

MBA 6730 - Consulting Project in Sustainability

Credits: (3)

Description: Graduate students are given the opportunity to consult with an existing organization, evaluate sustainable business practices, make recommendations for improvements, and assist in implementing changes in the organization. Students meet periodically with supervising faculty to review results.

Pre-requisite(s): Instructor approval and MBA 6700, MBA 6710, and MBA 6720.

Note: This course is not currently offered.

MBA 6740 - Principles of Contract Management

Credits: (3)

Typically Taught Summer Semester: 2nd Blk

Description: Students will gain an overview of the fundamentals of contract management from the development of acquisition requirements, solicitation/proposal, negotiation, contract formation, contract performance, and contract closeout. Learn the basics of what it takes to solicit, procure, negotiate and administer contracts and subcontracts

while gaining a broad understanding of business principles to establish long-term relationships with customers, suppliers and other stakeholders. Explore an insider's view of the roles and responsibilities of contract administrators and the various interfaces with program management and other internal disciplines. Learn how to identify the basic differences between contract types and how they are selected to mitigate risk in a contractual environment, as well as exploring the key distinctions between commercial, government and international contracting processes.
Note: Course offerings are subject to change.

MBA 6750 - Financial Aspects of Contract Management

Credits: (3)

Typically Taught Fall Semester: *1st Blk*

Description: Within the context of contract management, students will learn how to structure cash flow through financial methods that include invoice timing, pricing, overhead considerations, advance payments, letters of credit and other financial sources. Gain a comprehensive knowledge of accounting systems, budgeting, reporting, auditing and settlements. Enhance the profitability of your business through prudent contracting financial practices.

Note: Course offerings are subject to change.

MBA 6760 - Legal Aspects of Contract Management

Credits: (3)

Typically Taught Fall Semester: *2nd Blk*

Description: Within the context of contract management, students will gain a working knowledge of stakeholder requirements, applicable common law, Federal Acquisition Regulations (FAR), Uniform Commercial Code (UCC) and other local, state and federal regulations and law that must be adhered to throughout the contract management process. Students will learn the legal aspects of contract management with an emphasis on real world, day-to-day application. Students will explore all phases of managing an approved contract successfully through completion of performance including change management, communications, negotiations, contract types, terms and conditions, risks, defaults, terminations, claims and much more. Students will participate in projects and discussions to rapidly enhance knowledge and proficiency in contract management in order to apply classroom concepts in the workplace.

Note: Course offerings are subject to change.

MBA 6800 - Directed Study

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed individual study and research on special topics related to business.

Pre-requisite(s): Written approval of MBA program and instructor.

May be repeated for a cumulative total of three credits.

Note: Course offerings are subject to change.

MBA 6810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MBA 6850 - Business Development and Entrepreneurship

Credits: (3)**Typically Taught Summer Semester:** *2nd Blk*

Description: Students will learn how to effectively come up with an idea, iterate around that idea, and validate customers around their final direction so that they can learn how to successfully launch an idea into a business with low risk, low capital, and higher degrees for success. In addition, if a student is interested in learning how to be a better "intrapreneur" this course will help them use some of these same skills in a corporate or employee environment. Being innovative and creative is always valuable.

Note: Course offerings are subject to change.

MBA 6870 - Sales Strategy & Management**Credits: (3)****Typically Taught Summer Semester:** *1st Blk, 2nd Blk*

Description: This course looks at advanced selling techniques or the skills that make a salesperson and/or business leader successful in large or complex sales. These sales differ from the simple sales because they involve high-value goods or services, a sophisticated customer or business executive, and there is a continuing relationship after the sale. This course will build managerial relationship-selling skills that can be used in many settings.

MBA 6890 - MBA Internship**Credits: (1-3)****Typically Taught Summer Semester:** *Full Sem - Online***Typically Taught Fall Semester:** *Full Sem - Online***Typically Taught Spring Semester:** *Full Sem - Online***Description:**

The Master's of Business Administration offers MBA students the opportunity to earn 1 to 3 elective credits for a work internship.

Pre-requisite(s): For requirements and guidelines, contact the MBA office.

May be repeated three times for a maximum of three credit hours.

MBA 6920 - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MCJ 6000 - Criminal Justice Statistics**Credits: (3)****Typically Taught Fall Semester:** *Full Sem-Online***Typically Taught Spring Semester:** *Full Sem-Online*

Description: Criminal Justice Statistics is a focus on the role of data collection and analysis in formal, empirical research projects. The course begins with a review of statistical applications including measures of central tendency, dispersion, and hypothesis testing. The course concludes with an examination of more complex analytical tools such as MANOVA, Factor Analysis, Path Analysis, and Logistical Regression. Students will review various styles of multivariate analysis in peer-reviewed scholarly literature as well as use computing resources to conduct their own multivariate analysis of a criminal justice dataset.

MCJ 6060 - Private Security

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Description: This course will examine the philosophical, practical, and legal basis of security. The role of security and the security of the individual in modern society, the concept of professionalism and the relationship to public law are reviewed. Personnel, physical, and administrative aspects to security are examined.

MCJ 6070 - Terrorism

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Course provides an overview of key research areas into terrorism, including the nature and conceptualization of terrorism, the individuals and groups that perpetrate terrorism, and counterterrorism and homeland security as responses to terrorism.

MCJ 6080 - Media and Crime

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This class uses a combination of criminal justice, sociology, and cultural studies to guide students as they examine the relationship between broad media (including social, movies, television, and music), and crime. Students will become familiar with the theoretical lenses used to assess media effects and cultural criminology. Crime and media construction, image, moral panics, and the impact of the internet on crime and deviance will also be explored.

MCJ 6090 - Ethics in Criminal Justice

Credits: (3)

Typically Taught Spring Semester: *Full Sem - Online*

Description: An advanced course in ethics as it relates to law enforcement, courts, and corrections.

MCJ 6100 - Contemporary Criminal Justice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Course provides an analysis of the policies and practices of agencies of the criminal justice system including the police, prosecution, courts and corrections. Additionally, the latest technology and developments in the field of criminal justice will be addressed.

MCJ 6110 - Research Methods in Criminal Justice

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Course teaches quantitative and qualitative research design, data collection and analysis techniques, and research presentation and dissemination methods. Descriptive and inferential statistics will be covered as well as basic computer applications in criminal justice.

MCJ 6120 - Theories of Crime and Delinquency

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Course focuses on a review of classical and current theories of criminology and delinquency and the underlying assumptions of each. Advancements in profiling and classification as well as other applications of theoretical models will be studied.

MCJ 6130 - Law and Social Control

Credits: (3)

Typically Taught Spring Semester: *Full Sem-Online*

Description: Course focuses on the nature of law and legal institutions and the relationships between law and social control. Concepts of law and justice from the perspectives of its effects on the American criminal justice system will be investigated as well as the public policy concerns of laws and their relationship to our society.

MCJ 6140 - Technology and Innovation in Criminal Justice

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Course explores the latest developments in technology and innovations in criminal justice. Included will be current developments in forensic science, i.e. DNA and the use of computer applications in criminal justice. Specific topics will be adjusted as new technologies arrive. Emphasis will be on impact and management rather than the strict science of the protocols.

MCJ 6150 - Race, Class, Gender, and Criminal Justice

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Course will sensitize and educate criminal justice professionals to issues of diversity and equity. It explores the cross-cultural contact that criminal justice professionals have with citizens, victims, suspects, and co-workers, and the influence of culture, class, race and gender in the criminal justice field.

MCJ 6160 - Criminal Justice Policy Analysis

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Course focuses on crime as a political issue and examines how conflicting political philosophies influence criminal justice policy. Emphasis will be placed on how decisions in politics affect criminal justice organizations and how these decisions can be influenced by executive managers.

MCJ 6170 - Juvenile Justice & Delinquency

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Course examines the origins and development of the juvenile justice system with particular emphasis on the current policies and practices of the agencies which process young offenders through the juvenile system. Course examines a variety of political initiatives designed to reduce the jurisdiction of the juvenile court, enhance the due process rights of juveniles, and create a more punitive approach in the juvenile justice system.

MCJ 6180 - Contemporary Legal Issues

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course exposes students to current law impacting criminal justice professionals. Topics will change depending upon current legal developments, but will include the general areas of corrections, law enforcement, employment, civil liability and criminal procedure.

MCJ 6190 - Legal Foundations of Criminal Justice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Broad survey of foundational legal topics relevant to criminal justice, including: criminal law, search and seizure, bail, right to counsel, self-incrimination, lineups, responsibilities of courtroom legal actors, speedy trial, impartial jury, plea bargaining, double jeopardy, sentencing law, inmate rights, juvenile law, death penalty law, and basic rules of evidence.

MCJ 6200 - Advanced Victimology

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This is a graduate-level seminar designed to provide an overview of key research areas in victimology. Particular emphasis will be placed on theory, measurement, and empirical results related to different types, consequences, and prevention of victimization.

MCJ 6210 - American Criminal Courts

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Course exposes students to the dynamics of the American criminal courthouse. Students will examine how defense attorneys, defendants, prosecutors, judges, juries and others interact and contribute to America's version of criminal case disposition. Course also examines the mechanics of criminal case processing, as well as how the court system is supposed to work, how it really does work, and the implications for American democracy.

MCJ 6220 - Contemporary Law Enforcement

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: From the response and investigation of crimes committed, to the theory and practice involved in crime prevention, this course studies the development, theory, history and contemporary organizational structure of America's law enforcement organizations.

MCJ 6230 - Contemporary Corrections

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Course provides an analysis of critical problems confronting contemporary adult corrections agencies. Course examines the problems of institutions, the effect of judicial intervention in corrections, alternatives to incarceration, and the political milieu in which this occurs.

MCJ 6250 - Topics in Criminal Justice

Credits: (1-3)

Variable Title

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: Course focuses on a special issue or topic in criminal justice. A new topic/issue will be selected each time the course is offered.

May be repeated with a maximum of 10 credit hours.

MCJ 6255 - Great Thoughts in Criminal Justice

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Description: This course explores the broader context of criminal justice studies and concepts through the writings of significant authors and thinkers. Readings will focus on subjects such as justice, punishment, law and social control. Students will be expected to read extensively and participate in analysis and discussion.

MCJ 6260 - Graduate Readings

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Course allows the student to examine the scholarly literature on a subject of special interest under the supervision of faculty. Reading list and accompanying assignments must be approved by the supervising faculty member. Periodic progress meetings will be scheduled throughout the semester.

May be repeated once with a maximum of 6 credit hours.

MCJ 6810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

MCJ 6920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

ME 3040 - Dynamic System Modeling

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Fundamentals of analysis, design and control of physical engineering systems. Analytical and numerical modeling of mechanical, electrical, fluid and thermal systems with applications.

Pre-requisite(s): MATH 2250 or (MATH 2270 and MATH 2280) and ENGR 2030.

ME 3050 - Machine Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Design and analysis of machine elements and machines. Material selection, connections and joints, shafts and bearings, fits and tolerances, fasteners, material failure and reliability.

Pre-requisite(s): ENGR 2030 and ENGR 2140.

ME 3060 - Control Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: maintenance and replacement of instruments and replacement of sensors and other consumable parts.

Description: Fundamental principles of feedback control theory. Stability considerations and performance analysis in time and frequency domains. Root-locus and frequency response techniques for system analysis and design. Lecture plus laboratory.

Pre-requisite(s): ME 3040 and ME 3050.

ME 3300 - Fluid Mechanics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Fundamental principles of fluid statics and dynamics. Fluid properties, flow regimes, pressure, velocity, flow rate, internal and external flow, and dimensional analysis. Applications of fluid mechanics. Lecture plus laboratory.

Pre-requisite(s): MATH 1220, ENGR 2030 and ENGR 2300.

ME 3350 - Engineering Computing

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Introduction to engineering computing with applications to the analysis and design of engineering systems using an industry-standard software platform.

Pre-requisite(s): MATH 2250 or (MATH 2270 and MATH 2280).

ME 3500 - Numerical Methods for Engineering

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Fundamental methods for the numerical solution of engineering problems. Topics include root finding, interpolation, curve fitting, differentiation, integration, differential equations and curve fitting.

Pre-requisite(s): ME 3040 and ME 3350.

ME 4000 - Heat Transfer

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Replacement of lab equipment and consumable parts.

Description: Fundamental principles of conduction, convection and radiation. Heat transfer with phase change, heat exchangers, and applications of heat transfer. Lecture plus laboratory.

Pre-requisite(s): MATH 2250 or MATH 2280 and ME 3300.

ME 4050 - Thermal-Fluid Laboratory

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: Course fees are used to maintain and periodically replace necessary laboratory equipment and instruments and to purchase required consumable materials.

Description: This laboratory course provides experiences observing, predicting, and measuring fundamental phenomena in the thermal-fluid sciences. The course focuses on hands-on learning through weekly laboratory activities. Key concepts include measurement techniques, uncertainty analysis, sensor calibration, and other measurement-related important topics.

Pre-requisite(s): ME 3300.

Co-Requisite(s): ME 4000.

ME 4100 SUS - Senior Project I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: Maintenance of machine tools and hand tools. Replacement of mills, drills, reamers, bores, etc.

Description: A mechanical engineering project will be selected for team participation. Team assignments will lead to the completion of a preliminary design phase which includes concept generation, engineering analysis and design, prototype testing, and preliminary economic analyses. Senior Project I culminates in a preliminary design review based on formal student presentations of documented engineering drawings of the proposed design.

Pre-requisite(s): ME 3060, ME 3500, ME 4000.

ME 4150 - Vibrations

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Fundamental principles of free and forced vibrations of discrete linear systems with and without damping. Multiple-degree-of-freedom systems, continuous systems, shock isolation and vibration control.

Pre-requisite(s): MATH 2250 or (MATH 2270 and MATH 2280) and ENGR 2030.

ME 4200 SUS - Senior Project II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: Maintenance of machine tools and hand tools. Replacement of mills, drills, reamers, bores, etc.

Description: Continuation of ME 4100. Team assignments will lead to the construction, testing and optimization of the design. This includes detailed engineering analysis and testing of prototypes, final parameter and tolerance design, and economic analysis of the project. Senior Project II culminates in a final design review based on formal student presentations of the documented final product and verification that the final product meets all requirements.

Pre-requisite(s): ME 4100.

ME 4250 - Finite Element Analysis

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$60.00

Course Fee Purpose: Maintenance of software license.

Description: Introduction to the finite element method. Survey of FEA theory, including element formulation, stiffness matrix operations, shape functions, etc. Application and use of commercial FEA software for engineering design and analysis.

Pre-requisite(s): MATH 2250 or (MATH 2270 and MATH 2280) and ME 3050.

ME 4300 - Material Failure Analysis

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A survey of material failure modes, including fatigue, fracture, wear and corrosion. Introduction to damage tolerant design methodologies. Case studies in material failure.

Pre-requisite(s): ENGR 2160 and ME 3050.

ME 4350 - Intermediate Mechanics of Materials

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Intermediate topics in mechanics of materials such as three-dimensional combined stress fields, stress concentrations, dynamic loads, torsion of non-circular members, plates and shells, stability and buckling of columns, and energy methods.

Pre-requisite(s): ENGR 2140.

ME 4400 - Aerodynamics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Airfoil theory, lifting bodies, boundary layers, lift and drag, compressible aerodynamics.

Pre-requisite(s): ME 3300.

ME 4440 - Compressible Fluid Flow

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Fundamentals of compressible fluid flow. Normal shock waves, Fanno flow and Rayleigh flow. Two-dimensional supersonic flows with oblique shocks and Prandtl-Meyer expansion fans. Compressible flow in nozzles and supersonic wind tunnels.

Pre-requisite(s): ME 3300 and ME 4000.

ME 4450 - Aerospace Propulsion

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Design and analysis of gas turbine engines and rocket motors. Liquid and solid fuel propulsion systems. Thermodynamics of flow associated with aerospace propulsion systems. Introduction to fuel combustion processes.

Pre-requisite(s): ME 4440.

ME 4500 - Heating, Ventilating and Air-Conditioning

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Principles of heating, ventilating and air-conditioning (HVAC) of buildings. Refrigeration systems and indoor thermal environmental control system analysis and design.

Pre-requisite(s): ME 4000.

ME 4530 - Mechatronics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Maintenance of equipment, software license and replacement of consumable parts.

Description: Study of design and implementation of mechatronic systems. Topics include microcontrollers, digital signals and logic, motor control, mechanical and electrical actuation, and feedback controls using computer vision. Students collaborate in teams on hands-on project focused on designing mechatronic systems.

Pre-requisite(s): ME 3060 and ECE 2210.

ME 4550 - Robotics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$ 50.00

Course Fee Purpose: maintenance of equipment, software license and replacement of consumable parts.

Description: Fundamentals of kinematics, dynamics, and control of robotic systems. Key topics include spatial transformations, forward and inverse kinematics, Jacobians, singularities, and trajectory generations. Students will also explore human-robot interfaces, modern computer vision applications, robot programming, and communications.

Pre-requisite(s): ME 3040 and ME 3350.

ME 4600 - Intermediate Thermal-Fluids

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Intermediate topics in thermal-fluid sciences built upon knowledge from thermodynamics, fluid mechanics and heat transfer. Topics include thermodynamic cycles, psychrometrics, piping systems, boundary layers, heat transfer with phase change, radiation, and thermal design.

Lecture plus laboratory.

Pre-requisite(s): ME 4000.

ME 4800 - Individual Research Problems

Credits: (1-3)

Typically Taught Spring Semester: *Full Sem*

Description: With permission and under the direction of faculty, the student researches a specific problem in the mechanical engineering field.

Pre-requisite(s): Permission of department.

ME 4830 - Readings in Mechanical Engineering

Credits: (1-3)

Typically Taught Spring Semester: *Full Sem*

Description: With permission and under the direction of faculty, the student studies a topic taken from the mechanical engineering literature.

Pre-requisite(s): Permission of department.

ME 4890 - Cooperative Work Experience

Credits: (1-3)

Typically Taught Spring Semester: *Full Sem*

Description: Provides academic credit for engineering work experience. Permission of department required.

Pre-requisite(s): Permission of department.

ME 4900 - Special Topics

Credits: (1-3)

Variable Title

Typically Taught Spring Semester: *Full Sem*

Description: A special topic in mechanical engineering is selected by the faculty to be taught on a one-time basis. With departmental approval, may substitute for a technical elective.

Pre-requisite(s): Permission of department.

ME 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): Permission of department.

May be repeated for a total maximum of 6 credit hours.

ME 4990 - Seminar in Mechanical Engineering

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees in ME 4990 are used to cover the cost of class handouts, consumable materials in the labs, lab computing equipment, and related software.

Description: Seminar is designed to prepare the student for professional engineering employment. Topics include resumes, interviewing techniques, engineering ethics, professionalism, patent law, social issues, lifelong learning, diversity, communication, timeliness, and continuous improvement. Lectures and presentations by faculty, staff, and guests from local engineering industry.

Pre-requisite(s): ME 4100.

MENG 5010G - Introduction to Linguistics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces students to the scientific study of language. It explores what languages have in common, as well as what distinguishes them. Students learn basic analytic techniques in articulatory phonetics, phonology, morphology, syntax, and semantics and apply them to data drawn from various languages. These core concepts may be expanded and applied to other areas, such as language acquisition, language history, language and culture, language and thought, and language and literary expression. This course is designed for students with bachelor's degrees who have no upper-division undergraduate coursework in linguistics.

MENG 5050G - Grammar, Style, and Usage for Advanced Writing

Credits: (3)

Description: This course presents the concepts and nomenclature of traditional grammar as a context for students wishing to increase their control of punctuation, style, and usage to become more proficient writers. It offers practical guidance in how grammatical concepts can be applied to revising and editing one's own or others' writing to more effectively express one's intended meaning. The course is designed for students with bachelor's degrees who have no upper-division undergraduate coursework in linguistics.

MENG 5080G - Critical Approaches to Literature

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students will study and practice critical approaches to literature. The course will begin with New Criticism and proceed to study more resistant reading strategies such as feminism, Marxism, and deconstruction. Students will not only learn the theoretical premises behind these theories, but also practice explicating various texts from a particular critical perspective.

MENG 5510G - World Literature

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students in this course read texts from a variety of eras and of authors and regions outside the United States and Great Britain. This course may not be applied to graduate degree requirements if an undergraduate survey covering the same period was applied toward an undergraduate degree.

MENG 5570G - American Literature I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will introduce students to the study of American Literature from its earliest known works to those produced prior to the American Civil War. We will examine its history, major works, and literary concepts.

MENG 5580G - American Literature II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will introduce students to the study of American Literature from the American Civil War to the contemporary period. We will examine its history, major works, and literary concepts.

MENG 5670G - British Literature I

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem*

Description: This course will introduce students to the study of British Literature from its earliest known works to those produced in the eighteenth century. We will examine its history, major works, and literary concepts.

MENG 5680G - British Literature II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will introduce students to the study of British Literature from the eighteenth century to the contemporary period. We will examine its history, major works, and literary concepts.

MENG 5730G - Literature of Cultures and Places

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students in this course read texts focusing on a single national culture or works from various cultures. This course may not be applied to graduate degree requirements if an undergraduate survey covering the same time period was applied towards undergraduate degree.

MENG 5920G - Short Courses, Workshops, Institutes and Special Programs

Credits: (1-4)

Variable Title

Description: In order to provide flexibility and to meet many different needs, a number of specific offerings are possible using this catalog number. When the number is used it will be accompanied by a brief and specific descriptive title. The specific title with the credit authorized for the particular offering will appear on the student transcript.

May be repeated 5 times with a maximum of 6 credit hours.

MENG 6005 - Intercultural Classroom Discourse

Credits: (3)

Description: Students will read, discuss and experience interactive learning tools from the fields of sociolinguistics, intercultural communication, and TESOL pedagogy. Students will analyze dialects and personal/social conversational

styles. Examples from literature and film will help provide a contextualized means of observing and understanding cultural identities.

MENG 6010 - Introduction to Graduate Studies

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students will learn research methods and methodologies that will allow them to produce publishable, sophisticated pieces of academic prose of the kind expected of professional academics. Students will compose abstracts, conference paper proposals, annotated bibliographies, and surveys of scholarship. Students will explore academic databases extensively and learn to evaluate rigorously other scholars' work. Students will be encouraged to submit their work in the class to journals, conferences, or collections of essays. Students should take this course within their first year of study and focus their research on topics that may support future work on a thesis or project. Required in first or second semester.

MENG 6030 - Studies in Literary Theory and Criticism

Credits: (3)

Variable Title

Description: Students will study influential works in literary theory--potentially ranging from Plato's *REPUBLIC* to Gayatri Spivak's groundbreaking feminist studies to Stephen Greenblatt's New Historicist studies to Homi Bhabha's postcolonial analyses--paying specific attention to the influence of these theories on English studies. May be repeated 10 times for credit hours with different content.

MENG 6100 - Literary Curriculum Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course explores theory and research in curriculum design in the field of teaching literature and literacy. With the intention of preparing teachers to design intentional, equitable curricula that serves secondary students in grades 7 - 12 grade, this course also has pragmatic implications for teaching at the collegiate level. Through surveying multiple learning and educational theories related to curriculum design, this course promotes intellectual, well-paced, and purposeful teaching in the discipline of English.

MENG 6110 - Writing for Teachers

Credits: (3)

Description: Designed primarily for in-service teachers, this course explores the most current research and theory concerning the teaching of writing and applies it to issues in the secondary classroom. Permission of instructor required to register.

MENG 6120 - Young Adult Literature

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course explores young adult literature through three critical lenses: authorship, readership, and pedagogy. This course examines theory, research, and practice in publishing, reading, and teaching young adult literature. With an explicit focus on diverse and inclusive books, this course prepares scholars to evaluate young adult literature across multiple genres, contexts, and purposes.

Note: Permission of instructor required to register.

MENG 6130 - Theories of Rhetoric and Writing Studies

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is an intensive study of rhetoric and writing theory. Selected works of major composition and rhetorical theorists will be examined and historicized within a survey of the teaching of academic writing from antiquity to the present.

MENG 6140 - Foundations of Professional and Technical Writing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course will study the theoretical foundations and scholarly practices of professional and technical writing and communication. The course will examine the major ideas of those who practice professional and technical writing and the main values and practices of the field.

MENG 6150 - Grant Writing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This class covers advanced studies in the grant writing process. Class will examine the processes of formulating legible questions and developing meaningful partnerships and move toward experience in taking action and member checking. Students in this class will master contemporary theories of audience and genre while learning action research theories of change.

MENG 6210 - Teaching Literature, Literacy, and Language in the Secondary Schools

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course explores the most current research and theory in literature, literacy, and language as it applies to teaching in secondary English classrooms. This course explores culturally sustaining pedagogical practices that affirm adolescents' knowledge and use of language.

MENG 6230 - Wasatch Range Writing Project Summer Institute

Credits: (1-6)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Description: This course is designed to follow the National Writing Project model. The four-week Invitational Institute is for inservice teachers nominated by their school district or their peers. It is designed to develop leadership skills in those teachers to enable them to impact the quality of writing instruction in their individual schools and district. It is also designed to develop teacher leadership for the Wasatch Range Writing Project. The One Week Open Institute is open to any inservice teacher wishing to improve writing instruction in his/her classroom.

Can be repeated once up to eight (8) credit hours total.

Note: Permission of instructor required to register.

MENG 6231 - Wasatch Range Writing Project Advanced Institute

Credits: (1-6)

Variable Title

Description: This is a variable topics variable title course designed for Wasatch Range Writing Project Teacher Consultants, teachers who have taken the WRWP Summer Institute and work with WRWP providing professional development to local school districts. It allows those teachers to increase their effectiveness as teachers, add to their

expertise for work with inservice teachers and research possible solutions to literacy issues facing elementary and secondary education in our region. Course titles may include: Developing Utah State Core Standards Workshops, Digital Writing, Developing Argument Writing Across the disciplines. Only six hours can be used for meeting elective requirements in the MENG program.

Pre-requisite(s): Six hours credit in MENG 6230.

May be repeated 6 times and up to 18 credit hours.

MENG 6240 - Seminar in American Literature

Credits: (3)

Variable Title

Description: This seminar explores major texts of one particular American era. The course focuses on literature which articulates the selected period.

This variable emphasis course may be repeated 10 times for credit with different content.

MENG 6250 - Seminar in British Literature

Credits: (3)

Variable Title

Description: This seminar explores major texts of one particular British era. This course focuses on the literature which articulates the selected period. This variable emphasis course may be repeated 3 times up to 6 credit hours with different subject matter.

This course may be repeated four times for a maximum of 12 credit hours.

MENG 6260 - Seminar in World Literature

Credits: (3)

Variable Title

Description: This seminar explores literature other than American or British. The course focuses on the literature which articulates the selected time and place.

This variable emphasis course may be repeated 10 times for credit with different subject matter.

MENG 6280 - TESOL Practicum

Credits: (1)

Description: TESOL practicum provides guided and supported experience in one or more of the following: tutorial, small group teaching, whole class lesson planning. Candidates will practice a variety of instructional modes for speaking, reading and writing.

Note: Instructor permission is required for registration.

MENG 6310 - Language and Sociolinguistics for Teachers

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Designed primarily for in-service teachers, this course explores recent research in linguistics and sociolinguistics, and applies it to issues in the classroom.

MENG 6320 - World Languages

Credits: (3)

Description: This course broadens students' awareness of diversity among the world's languages, thereby fostering

understanding and appreciation of the nature of human language in general. Issues may include language obsolescence and maintenance, writing systems of the world, prosody and poetic forms in other languages, language history, and language families. Some prior experience in linguistics or language structures will be helpful as students study profiles of selected languages representing major language families of the world and various geographical areas.

MENG 6330 - Literary and Rhetorical Stylistics

Credits: (3)

Description: This course surveys the literature on style in linguistics, literature, and rhetoric. Some prior background in grammar will be useful as students engage in quantitative and qualitative stylistic analysis of texts from a literary period, genre, or particular author and learn how diction, syntax, and figurative language can be deployed to communicative and artistic ends.

MENG 6410 - Strategies and Methodology of Teaching ESL/Bilingual

Credits: (3)

Typically Taught Summer Semester: *2nd Blk, Odd Years*

Typically Taught Spring Semester: *Full Sem*

Description: This course emphasizes practical strategies and methods of teaching English as a Second Language in elementary and secondary schools.

MENG 6420 - English Phonology and Syntax for ESL/Bilingual Teachers

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem, Odd Years*

Description: This course provides the foundation for ESL/Bilingual teachers in the workings of the English language: its pronunciation and spelling systems, its word-forming strategies, and its sentence structure patterns.

MENG 6450 - ESL/Bilingual Assessment: Theory, Methods, and Practices

Credits: (3)

Typically Taught Summer Semester: *2nd Blk, Even Years*

Typically Taught Fall Semester: *Full Sem*

Description: This course explores how to evaluate and implement assessment processes effectively for ESL/Bilingual pupils in public schools. Students will gain experience with both standardized test and authentic assessment.

MENG 6510 - Seminar in Eminent Writers:

Credits: (2-3)

Variable Title

Description: This seminar examines significant works of and relevant criticism on an influential writer or a small group of writers.

This variable emphasis course may be repeated 10 times for credit with different subject matter.

MENG 6520 - Seminar in Shakespeare

Credits: (3)

Typically Taught Summer Semester: *1st Blk, Even Years*

Description: This seminar examines a range of Shakespeare's major works as well as relevant criticism.

MENG 6610 - Advanced Studies in Genre

Credits: (2-3)

Variable Title

Description: Students will analyze primary and secondary texts about one genre or sub-genre to develop a definition and understanding of the form.

This variable emphasis course may be repeated 10 times for credit with different subject matter.

MENG 6710 - Variable Topics

Credits: (2-3)

Variable Title

Description: Topics will vary based on student interest and instructor expertise.

This course may be repeated 10 times for credit with different subject matter.

MENG 6730 - Prose Forms and Crafts

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Description: This course will investigate the relationship of form and function in prose creative work and explore how the underlying structure affects the impact of the work. This course will examine a variety of prose genres to examine the effect of formal choices on readers' response. The course will then put these strategies and insights to work by drafting, workshopping, and revising students' own original writing.

May be repeated 2 times and up to 9 credit hours.

MENG 6731 - Verse Forms and Craft

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course will investigate the relationship of form and function in creative work in verse and explore how the underlying structure affects the impact of the work. This course will examine a variety of poetic genres to examine the effect of formal choices on readers' response. The course will then put these strategies and insights to work by drafting, workshopping, and revising students' own original writing.

MENG 6740 - Creative Nonfiction Writing

Credits: (3)

Variable Title

Typically Taught Spring Semester: *Full Sem*

Description: In this course, students will study the art and craft of writing creative nonfiction. Along with writing their own original work, students will read a variety of contemporary texts and will critique their peers' writing.

May be repeated 2 times and up to 9 credit hours.

MENG 6750 - Fiction Writing

Credits: (3)

Variable Title

Typically Taught Spring Semester: *Full Sem*

Description: In this course, students will study the art and craft of writing fiction. Along with writing their own original work, students will read a variety of contemporary texts and will critique their peers' writing.

May be repeated 2 times and up to 9 credit hours.

MENG 6760 - Poetry Writing

Credits: (3)

Variable Title

Typically Taught Spring Semester: *Full Sem*

Description: In this course, students will study the art and craft of writing poetry. Along with writing their own original work, students will read a variety of contemporary texts and will critique their peers' writing.

May be repeated 2 times and up to 9 credit hours.

MENG 6770 - Screenwriting

Credits: (3)

Description: This course provides advanced study and practice in the craft of screenwriting. Students will analyze screenplays, read and discuss craft advice from professional screen writers, watch films and compare script to screen, complete exercises on craft theory, and practice the craft by writing scenes and short scripts. The course will also provide context in terms of current issues in the screenwriting industry.

MENG 6810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MENG 6821 - Teaching Developmental Reading and Writing

Credits: (2)

Description: This course introduces first-time teachers to the theory and practice of teaching developmental reading and writing.

Note: Permission of instructor required to register.

MENG 6822 - Teaching College Writing

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces first-time teachers to the theory and practice of teaching college writing.

Note: Permission of instructor required to register.

MENG 6823 - Teaching Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course supports teachers in their second semester of teaching college writing. Students will meet regularly to develop teaching strategies, enhance grading skills, resolve problems that have arisen in their classes, and plan strategies and procedures for classes they are teaching.

Note: Permission of instructor required to register.

MENG 6830 - Directed Readings

Credits: (1-3)

Description: This course allows students credit for individual study with a professor, usually for further study that grows out of course work. The student and professor agree to a written contract for study which must be approved by the program director. No more than 3 credit hours of directed readings may apply toward the MA degree unless approved by the program director. This course is designed to allow students to explore in depth and/or breadth, subject matter which goes beyond the established courses in the Master's Degree Program. May be repeated 3 times with a maximum of 9 credit hours.

MENG 6861 - Practicum in Secondary English Education**Credits: (2)**

Description: This course provides a broad, practical background in teaching young adult (YA) literature for MENG students seeking secondary school licensure. Selection, evaluation, curriculum planning, and assessment in teaching literature will receive primary emphasis. Issues concerning community values and censorship will also receive our attention.

Pre-requisite(s): EDUC 6050 Curriculum Design, Evaluation, Assessment (3) must be taken prior to MED 6120 /6861. We strongly recommend that MENG 6110 Writing for Teachers (3) or MENG 6230 Wasatch Range Writing Project Summer Institutes (3) be taken prior to MENG 6120/6861. MENG 6120 and MENG 6861 must be taken concurrently.

MENG 6920 - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Description: Consult the semester class schedule for the current offering under this number. The specific title with the credit authorized for the particular offering will appear on the student transcript. May be repeated for a total maximum of 6 credit hours.

MENG 6940 - Masters Project**Credits: (2-6)**

Description: This course provides for the creation and execution of a project growing out of graduate study particularly as it applies to the workplace. Project credit may be taken in increments of 1-3 hours in any term. May be repeated twice up to 6 credits.

MENG 6950 - Creative Writing Thesis: Fiction, Nonfiction, Poetry**Credits: (1-6)**

Description: The course is designed as a rigorous academic and professional mentorship for students who intend to produce a MA thesis in creative writing. The thesis will include a manuscript of original writing with a critical foreword, both of which require extensive research and substantial writing on the thesis topic. The manuscript can be a creative response to literary works or original creative poetry, fiction, and/or nonfiction. The critical introduction will situate the creative component within the literary, historical, and/or theoretical context(s) of the creative component. Minimum of 3 hours required, with a possible maximum of 6 hours with approval.

Pre-requisite(s): MENG 6730 - Prose Forms and Crafts (3), must complete at least two workshops (6 Credits), MENG 6740 - Creative Nonfiction Writing (3)*, MENG 6750 - Fiction Writing (3)*, MENG 6760 - Poetry Writing (3)*. *Repeated with different titles.

May be repeated three times for a maximum of six credit hours.

MENG 6960 - Thesis**Credits: (1-6)**

Description: Thesis credit may be taken in increments of 1-3 hours in any term. The thesis is a capstone writing

course for the Master's Degree Program.
May be repeated 5 times with a maximum of 6 credit hours.

MENG 6990 - Extension of Thesis/Project

Credits: (1)

Description: This course allows students to continue to work on their thesis/project. The course is graded credit/no credit.

May be repeated up to two times for a maximum of two credit hours.

MET 1000 - Introduction to Mechanical Engineering Technology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Course fees are used to cover materials needed to complete the semester project and to replace small tools in the Freshman Project Lab as needed.

Description: Introductory course for students majoring in mechanical engineering technology. The role of mechanical engineering technology and its place in the occupational spectrum. The experimental and analytical tools used in mechanical engineering technology and fundamentals of mechanical design and problem solving. College algebra and trigonometry strongly recommended.

Pre-requisite(s): MATH 1010 or Math ACT score of 23 or higher or placement test.

MET 1500 - Mechanical Design for Engineering Technology

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: Course fees are used for paper and toner for course handouts and maintenance of computer hardware and software. The fees also cover consumable materials needed for the semester project.

Description: This course will focus on understanding the engineering design process within the MET discipline. Students will develop problem statements and use brainstorming techniques to generate design concepts. These design concepts are evaluated and implemented for possible solutions to bring a factious engineered product to market.

Pre-requisite(s): (MATH 1060 or MATH 1080) and MET 1000.

MET 1890 INT - Cooperative Work Experience

Credits: (1-3)

Description: Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department. Prior consent of the department chair and the employer are required.

Pre-requisite(s): PDD 1010, MATH 1080 and Permission of Instructor.

MET 2500 - Modern Engineering Technologies

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are used for paper and toner for course handouts and maintenance of computer hardware and software.

Description: A survey of modern engineering technologies including, but not necessarily limited to, energy generation, nano systems, smart materials, robotics, lasers, transportation systems, and bioengineering.

Pre-requisite(s): MET 1500.

MET 2890 INT - Cooperative Work Experience

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department. Prior consent of the department chair and the employer are required. May be repeated for credit up to 3 times for a max of 3 credit hours total.

Pre-requisite(s): Credit or concurrent enrollment in MFET 2300.

MET 3050 - Dynamics for Engineering Technology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are used for paper and toner in computer lab and for maintaining computers and software.

Description: Fundamentals of force, mass and acceleration, work and energy, and impulse and momentum applied to particles and rigid bodies.

Pre-requisite(s): MATH 1210 and PHYS 2210 and (MFET 2300 or MFET 2310).

MET 3150 - Engineering Technology Materials

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course Fees to cover disposable lab testing coupons.

Description: Material properties, processing and selection of materials for technological applications. Design parameters for material selection of metals and nonmetals. Mechanical behavior and service failures of metallic alloys and other engineering materials at high and low temperatures. Lecture plus laboratory work in materials testing.

Pre-requisite(s): CHEM 1110 and (MFET 2300 or MFET 2320) .

MET 3300 - Computer Programming Applications of Mechanical Engineering Technology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are used to purchase class handouts, consumable materials in the labs, lab computing equipment, and related software.

Description: Applications of computer programming and computer software to problems in mechanical engineering technology. Lecture plus computer-based laboratory work.

Pre-requisite(s): MFET 2300 or MFET 2310.

MET 3400 - Machine Design for Engineering Technology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are used for paper and toner for course handouts and maintenance of computer hardware and software.

Description: Application of engineering technology fundamentals to machine design. Techniques involved in

designing and selecting individual machine parts.

Pre-requisite(s): MFET 2300 or MFET 2320.

MET 3500 - Mechanical Measurements and Instrumentation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are used to purchase class handouts, consumable materials in the labs, lab computing equipment, and related software.

Description: Principles of temperature, pressure, strain, flow, force, and vibration measurements. Techniques of computerized data acquisition and reduction. Students will learn how to specify instrumentation systems, take data and interpret the results. Lecture plus laboratory work in selected topics.

Pre-requisite(s): EET 1850 and (MFET 2300 or MFET 2310).

MET 3700 - Testing and Failure Analysis

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are used to cover paper and toner for class handouts and to maintain computer hardware and software.

Description: Mechanical testing of materials, fatigue, fracture, wear, corrosion, embrittlement, failure mechanisms and analysis, case studies of failures. Lecture plus laboratory work.

Pre-requisite(s): MET 3150 and (MFET 2300 or MFET 2320).

MET 3890 INT - Cooperative Work Experience

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department. Prior consent of the department chair and the employer are required. May be repeated for credit up to 3 times for a max of 3 credit hours total.

Pre-requisite(s): Credit or concurrent enrollment in MET 3400.

MET 4200 - Mechanical Design with FEA

Credits: (3)

Course Fee: \$60.00

Course Fee Purpose: Course fee's are used for ANSYS software licence.

Description: Application of engineering technology fundamentals in mechanical design using Finite Element Analysis. Lecture plus computer-based laboratory work.

Pre-requisite(s): MET 3400 and (MFET 2300 or MFET 2320).

MET 4300 - Heating, Ventilating & Air Conditioning

Credits: (3)

Description: Principles of heating, ventilating and air conditioning of buildings. Refrigeration systems, air and water distribution and solar energy. Indoor thermal environmental control.

Pre-requisite(s): Permission of instructor.

MET 4500 SUS - Senior Project I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Course fees are used to purchase class handouts, consumable materials in the labs, lab computing equipment, and related software.

Description: A mechanical engineering technology project will be selected for team participation. Projects will require planning, analysis, design, development, production, testing, and documentation.

Pre-requisite(s): MET 3400; AAS or AS Degree.

MET 4510 SUS - Senior Project II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Course fees are used to purchase class handouts, consumable materials in the labs, lab computing equipment, and related software.

Description: A mechanical engineering technology project will be selected for team participation. Projects will require planning, analysis, design, development, production, testing and documentation.

Pre-requisite(s): MET 4500.

Note: MET 4500 and MET 4510 are a two-course sequence, with MET 4500 only taught in fall semester and MET 4510 only taught in spring semester. The courses must be taken back-to-back.

MET 4650 - Thermal Science

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are used for paper and toner for course handouts and maintenance of computer hardware and software.

Description: Fundamental principles of thermal science for mechanical engineering technology. Basic thermal science theory with an emphasis on technological applications and systems.

Lecture plus laboratory work in selected thermal science topics.

Pre-requisite(s): MATH 1210, PHYS 2210 and CHEM 1110 or CHEM 1210.

MET 4800 - Individual Research in Mechanical Engineering Technology

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Special individual research and development projects in mechanical engineering technology. Credit and time determined by the student and the faculty project supervisor. May be repeated for credit up to 3 times for a max of 3 credit hours total.

Pre-requisite(s): Permission of instructor.

MET 4830 - Directed Readings

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed individual readings in mechanical engineering technology. Topic selected in consultation with instructor.

Pre-requisite(s): Permission of instructor.

MET 4890 INT - Cooperative Work Experience

Credits: (1-3)

Typically Taught Spring Semester: *Full Sem*

Description: Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department. Prior consent of the department chair and the employer are required. May be repeated for credit up to 3 times for a max of 3 credit hours total.

Pre-requisite(s): MET 3400 and Permission of instructor.

MET 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title with the credit authorized for the particular offering will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MET 4990 - Seminar in Mechanical Engineering Technology

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are used for paper and toner for course handouts and maintenance of computer hardware and software.

Description: Guest lectures from local industry, professionalism and engineering ethics, technology and society, and employment preparation.

Pre-requisite(s): MET 4500.

MFET 1000 - Manufacturing Engineering Technology Fundamentals

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$65.00

Course Fee Purpose: Lab related consumables and maintenance of laboratory equipment.

Description: This is an introductory course for students interested in majoring in Manufacturing Engineering Technology. Students will be exposed to Manufacturing Engineering Technology through several hands-on laboratory experiences that introduce them to concepts needed for future classes. Students will gain a clear understanding of degree requirements and possible career paths.

MFET 1150 - Pre-Professional Seminar in Manufacturing

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: An introductory course for students planning to major in Manufacturing Engineering Technology. An explanation of the Manufacturing Engineering Technology curriculum and its place in the occupational spectrum. Current job functions of manufacturing engineering technologists will be discussed by manufacturing engineers and technologists from industry.

MFET 1210 - Machining Principles Lecture/Lab I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: Consumables (aluminum, steel, tools), paper, lab support, computers, software licenses, lab equipment

Description: Introduction to machining processes through theory and practice including: setup and operation of the engine lathe & milling machine, machine and tool performance, inspection techniques, basic blueprint reading, and process planning. Students will utilize lab time to complete assignments as required.

One lecture per week and two 3-hour labs per week are required.

MFET 1810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MFET 1820 - Manufacturing Electricity and Electronics

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introduction to basic electrical and electronic principles and the application of these principles to AC and DC circuits. The course will give students the foundation for required manufacturing courses in welding power supplies, motor controls and automation. An integrated hands-on lab will reinforce concepts taught in the classroom

Pre-requisite(s): MATH 1010 or QL.

MFET 1890 INT - Cooperative Work Experience

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Description: Open to all first year students in Manufacturing Engineering Technology. Department approval required before registration. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

MFET 2150 - Metal Forming, Casting and Welding

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Paper, lab support, computers, software licenses, lab equipment

Description: Introduction to industrial metal forming, casting and welding processes, equipment selection, design criteria, shop procedures and terminology.

Two one-hour lectures per week and one two-hour lab

Co-Requisite(s): MFET 2150L.

MFET 2150L - Metal Forming, Casting & Welding Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: Paper, lab support, shop supplies for casting/welding/sheet metal

Description: Lab application of theories taught in MFET 2150 by use of student projects.

Co-Requisite(s): MFET 2150.

MFET 2151 - Metal Forming Lecture/Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, shop supplies for casting/welding/sheet metal

Description: Introduction to industrial metal forming processes, equipment selection, design criteria, shop procedures and terminology.

Pre-requisite(s): Instructor Approval.

MFET 2152 - Metal Casting Lecture/Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, shop supplies for casting/welding/sheet metal

Description: Introduction to industrial metal casting processes, equipment selection, design criteria, shop procedures and terminology.

Pre-requisite(s): Instructor Approval.

MFET 2153 - Metal Welding Lecture/Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, shop supplies for casting/welding/sheet metal

Description: Introduction to industrial metal welding processes, equipment selection, design criteria, shop procedures and terminology.

Pre-requisite(s): Instructor Approval.

MFET 2300 - Statics and Strength of Materials

Credits: (5)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Principles of forces, moments, resultants & static equilibrium of force systems, center of gravity, friction, and free body diagram analysis. Also concept of stress and strain, shear, bending moments, torsion, bending stresses in beams and stress resolution and shear.

Five lectures per week.

Pre-requisite(s): PHYS 2010/L or PHYS 2210/L; MATH 1060 or MATH 1080 or MATH 1210.

MFET 2310 - Statics for Engineering Technology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Course fees: Course fees support computer lab aids, lab computers, and software licensing in the computer labs.

Description: Topics include: Principles of forces, moments, resultants & static equilibrium of force systems, center

of gravity, friction, and free body diagram analysis.

Pre-requisite(s): MATH 1080 or MATH 1050 and MATH 1060.

MFET 2320 - Mechanics of Materials

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Course fees: Course fees support computer lab aids, lab computers, and software licensing in the computer labs.

Description: Topics include: Principles of stress and strain, shear, bending moments, torsion, and bending stresses in beams.

Pre-requisite(s): MFET 2310.

MFET 2360 - Manufacturing Processes and Materials

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, computers, software licenses, lab equipment

Description: Survey of industrially important processes used to change material shape and condition for industrial use. Survey of industrially important materials and the principles of material behavior.

MFET 2410 - Quality Concepts and Statistical Applications

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Paper, lab support, consumables, instructor supplies, simulation materials, computers, software licenses, lab equipment

Description: This is the first course in a series of three designed to impart the Six Sigma body of knowledge. It integrates managerial, technological and statistical concepts across all functions of an organization to ensure that a product is fit for use. Provides a foundation in current quality paradigms and introduces students to software tools (MS Excel and Minitab) used to statistically analyze problems encountered in manufacturing firms. Three lectures per week.

Pre-requisite(s): MATH 1010 or Aleks (score: 30 or above).

MFET 2440 - Computer Numeric Control (CNC) in Manufacturing

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, computers, software licenses, lab equipment

Description: This course is designed for those who have little or no experience with CNC programming, setup or operations. Manual programming, APT programming, and Mazatrol (a conversational programming language) will be taught. In addition, an introduction to CAD/CAM will also be discussed. A three-hour lab, once a week is required.

Pre-requisite(s): MATH 1080 or MATH 1050 and MATH 1060; MFET 1210.

Co-Requisite(s): MFET 2440L.

May be repeated 3 times up to 6 credit hours.

MFET 2440L - CNC in Manufacturing Lab

Credits: (1)

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, computers, software licenses, lab equipment

Description: Applications of the theory taught in MFET 2440. Introduction to the setup & operation of the CNC lathe and mill.

One 3-hour lab per week.

Co-Requisite(s): MFET 2440.

MFET 2500 - Process Automation I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Computer lab refurbishment, software, lab aide

Description: A study of the elements used in manufacturing automation and control technologies including: basic elements of an automated system, cost benefit analysis, programmable logic controllers, robotics (servo and non-servo), material handling devices and automated inspection technologies. One 50 minute lecture per week.

Pre-requisite(s): EET 1850.

Co-Requisite(s): MFET 2510.

MFET 2510 - Process Automation I Lab

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: Automation equipment and consumables

Description: Students duplicate demonstration sequences of automation equipment and develop new routines in: Controlling servo and non-servo robots, computer-aided manufacturing systems, programmable logic controllers, and other devices used in process automation. Labs will include additional lectures.

Pre-requisite(s): EET 1850.

Co-Requisite(s): MFET 2500.

MFET 2550 - Basics of Quality Engineering

Credits: (2)

Description: Approaches quality from the perspective of the production technician using applied statistics, total quality concepts, inspection techniques and methods and nonconforming material control. Addresses sampling principles used in production management as well as a review of industry accepted standards. (ASQC Series)

Note: This course is offered in the evenings only.

MFET 2610 - Quality Improvement Principles and Techniques

Credits: (2)

Description: This course assesses vital knowledge of quality tools and their uses by individuals, from non-traditional quality areas, who are involved in quality improvement projects. The course examines the rapid spread of quality principles and practices throughout organizations, and covers the essentials of quality management for individuals who manage quality programs, but who are not necessarily specialized in traditional quality areas. The course prepares students for the Certified Quality Improvement Associate examination administered by the American Society for Quality.

MFET 2670 - GMA, FCA and GTA Welding

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, computers, software licenses, lab equipment

Description: Theory and skills course covering Gas Metal Arc Welding, Flux Core Arc Welding, and Gas Tungsten Arc Welding.

Pre-requisite(s): MFET 2150/MFET 2150L or MFET 2153.

Co-Requisite(s): MFET 2670L.

MFET 2670L - GMA, FCA and GTA Welding Lab

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: Paper, lab support, computers, software licenses, lab equipment

Description: A "hands on" lab that reinforces the theory and skills course (MFET 2670) covering Gas Metal Arc Welding, Flux Core Arc Welding, and Gas Tungsten Arc Welding.

Pre-requisite(s): MFET 2150/MFET 2150L.

Co-Requisite(s): MFET 2670.

MFET 2830 - Directed Readings in Manufacturing Engineering Technology

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Description: Individual research on topics requested by industry or which meet special needs of Manufacturing Engineering Technology students.

Pre-requisite(s): Departmental approval.

MFET 2850 - CNC/CAM for Plastics and Composites Lecture/Lab

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$60.00

Course Fee Purpose: Plastic material, paper, lab support, computers, software licenses, lab equipment

Description: Traditional and nontraditional methods for machining organic-matrix and metal-matrix composites are reviewed. Traditional machining procedures are discussed together with the damage introduced into composites by these manipulations. Computer Numerical Control (CNC) codes and Computer Aided Manufacturing are covered, focusing on the production of plastic products and tooling. Machining concepts also including laser, water-jet, electrodischarge, electrochemical spark, and ultrasonic machining.

Pre-requisite(s): MFET 1210/L.

MFET 2860 - Plastics/Composites Materials & Properties

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$60.00

Course Fee Purpose: Plastic material, paper, lab support, computers, software licenses, lab equipment

Description: Coverage of the most common commercial plastics including their additives, fillers, and fibers; includes common physical tests used to determine material characteristics; writing intensive.

Pre-requisite(s): CHEM 1110.

MFET 2870 - Design of Plastics/Composites Products

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Plastic material, paper, lab support, computers, software licenses, lab equipment

Description: Designing plastic parts utilizing CAD and CAE technologies for the design and for structural, dimensional, and process evaluation and optimization. A strong emphasis in design principles related to design of plastics products. Also analysis of functional requirements, structural properties, aesthetic qualities and cost relationships. The student will gain experience in product design and material evaluation.

Pre-requisite(s): PDD 1160 and MFET 2860.

MFET 2890 INT - Cooperative Work Experience

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Description: Open to all second year students in Manufacturing Engineering Technology. A continuation of MFET 1890.

MFET 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): Departmental approval.

May be repeated for a total maximum of 6 credit hours.

MFET 3010 - Tool Design

Credits: (3)

Description: Principles of workpiece control including: Geometric, dimensional, and mechanical control. Other topics include: process tolerance stacks, design of special tools and gauges, applications in the production of manufactured parts, tool drawings, specifications, and modular tooling. Three lectures per week.

Pre-requisite(s): MFET 1210; PDD 1160.

MFET 3060 - Codes, Weld Inspection, and Quality Assurance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Computer lab fees and supplies used in the Lab portion of this course.

Description: Study of ASME and AWS codes as relating to procedure qualification and welder qualification for fabrication of pressure vessels and structures, and how codes relate to quality assurance and ISO 9000.

Pre-requisite(s): MFET 2150/MFET 2150L or MFET 2153.

MFET 3310 - Material Selection and Heat Treat

Credits: (2)

Description: Terminology, concepts and principles involved in the selection, specification and processing of engineering materials so they meet design criteria including load, life, and appearance. Testing methods to determine those properties and characteristics. Manual and computer assessing of material data.

Two lectures per week.

Pre-requisite(s): MFET 1210/L, MFET 2300, CHEM 1110.

Co-Requisite(s): MFET 3310L.

MFET 3310L - Material Selection and Heat Treat Lab

Credits: (1)

Description: Application of theory taught in MFET 3310.

One 2-hour lab per week.

Co-Requisite(s): MFET 3310.

MFET 3320 - Machine Design

Credits: (2)

Description: Application of engineering fundamentals to the design of individual machine components such as shafts, couplings, springs, bearings, gears, fasteners, clutches, and breaks. Students will be required to complete a design project emphasizing manufacturing equipment.

Two lectures per week.

Pre-requisite(s): MFET 2300.

MFET 3340 - Applied Fluid Power

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Paper, lab support, Hydraulic fluid, hydraulic lab components, computers, software licenses, lab equipment

Description: Principles of fluid mechanics and component operation as they apply to the design of hydraulic and pneumatic systems. Computer programs may be used to analyze and design systems. Two lectures per week.

Pre-requisite(s): MFET 2300 or MFET 2320 or ENGR 2010 and ENGR 2140; PHYS 2010/L or PHYS 2210/L.

Co-Requisite(s): MFET 3340L.

MFET 3340L - Applied Fluid Power Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Paper, lab support, Hydraulic fluid, hydraulic lab components, computers, software licenses, lab equipment

Description: Application of the theory taught in MFET 3340.

One 2-hr lab per week.

Co-Requisite(s): MFET 3340.

MFET 3350 - Plastic and Composite Manufacturing

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Design and processing of plastic and composite materials for industrial applications.

Two lectures per week.

Pre-requisite(s): CHEM 1110 or CHEM 1210.

Co-Requisite(s): MFET 3350L.

MFET 3350L - Plastic and Composite Manufacturing Lab

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$60.00

Course Fee Purpose: Plastic material, paper, lab support, computers, software licenses, lab equipment

Description: Application of the theory taught in MFET 3350.

Two 2-hr labs per week.

Pre-requisite/Co-requisite: MFET 3350.

MFET 3460 - Engineering Design using Solid Modeling

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Paper, lab support, 3D print material, computers, software licenses, lab equipment

Description: An advanced computer-aided design course using state-of-the-art solid modeling CAD/CAM software.

Topics include: 3D parametric solid modeling, applications associativity, design-by-feature, assembly modeling, injection mold design, flat pattern development, design analysis using FEA, realistic rendering, and detailing.

Pre-requisite(s): PDD 1010.

Co-Requisite(s): MFET 3460L.

MFET 3460L - Engineering Design using Solid Modeling Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Paper, lab support, 3D print material, computers, software licenses, lab equipment

Description: Lab assignments will include: Fundamentals of 3D parametric solid modeling, Extrude & Revolve Features, Sweep & Loft Features, Assembly Modeling, Injection Mold Design, Flat Pattern Development, Design Analysis using FEA, and others.

Pre-requisite(s): PDD 1010 and WEB 1700.

Co-Requisite(s): MFET 3460.

MFET 3510 - Basics of Supply Chain Management

Credits: (2)

Description: Introductory course for production and inventory management personnel which provides basic definitions and concepts for planning and controlling flow of materials into, through, and out of an organization. Explains fundamental relationships of supply chain from suppliers to customers. Addresses manufacturing systems, forecasting, master planning, material requirements planning, capacity management, production activity control, purchasing, inventory management, distribution, quality management, and Just-in-Time manufacturing. (APICS Series).

Note: This course is offered in the evenings only.

MFET 3550 - Manufacturing Supervision

Credits: (3)

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, computers, software licenses, lab equipment

Description: The application of supervision skills. Students will gain an understanding of; motivation of

subordinates, personal leadership theories, problem-solving and decision-making techniques, organizational communication, employee selection, evaluation and training process, and organizational structures. Topics will include; the American Disabilities Act, OSHA and environmental issues, Equal opportunity Employment, and Affirmative Action issues. Three lectures per week.

Pre-requisite(s): MFET 2410 (or MATH 1040).

MFET 3560 - Advanced Quality Engineering

Credits: (2)

Description: Addresses the application of advanced quality techniques by personnel in positions of responsibility such as manufacturing leads and supervisors. Uses statistics, metrology, inspection methods, quality management concepts, and sampling principles to address process decisions involving both overall quality and costs. (ASQC Series).

Pre-requisite(s): MFET 2550.

Note: This course is offered in the evenings only.

MFET 3570 - Manufacturing Quality Auditing

Credits: (2)

Description: Utilizes auditing principles and quality management tools and techniques to prepare an individual to plan and conduct, or prepare an organization, for a quality audit. Links directly to process associated with implementation of ISO 9000 standards.

Two one-hour lectures per week. (ASQC Series).

Pre-requisite(s): MFET 2410 or equivalent.

Note: This course is offered in the evenings only.

MFET 3580 - Certified Mechanical Inspector

Credits: (2)

Description: Provides the student with terminology, concepts and tools needed to be professionally competent in advanced quality management. The course will also be helpful to those preparing to take the ASQC CMI Certification Exam. (ASQC Series).

Note: This course is offered in the evenings only.

MFET 3610 - Machining Processes Lecture/Lab II

Credits: (3)

Description: The manufacture and assembly of precision and interchangeable parts using conventional lathes, mills, drills, and grinders. Introduction to geometric dimensioning & tolerancing (GD&T), and advanced inspection techniques. Students will utilize lab time to complete assignments as required.

One lecture per week and two 3-hour labs per week are required.

Pre-requisite(s): MFET 1210.

MFET 3620 - Senior Capstone Project Planning

Credits: (.5)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course must be taken the semester prior to beginning the MFET senior project sequence of classes (MFET 4610, MFET 4610L and MFET 4620L). Capstone requirements will be discussed. Capstone projects will be selected and teams formed with faculty input.

Pre-requisite(s): Department Approval.

MFET 3630 - Fusion Joining and Brazing Processes

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Paper, lab support, welding supplies, computers, software licenses, lab equipment

Description: Study of SAW, ESW, GMAW, EG, RW, PAW, PAC, Electron Beam, Laser, Friction, Brazing, and other welding processes.

Pre-requisite(s): MFET 2670/MFET 2670L.

Co-Requisite(s): MFET 3630L.

MFET 3630L - Fusion Joining and Brazing Processes

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$85.00

Course Fee Purpose: Paper, lab support, welding supplies, computers, software licenses, lab equipment

Description: A "hands-on" lab that reinforces the concepts taught in MFET 3630 of SAW, ESW, GMAW, EG, RW, PAW, PAC, Electron Beam, Laser, Friction, Brazing, and other welding processes.

Pre-requisite(s): MFET 2670/MFET 2670L.

Co-Requisite(s): MFET 3630.

MFET 3650 - Quality Management Institute

Credits: (3)

Description: This course consists of application process control and problem solving techniques including statistical process control (SPC), measurement systems analysis, and process capability analysis. Students will apply cause-and-effect diagrams, check sheets, sampling, line and bar charts, Pareto charts, scatter diagrams, variation, probability plots, x-R charts, gate repeatability and reproducibility (gage R & R) on course projects. Curriculum will include practical application exercises.

Pre-requisite(s): MFET 2410, MATH 1010 Intermediate Algebra or equivalent, and Basic Statistics course (MATH 1040) or equivalent.

MFET 3710 - Computer Aided Manufacturing and Rapid Prototyping

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, software licenses

Description: This course will introduce and explain concepts behind Computer-Automated Manufacturing (CAM). It will define elements, terms, and concepts involved with CAM. Elements of rapid prototyping will also be covered from conceptual design in solids to production of tooling and parts. This course is designed for those who have the basic understanding of the setup and operation of CNC machine tools and programming. Software will be used to perform the CAM operations, such as part generation and post processing.

Pre-requisite(s): MFET 2440/MFET 2440L, PDD 1010, PDD 1160 or MFET 3460.

Co-Requisite(s): MFET 3710L.

MFET 3710L - Computer Aided Manufacturing and Rapid Prototyping Lab

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Waterjet nozzles, steel, plastic shop consumables

Description: A "hands-on" lab that reinforces the concepts taught in MFET 3710. Students will learn how to transfer CNC part programs from a PC to the CNC machine controller. Testing, editing and running their part programs on the CNC machines will also be covered.
May be repeated twice up to 3 credit hours.

MFET 3750 - Welding Metallurgy I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Paper, lab support, software licenses

Description: Metallurgical principles applied to welding and weldability of ferrous metals.

Pre-requisite(s): MFET 2150/MFET 2150L or MFET 2153, CHEM 1110 or CHEM 1210.

Co-Requisite(s): MFET 3750L.

MFET 3750L - Welding Metallurgy I Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$85.00

Course Fee Purpose: Welding supplies

Description: A "hands-on" lab that reinforces the concepts taught in MFET 3750 of metallurgical principles applied to welding and weldability of ferrous metals.

Pre-requisite(s): MFET 2150/MFET 2150L, CHEM 1110.

Co-Requisite(s): MFET 3750.

MFET 3760 - Welding Metallurgy II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Paper, lab support, software licenses

Description: Metallurgical principles applied to welding and weldability of nonferrous metals.

Pre-requisite(s): MFET 3750/MFET 3750L.

Co-Requisite(s): MFET 3760L.

MFET 3760L - Welding Metallurgy II Lab

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$85.00

Course Fee Purpose: Welding supplies

Description: A "hands-on" lab that reinforces the concepts taught in MFET 3760 of metallurgical principles applied to welding and weldability of nonferrous metals.

Pre-requisite(s): MFET 3750/MFET 3750L.

Co-Requisite(s): MFET 3760.

MFET 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and

credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

MFET 3820 - Nondestructive Testing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Paper, lab support, computers, software licenses, lab equipment

Description: Fundamental concepts relating to liquid penetrant, magnetic particle, ultrasonics, and radiography and other NDT processes.

Pre-requisite(s): MATH 1210 or MATH 1110 and PHYS 2010 or PHYS 2210.

MFET 3830 - Reinforced Plastics/Advanced Composite Lecture/Lab

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$135.00

Course Fee Purpose: Paper, lab support, lab consumables

Description: Polymer and reinforcement systems; material testing; mold design and development; laboratory involvement in reinforced plastics production processes.

Pre-requisite(s): MFET 3350/MFET 3350L and MFET 2860.

MFET 3870 - Mold Design and Process Strategies Lecture/Lab

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Paper, lab support, lab consumables

Description: Overview of mold design and the development of strategies and techniques integrating CAD and CAE technologies for optimizing part quality, moldability, and productivity. Additional study on design and construction of various types of production molds that are used for processing plastics in final shape. Product design in relationship to molding techniques and various techniques and materials used to construct the molds are the major units of study.

Pre-requisite(s): MFET 2850 and MFET 2870.

MFET 3890 INT - Cooperative Work Experience

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all third year students in Manufacturing Engineering Technology. A continuation of MFET 1890.

MFET 4050 - Detailed Scheduling and Planning I

Credits: (2)

Description: Techniques and practices of detailed scheduling and planning of inventory management including order review methodologies, policies and functions of inventory. Covers lot sizing, safety stock techniques, demand, and Just-in-Time as they relate to detailed scheduling and planning.

Pre-requisite(s): MFET 3510 or equivalent. (APICS series).

Note: This course is offered in the evenings only.

MFET 4090 - Welding Power Sources

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, computers, software licenses, lab equipment

Description: Study of power sources used to generate and control voltage and amperage for welding.

Two lectures per week.

Pre-requisite(s): EET 1850.

MFET 4150 - Execution and Control of Operations**Credits: (2)**

Description: Focuses on prioritizing and sequencing work, executing work plans, implementing controls, reporting activity results, and evaluating and providing feedback on performance. Eval.

Pre-requisite(s): MFET 3510 or equivalent. (APICS Series).

Note: This course is offered in the evenings only.

MFET 4200 - Manufacturing Processes**Credits: (2)**

Description: Manufacturing processes define the methods that companies use in designing, producing, and delivering goods and services required by customers. The manufacturing processes provide the execution component to the other activities of the integrated manufacturing system. Beginning with customer requirements and needs, they design, build, operate, upgrade, and maintain a manufacturing process which is most supportive of and consistent with those needs and requirements. To achieve these objectives, manufacturing processes draw on three different but very interrelated subsystems: industrial facilities management, process design and development, and manufacturing. (APICS Series)

Note: This course is offered in the evenings only.

MFET 4210 - Cost Estimating and Engineering Economics**Credits: (2)**

Description: Production cost structure, operation costing, break-even analysis, make buy decision, and capital equipment justification. Computer aids are used to analyze cost data.

Three lectures per week.

Pre-requisite(s): MATH 1080; WEB 1700.

Co-Requisite(s): MFET 4610.

MFET 4250 - Detailed Scheduling and Planning**Credits: (2)**

Description: Detailed explanation of inventory management including order review methodologies, policies and functions of inventory. Covers material requirements planning (MRP) and other material planning and capacity requirements planning techniques. Includes concepts, principles, interfaces, desired characteristics, applications, and supplier relations.

Pre-requisite(s): MFET 3510 or equivalent. (APICS Series)

Note: This course is offered in the evenings only.

MFET 4300 - Design of Experiments**Credits: (2)**

Description: A step-by-step description of procedures used to organize, conduct and evaluate industrial experiments. Emphasizes the usefulness of results and the decision criteria for choosing the proper design.

Pre-requisite(s): MFET 2410

MFET 4310 - Corrosion and Corrosion Control

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Analysis of corrosion mechanisms for ferrous metals, nonferrous metals, and nonmetallic materials, as well as the control of corrosion.

Pre-requisite(s): CHEM 1110 and MATH 1080.

MFET 4315 - Welding Robotics

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Paper, lab support, software licenses

Description: This course is designed to introduce students to welding robot programming and applications. Students will demonstrate skills learned in welding robot programming in applied labs. They will learn parameters, terms and nomenclature and obtain knowledge of applications and configurations in industry settings.

Pre-requisite(s): MFET 2670, MFET 2670L.

MFET 4350 - Principles of Lean Manufacturing

Credits: (2)

Typically Taught Spring Semester: *Online*

Description: This course introduces students to lean manufacturing and waste reduction concepts such as work standardization, visual manufacturing & workplace organization, value stream mapping, setup reduction & batch size reduction, quality at the source, point of use storage, total productive maintenance, pull systems/kanbans, tack time calculation and cellular/synchronous manufacturing design concepts.

A combination of lectures, videos and hands on exercise will be used.

MFET 4550 - Advanced Quality Principles

Credits: (2)

Description: Provides advanced study in all aspects of the application of quality principles to a production environment. The course will involve case study and application of quality theory. Students should have a broad knowledge of organizational structure and planning, quality techniques, customer satisfaction and focus, project management, and human resource management. Cooperative experience in a business/industry is recommended. (ASQC Series)

Pre-requisite(s): MFET 2410 or equivalent.

Note: This course is offered in the evenings only.

MFET 4580 - Process Automation II & Robotics

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Computer lab refurbishment, software, lab aide

Description: An advanced study of the elements used in manufacturing automation and control technologies including: the use of basic elements of an automated system, cost benefit analysis, programmable logic controllers, robotics (servo and non-servo), material handling devices and automated inspection technologies. One 1-hour lecture per week.

Pre-requisite(s): MFET 2500 and MFET 2510.

Co-Requisite(s): MFET 4585.

MFET 4585 - Process Automation II Lab

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: Mechatronics automation equipment and consumables

Description: Students work in teams to demonstrate proficiency programming individual automated manufacturing stations using Allen Bradley PLCs (Cognex Vision Systems, RF Systems, bar coding, pick and place feeding station, gauging station, part orientation processing station, sorting-buffering station, servo robotic assembly station-Fanuc, torque assembly station, inventory storage station, electro-hydraulic station). Students then work as a class to integrate an entire manufacturing process using all of the stations for a small part. Labs will include additional lectures.

Pre-requisite(s): MFET 2500 and MFET 2510.

Co-Requisite(s): MFET 4580.

MFET 4610 - Senior Project Management & Cost Estimating

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, computers, software licenses, lab equipment

Description: This is designed as a capstone course for students and is to be taken in the senior year of their program. The course will teach students fundamental principles in Project Management, Cost Estimating, and Engineering Economics that will be necessary to successfully complete their Senior Project experience. Students must apply and gain departmental approval before entering Senior Project. Approval is based on an interview with department faculty and fulfilling the prerequisites listed on the "Senior Project Requirements Sheet" available from the department secretary. All students approved for Senior project will register for this course regardless of individual project group assignments.

Pre-requisite(s): MFET 3620 and AAS or AS Degree.

Co-Requisite(s): MFET 4610L for manufacturing students or PDD 4600 for design graphics students.

MFET 4610L - Senior Project Lab

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Senior Project consumables

Description: Must apply for senior project before March 1 of the previous year. Must have department approval. Approval is based on an interview with department faculty and fulfilling the prerequisites listed on the "Senior Project Requirements Sheet" available from the department secretary. Time: as required to complete the project. Two consecutive semesters.

Co-Requisite(s): MFET 4610 (with MFET 4610L only).

MFET 4620L - Senior Project Lab

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Senior Project consumables

Description: Must apply for senior project before March 1 of the previous year. Must have department approval. Approval is based on an interview with department faculty and fulfilling the prerequisites listed on the "Senior Project Requirements Sheet" available from the department secretary. Time: as required to complete the project. Two consecutive semesters.

MFET 4650 - Software Quality Engineering Principles

Credits: (2)

Description: This course prepares the student to incorporate quality development and implementation as a software design team member. The course provides instruction on concepts, principles and techniques to develop a comprehensive understanding of software inspection, testing, verification, and validation. Participants will learn to implement software development and maintenance processes and methods. This course also prepares the student for the Certified Systems Quality Engineer examination administered through American Society for Quality.

MFET 4670 - Reliability Engineering Principles

Credits: (2)

Description: This course prepares the student to work as a design team member to incorporate reliability considerations into a basic design. Course provides information on application of proven techniques to achieve quality product results. This course also prepares the student for the Certified Reliability Engineer examination administered through American Society for Quality.

MFET 4750 - Master Planning of Resources

Credits: (2)

Description: Explore processes used to develop sales and operations plans, forecast internal and external demand, create the master schedule consistent with business policies, objectives and resource constraints. (APICS series).

Pre-requisite(s): MFET 3510.

Note: This course is offered in the evenings only.

MFET 4770 - Strategic Management of Resources

Credits: (2)

Description: The relationship of existing and emerging processes and technologies to manufacturing strategy and supply chain related functions. Addressing aligning resources with strategic plan, integrating operating processes to support the strategic plan, and implementing change.

Pre-requisite(s): MFET 3510 and be familiar with concepts addressed in all other APICS courses. (APICS series).

Note: This course is offered in the evenings only.

MFET 4800 - Individual Research in Manufacturing Technology

Credits: (1-3)

Description: Special individual research and development projects in Manufacturing and Engineering Technology. Credit and time determined by the student and the faculty project supervisor.

Pre-requisite(s): Permission of instructor.

MFET 4830 - Directed Readings in Manufacturing Engineering Technology

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Must have department approval.

MFET 4850 - Integration of Automated Systems

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Paper, lab support, automation lab supplies

Description: An Advanced Automation course designed to give the student both theory and practical application in control and integration issues dealing with automated equipment. Selected topics include motor controllers, PID's, data collection and transfer devices, vision systems, and systems integration issues.

Pre-requisite(s): MFET 4580/MFET 4585.

MFET 4890 INT - Cooperative Work Experience

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all fourth year students in Manufacturing Engineering Technology. A continuation of MFET 1890.

MFET 4920 - Short Courses, Workshops, Institutes and Special Programs

Credits: (1-3)

Variable Title

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. Juniors and Seniors only. Faculty approval required.

MFET 4995 - Certified Manufacturing Technologist (CMfgT) Exam Review

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$115.00

Course Fee Purpose: SME CmfgT exam, paper, lab support

Description: This course is designed to provide a structured review for the student to take the Certified Manufacturing Technologist (CMfgT) Exam.

Pre-requisite(s): MSE 3910.

MFET 5100G - Introduction to Engineering Design (IED)

Credits: (5)

Description: IED provides students with opportunities to be creative and to apply their decision-making and problem-solving skills to design problems. Students use powerful computer hardware and software (Inventor) to develop 3-D models or solid renderings of objects. Using a Computer Aided Design System, students learn the product design process through creating, analyzing, rendering and producing a model. The course meets for a total of 75 hours over a two-week period and focuses on the content as well as teaching methods appropriate for the course. This course is designed specifically and only for current high school teachers who have been assigned by their schools and districts to teach the Project Lead the Way courses in their respective schools. These courses carry graduate credit for those teachers who would use them as part of a master's degree program or for recertification.

MFET 5300G - Principles of Engineering (POE)

Credits: (5)

Description: POE is designed to help students understand the field and the career possibilities of engineering and

engineering technology. Students work on the problem-solving skills that are used at the college level and in the workplace, and they explore engineering systems and manufacturing processes. Students learn how engineers address concerns about the social and political consequences of technological change. The course meets for a total of 75 hours over a two-week period and focuses on the content as well as teaching methods appropriate for the course. This course is designed specifically and only for current high school teachers who have been assigned by their schools and districts to teach the Project Lead the Way courses in their respective schools. These courses carry graduate credit for those teachers who would use them as part of a master's degree program or for recertification.

MFET 5400G - Computer Integrated Manufacturing (CIM)

Credits: (5)

Description: CIM is a course that applies principles of prototyping, robotics, and automation. It builds on the solid modeling skills developed in Introduction to Engineering Design. Students use computer-controlled equipment to solve problems by constructing models of their three-dimensional designs. Students are also introduced to the fundamentals of robotics and to how this equipment is used in an automated environment. Students evaluate their design solutions using various techniques and modifications before they produce the prototype. The course meets for a total of 75 hours over a two-week period and focuses on the content as well as teaching methods appropriate for the course. This course is designed specifically and only for current high school teachers who have been assigned by their schools and districts to teach the Project Lead the Way courses in their respective schools. These courses carry graduate credit for those teachers who would use them as part of a master's degree program or for recertification.

MFET 5500G - Engineering Design and Development (EDD)

Credits: (5)

Description: In this course, students work on a team with one or two others to design and construct the solution to an engineering problem. The problems involve a wide range of engineering applications (e.g., a school robo-mascot, automated solar water heater, remote control hover craft). The course serves as a capstone course where students apply the principles they developed in previous courses. A journal is part of each student's portfolio. Each team is responsible for delivering progress reports and making final presentations to an outside review panel. The course meets for a total of 75 hours over a two-week period and focuses on the content as well as teaching methods appropriate for the course. This course is designed specifically and only for current high school teachers who have been assigned by their schools and districts to teach the Project Lead the Way courses in their respective schools. These courses carry graduate credit for those teachers who would use them as part of a master's degree program or for recertification.

MFET 6050 - Gateway to Technology

Credits: (1-4)

Typically Taught Summer Semester: *2nd Blk*

Description: Gateway to Technology is a course designed specifically and only for current high school teachers who have been assigned by districts to teach the related Project Lead the Way course in their respective schools. Gateway to Technology introduces the Project Lead the Way series of courses covering the principles of engineering and technology. The course promotes an understanding of the field of technology and covers the continuous evolution of technology, the positive and negative impact of technology on our society, and career opportunities in technology. The various modules in this course will utilize a train the trainer approach. Teachers will learn technical content, teaching methodologies used to present the course, and the Project Lead the Way learning management system (Canvas). Credit hours will be based on the number of modules taken (two credits for each one-week module). May be repeated 4 times and up to 8 credit hours.

MGMT 3010 - Organizational Behavior and Management

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Focus of the course is on individual and group behavior in an organizational setting and on decision processes. Examples of topics included are motivation, group behavior, organizational design and development, organizational culture, and decision making theory.

MGMT 3200 - Managerial Communications

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Study of corporate communication methods to improve communication in organizations. Written and oral reports tailored to achieve strategic goals contingent upon business situations.

Pre-requisite(s): ENGL 1010, ENGL 2010.

MGMT 3300 - Human Resource Management

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Study of principles and methods in managing specific aspects of human resources, either as an operating manager or as a human resource specialist. Topics include: legal constraints in managing human resources, strategic planning of human resources, recruitment, selection, orientation, performance evaluation, employee/ labor relations and communication programs, safety and health, and work scheduling. The computer will be used for analysis in certain areas studied.

Pre-requisite(s): BSAD 2899; MGMT 3010.

MGMT 3350 - Employment and Labor Law

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course will focus on legal and ethical issues most closely associated with Human Resource Management. Title VII of the Civil Rights Act of 1964, ADEA, and ADA form the heart of this course. Other topics include FLSA, OSHA, ERISA, sexual harassment, drug testing and privacy. Labor law issues include preventing unionization, and dealing effectively with a union.

Pre-requisite(s): BSAD 2899.

Pre-requisite/Co-requisite: MGMT 3300.

MGMT 3400 - International Business

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Student participation in the X Culture program.

Description: An exploration of the role of multi-national corporations in worldwide economic development and an analysis of the management processes of such corporations.

Pre-requisite(s): BSAD 2899.

MGMT 3450 - Business Studies Abroad-International Management

Credits: (3)

Description: An exploration of the internationalization of economies and the analysis of international decision-

making. Focus is internationalization as the central challenge for management. This course is taught at Fachhochschule Hof, Germany during each fall semester. Students enrolled in this course have to participate in the Study Abroad Program (Contact: Doris Geide-Stevenson, ext. 7634, dgsteven@weber.edu).

Pre-requisite(s): BSAD 2899, MGMT 3010.

May be repeated 3 times for credit.

MGMT 3550 - The Cultural Environment of International Business

Credits: (3)

Description: This course considers issues in communication, negotiation and culture in international business relations. Topics include the role of language and nonverbal communication, contrasting cultural values and using sources of information on the culture of international business.

Pre-requisite(s): BSAD 2899.

MGMT 4300 - Leadership and Group Effectiveness

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Description: This course is about getting things done through the use of influence. The course emphasizes influencing others and influencing a situation. Power and other forms of influence are studied in-depth. Topics also include an examination of group behavior in work setting and the management of work groups. All stages of group development are studied from the forming stage of a group to its development as a high performance, self-managed team.

Pre-requisite(s): MGMT 3010 or COMM 3550 or HAS 3260.

MGMT 4310 - Compensation and Benefits

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is intended to provide the student with a basic working knowledge of compensation and benefits as an important part of the broader Human Resources field. The topics to be covered include: benefits management, job analysis, job evaluation, performance appraisal and recognition, and different approaches to employee compensation. The course is also designed to assist the student in their preparation for professional certification examinations in related areas.

Pre-requisite(s): BSAD 2899.

Pre-requisite/Co-requisite: MGMT 3300.

MGMT 4320 - Staffing Organizations

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Designed to provide students with the knowledge and skills necessary to effectively analyze and project organizational staffing requirements, recruit and select candidates, and effectively place employees in today's complex organizations. Includes treatment of legal aspects of staffing process.

Pre-requisite(s): BSAD 2899.

Pre-requisite/Co-requisite: MGMT 3300.

MGMT 4350 - Training

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to provide prospective human resource managers with an understanding of the applicable theory and with the "tools" required to effectively manage the training function within an organization.

Pre-requisite(s): BSAD 2899.

Pre-requisite/Co-requisite: MGMT 3300.

MGMT 4400 - Advanced Organizational Behavior

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An in-depth study of leadership and organizational behavior. Focus is on the structural and behavioral variables that are most significant for organizational effectiveness. Both theory and application are emphasized.

Pre-requisite(s): MGMT 3010 or COMM 3550 or HAS 3260.

MGMT 4410 - Leadership Through Character

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will provide students access to the concepts and skills to possess the competencies, commitment, emotional intelligence and character to be effective leaders. While competencies and commitment are important, character plays a critical role in leadership behavior and will be the focus of this course. By character it is meant the combination of traits, values and virtues that are recognized as admired and appreciated in leaders, providing them with the expertise to exercise quality of judgment and decision-making. For example, in the financial crisis of 2008 - 2009 some corporate leaders' needs for instant gratification triumphed over temperance; and others who knew ethical risks were taken remained silent because they did not have the skills or courage to speak up. A component of this course is to explore the fundamentals of corporate governance, emphasizing the leader's responsibility to make ethical, socially responsible, legal, and wise financial decisions on behalf of the organization. We will explore a number of corporate examples that demonstrate positive and negative character development. Effective corporate governance requires leaders know the purpose or values of the organization, design the space of the organization to achieve its purpose, organize the flow of power within the organization, and manage the relationships of the key stakeholders in the organization: owners, directors, managers, employees, customers, suppliers, regulators, and the wider community of which the organization is a member. The skills and knowledge acquired in this course are transferable to other areas of life including one's community service and interaction with family and friends.

Pre-requisite(s): MGMT 3010, or HAS 3260, or COMM 3550.

MGMT 4420 - Critical Thinking for Leaders

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to apply a well-rounded and experiential learning process to developing critical thinking skills for leaders. Course topics are broad and include the major branches of philosophy, the nature of thinking and knowledge, the formation of beliefs, perceptual biases, cognitive biases, the nature of memory, the structure and purpose of argument, logic and logical fallacies, the practice of street epistemology, probabilities and statistics, culture and mass delusions, the philosophy of science, the scientific method, skepticism, and pseudoscience. Application of critical thinking skills will target the human side of business in areas most relevant to leaders - leading, decision making, influence, conflict management and the development of conceptual skills and human capital.

Pre-requisite(s): MGMT 3010, or HAS 3260, or COMM 3550.

MGMT 4650 - Negotiations

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an opportunity for management students to obtain an understanding of negotiation concepts and to develop management negotiation skills. Because the objective is skill building, the course emphasizes hands-on experience through negotiation simulations. These role playing exercises are designed to simulate the situations and issues commonly faced in management/organizational settings (e.g., labor negotiations, contract provisions, vendor arrangements).

Pre-requisite(s): BSAD 2899.

MGMT 4800 - Independent Research

Credits: (1-3)

Description: Directed research and study on an individual basis.

Pre-requisite(s): BSAD 2899; Senior Standing; Written Instructor Approval.

May be repeated until a total of 4 hours credit is accumulated.

MGMT 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MGMT 4850 - Management Study Abroad

Credits: (1-3)

Description: This course is designed for students who wish to explore management theory and practice in countries other than the U.S. Students will study international business as offered through a partner university (or other university with department chair approval).

Pre-requisite(s): BSAD 2899.

May be repeated once up to 6 credits.

MGMT 4860 - Management Internship

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A structured professional-level field experience. The student will be counseled and supervised as he/she applies and integrates the knowledge and skills obtained through the Management program courses. Students receiving credit in this course cannot also receive credit in MGMT 4865.

Pre-requisite(s): BSAD 2899; Instructor approval.

MGMT 4865 INT - Human Resource Internship

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A structured professional-level field experience. The student will be counseled and supervised as

he/she applies and integrates the knowledge and skills obtained through the Human Resource or Management program. Students receiving credit in this course cannot receive credit for MGMT 4860.

Pre-requisite(s): BSAD 2899; Instructor approval.

MHA 6000 - Health Systems & the Healthcare Economy

Credits: (3)

Typically Taught Fall Semester: *1st Blk, 1st Blk Online*

Description: In-depth analysis and synthesis of all aspects of the health care delivery system emphasizing improvement of health care delivery and access. Examines the complex organizational dynamics and structures that predicate the interaction among major components of the U. S. health care system, including service provider settings in which care is provided. The course surveys the funding systems and regulatory structures for financing healthcare delivery and resource management in health services organizations. Current reform debates will be challenged.

MHA 6100 - Leading & Managing People in Healthcare

Credits: (3)

Typically Taught Fall Semester: *1st Blk, 1st Blk Online*

Description: The course content emphasizes visionary leadership and management of diverse healthcare professionals in complex organizational structures. Individual leadership talents in handling various organizational challenges, such as leading organization change, building strong culture, developing effective teams, resolving conflicts, implementing effective motivational systems, and nurturing a learning organization are investigated.

MHA 6140 - Post Acute Care Administration

Credits: (3)

Description: Seminar analysis of effect of chronic conditions and aging on delivery of health services, nursing homes and alternatives, mental health facilities and agencies, and rehabilitation facilities and services. Field trips and individual research projects.

Note: Check with department for course availability.

MHA 6160 - Medical Group Management

Credits: (3)

Description: Theory and principles of practice management. Emphasis on the fundamentals of organizing, staffing, and controlling a physician practice. Financial applications and resource consumption.

Note: Check with department for course availability.

MHA 6180 - Healthcare Entrepreneurship

Credits: (3)

Description: Develops an understanding of entrepreneurship, its importance for a healthcare organization and the health economy, and the challenges associated with promoting entrepreneurship within healthcare organizations.

Note: Check with department for course availability.

MHA 6200 - Population Health and Data Analytics

Credits: (3)

Typically Taught Fall Semester: *2nd Blk, 2nd Blk Online*

Description: The course addresses the integration of population health into strategic planning and managerial decision-making in health services organizations. Epidemiological principles, social determinates of health, and the improvement of health of the entire population from clinical and managerial perspectives are addressed. This course

teaches the necessary fundamentals of data analytics and engages students in the process of analyzing data related to population health topics. Course work includes environmental analysis of community health, and health behaviors and lifestyle that impact demand on health care delivery systems. The student will evaluate models for integration of health services, preventive programs, demand management, and policy issues affecting continuity of care.

Pre-requisite(s): MHA 6000 (may be taken concurrently) or Instructor Approval.

MHA 6240 - Human Resources Management in Healthcare

Credits: (3)

Typically Taught Fall Semester: 2nd Blk, 2nd Blk Online

Description: Human resources management in healthcare organizations including recruitment and selection of employees, benefits and compensation management, privileging and credentialing of health professionals, performance evaluation, staffing plans, labor relations and labor law relevant to health care organizations.

MHA 6249 - Accounting and Finance Principles for Healthcare Managers

Credits: (3)

Typically Taught Spring Semester: 1st Blk, 1st Blk Online

Description: The first course in a two-course sequence addressing the accounting and finance knowledge and skills required of successful healthcare managers. It emphasizes the understanding of accounting and finance functions, use and interpretation of documents, reports, and statements, and the ability to work with the accounting and finance professionals in one's organization.

Pre-requisite/Co-requisite: MHA 6000.

MHA 6250 - Healthcare Finance

Credits: (3)

Typically Taught Spring Semester: 2nd Blk, 2nd Blk Online

Description: Application of financial management techniques to decision making for healthcare providers. Financial management functions and organizations, financial statement analysis, working capital management, present value analysis, capital budgeting, cost of capital, variance analysis, financing techniques, and financial analysis case studies.

Pre-requisite(s): MHA 6000 and MHA 6249 (6249 may be taken concurrently).

MHA 6300 - Quality Improvement and Risk Management in Health Services Organizations

Credits: (3)

Typically Taught Spring Semester: 1st Blk, 1st Blk Online

Description: A study of the effects of sophisticated quality and health outcome measures as used by individuals, employers and insurers to compare the results of various providers. The course will cover the forces of external customers and in addition to internal pressures to justify costs, provide continuous quality improvement, risk management, and changes within a complex health care system. Course content will include systems behavior and relationships, creating a culture of safety, using measurement to improve quality, fostering teamwork, and understanding the role of risk management in quality improvement.

Pre-requisite(s): MHA 6000 or Instructor Approval.

MHA 6320 - Health Policy and Economics

Credits: (3)

Typically Taught Spring Semester: 1st Blk, 1st Blk Online

Description: Economic analysis applied to health services sector; concept of efficiency applied to production and distribution of health services, health insurance, government programs, health care personnel, and health services

organizations; current public policy issues; emphasis on student application of economic principles to health care issues.

MHA 6350 - Decision Making for Healthcare Leaders

Credits: (3)

Typically Taught Fall Semester: *1st Blk*

Description: Course focuses on concepts for approaching executive decision-making in addressing key strategic, tactical execution, operational, and competitive issues facing healthcare organizations. Emphasis is placed on the development of analytical skills and the use of data to enable effective decision-making and sustained high organizational performance.

MHA 6360 - Comparative International Health Systems

Credits: (3)

Description: Analysis of key attributes of health care policy in selected countries and comparisons with the US health care system. This course includes an international field trip and appropriate travel expenses will be required of the students. Please check with the course instructor for more details.

Note: Check with department for course availability.

MHA 6370 - Executive Leadership Seminars in Healthcare

Credits: (3)

Description: Via a series of in-depth seminars, dialogues, interactions, and/or lectures with top level clinical leaders and healthcare executives, this course will explore complex and timely healthcare topics and issues of the day from the perspective of successful leaders in the healthcare industry, exploring and analyzing their implementation and application of management and leadership theory and practice as put into effect in a variety of healthcare settings and facilities.

Note: This course is offered as needed.

MHA 6400 - Strategic Health Planning and Marketing

Credits: (3)

Typically Taught Spring Semester: *2nd Blk, 2nd Blk Online*

Description: Various planning approaches, styles and theories are considered from a corporate decision-making perspective within the unique governance structures of health service organizations. Issues covered include strategic planning and resource allocation within integrated health systems. Environmental analysis explores national health care delivery policy, unique financing structures such as third party payment systems, and open vs. regulated markets and development of comprehensive marketing plans.

Pre-requisite(s): MHA 6100 and MHA 6200.

MHA 6440 - Health Ethics and Law

Credits: (3)

Typically Taught Fall Semester: *1st Blk, 1st Blk Online*

Description: Selected legal principles and their application to health field. Legal aspects of corporate liability, medical malpractice, admission and discharge processes, medical staff bylaws, informed consent, nursing, patients' rights, medical records, and governmental regulation of personnel and health facilities.

MHA 6450 - Health Informatics

Credits: (3)

Typically Taught Fall Semester: *2nd Blk, 2nd Blk Online*

Description: This course addresses the concepts and application of health informatics. Topics addressed in the course include: interoperability, IT standards, privacy and security of health information, cybersecurity, strategic planning for IT, and emerging trends in health informatics. Emphasis is placed on the use of data analytics to support management decision making.

MHA 6500 INT - Field Work**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course provides a capstone experience where the student synthesizes theory learned the classroom and applies it real world problem solving in health care organizations. Designed to integrate the knowledge gained in other graduate courses into an applied management project. The project will have enterprise wide applicability to a health services organization. The Student will develop and present a deliverable product that could be implemented by management to improve their organizational performance, specifically with analysis and recommendations for policy and strategic improvements.

Pre-requisite(s): MHA 6000, MHA 6200, MHA 6300, MHA 6400.

MHA 6810 - Experimental Course**Credits: (1-6)****Experimental**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): MHA 6000 and permission of instructor.

May be repeated for a total maximum of 6 credit hours.

MHA 6830 - Directed Study**Credits: (1-3)**

Description: Directed individual study and research on special topics related to health care.

Pre-requisite(s): Approval of MHA program and instructor.

May be repeated for a cumulative total of four credits.

Note: This course is offered as needed.

MHA 6840 - Case Study Analysis**Credits: (3)**

Description: Analysis, Preparation, and Presentation at a national Case Study Competition. Students synthesize theory and apply it to the explicit healthcare circumstance outlined in the case. Case studies require the demonstration and integration of knowledge, skills, and competencies from prior graduate courses and the application of them to a specific case situation. Students will travel and present their case analysis at a national case competition.

Pre-requisite(s): MHA 6000, and permission of instructor.

Note: Check with department for course availability.

MHA 6850 GLB - MHA Study Abroad**Credits: (3)**

Description: Healthcare has become a global phenomenon. Travel to other countries to see firsthand how their health industries are planned and organized, how care is delivered, and to interact with health leaders, providers, and

patients from other countries provides an inarguably rich experience for healthcare leaders. In addition, the study abroad experience requires both sound knowledge of the health industry being observed and scholarly reflection on its effectiveness, efficiency, and success in addressing and meeting that country's healthcare needs.

Pre-requisite(s): MHA 6000 and permission of instructor.

Note: Check with department for course availability.

MHA 7080 - Healthcare Finance/Economics

Credits: (2)

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course focuses on principles of healthcare economics and finance to develop and implement effective planning, decision-making, and evaluation for healthcare delivery within healthcare organizations and systems. It provides a financial management perspective to advanced nursing practice and general health care issues. This course offers 15 practicum hours 1:4 credit to clock hours (0.25 credit = 15 clock hours).

MICR 1113 LS - Introductory Microbiology

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online, 1st Blk Online, 2nd Blk Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: An overview of how microorganisms are used as model systems to study biology, genetics, metabolism, and ecology; how microorganisms play an integral role in disease and how microbial and immunological methods are used to treat and prevent disease; why microorganisms are found inhabiting a wide range of ecological habitats; how microorganisms play a vital role in biotechnology, fermentation, medicine, and other industries important to human well-being; and how microorganisms play an indispensable role in element cycles, biodegradation, and other aspects of the environment. This course is intended for all students who are not Microbiology majors. This course consists of 3 one-hour lectures/demonstrations per week.

MICR 1153 LS - Public Health: Sex, Travel, Food, & Drugs

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online, 1st Blk Online, 2nd Blk Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: We live in a microbial world. In this course, we will explore our complicated relationships with microbes, from those used to make bread, beer, and yogurt, to those that cause disease and death. To understand how microbes spread, cause illness, and evolve, we will use current important public health examples and case studies, such as sexually transmitted diseases, antibiotic resistance, measles outbreaks, food-borne illnesses, and drug use and abuse. Students will also learn about current efforts to understand and control our microscopic neighbors, such as vaccines, hand sanitizer, and antibiotics. We will discuss how public health issues are studied, how they influence society, and how we make policy decisions to prevent disease. This course consists of 3 one-hour lectures/demonstrations per week.

MICR 1280 - Life in Medicine

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: This one credit course for premedical students is designed to provide insight into many of the aspects associated with a career in medicine. The objectives of this course include 1.) provision of basic information regarding admission to medical training programs; 2.) exposure to some of the basic tenets necessary for professional success; 3.) investigation of some of the benefits and detriments associated with this challenging career; and 4.) establishing a

forum through which students can question and self-assess the feasibility and desire to pursue a medical career. Presentations, group discussions and introspective analysis of selected topics will be led by a local physicians of various specialties to accomplish these goals.
May be repeated once.

MICR 1353 LS - Microbes Rule the World - Power of Disease

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: We will explore the intimate relationships between infectious diseases and humans. Students will examine the biology of influential diseases and the biological principles that allow diseases to influence human events. The course uses scientific explanations and case studies to investigate the effects of diseases on human society. Each disease will be examined from different angles including its natural history (reservoirs, host factors, transmission), pathogenicity, historical impacts, and appropriate interventions. The diseases chosen reflect plagues that have occurred throughout history, especially those that have important lessons for the fields of microbiology or public health. This course consists of 3 one-hour lectures per week.

MICR 1370 LS - Principles of Life Science

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A survey course for elementary education majors. Course content includes cells, cell chemistry, genetics, plant and animal anatomy, plant and animal classification, physiology, immune systems, evolution, and ecology. Unifying concepts of all living things will be emphasized.

This course consists of 2 hours of lecture and 1 three-hour laboratory per week.

Cross-listed with BTNY 1370 and ZOOL 1370.

MICR 1810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MICR 2051 - LS - Principles of Microbiology Lab

Credits: (1)

Typically Taught Summer Semester: *2nd Block*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Consumable laboratory supplies including, but not limited to, culture tubes, Petri plates, broth and agar media, gloves, pipets, staining reagents, microscope slides and coverslips, disinfectant, swabs, and chemicals and reagents used in media preparation.

Description: MICR 2051 is a stand-alone laboratory version of the MICR 2054 laboratory. The laboratory experience focuses on the microscopy, cultivation, control, and identification of microorganisms. This course has the same syllabus content; including textbook, supplies, laboratory fee, and assessment as MICR 2054 laboratory. This laboratory course is to accommodate transfer students from other universities, departments, or microbiology majors that have completed an Introductory Microbiology course without a laboratory. To register for this course a grade of B- or higher is required in MICR 1113 or an equivalent course and Instructor approval is needed. This course consists

of 1 two-hour laboratory per week.

Pre-requisite(s): A passing grade of B- or higher in MICR 1113 or equivalent course and CHEM 1110/CHEM 1115 or CHEM 1200 or CHEM 1210/CHEM 1215. Instructor approval is required.

Pre-requisite/Co-requisite: CHEM 1210/CHEM 1215 may be taken concurrently.

MICR 2054 LS - Principles of Microbiology

Credits: (4)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Consumable laboratory supplies including, but not limited to, culture tubes, Petri plates, broth and agar media, gloves, pipets, staining reagents, microscope slides and coverslips, disinfectant, swabs, and chemicals and reagents used in media preparation.

Description: Comprehensive introduction to the microbial world, including cell structure and function, metabolism, genetics, ecology, and interactions with humans and other organisms. Discussions include current research topics and applications of microbiology. Laboratory experience focuses on the microscopy, cultivation, control, and identification of microorganisms. This course is designed for science majors, pre-professional students, and Biology Composite Teaching majors. However, anyone meeting the pre- or co-requisites may take this course. This course consists of 3 one-hour lectures and 1 two-hour laboratory per week.

Pre-requisite(s): CHEM 1110/CHEM 1115 or CHEM 1200 or CHEM 1210/CHEM 1215.

Pre-requisite/Co-requisite: CHEM 1210/CHEM 1215 may be taken concurrently.

MICR 2600 - Laboratory Safety

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An interdisciplinary, course that will be an overview of the major chemical, biological and physical safety issues related to science laboratories and field work.

Class will meet once per week and will be taught in a lecture/demonstration format.

Cross-listed with BTNY, CHEM, GEO, and PHYS.

MICR 2890 INT - Cooperative Work Experience

Credits: (1-5)

Description: Open to all students in the Microbiology Department who meet the minimum Cooperative Work Experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

Pre-requisite(s): MICR 2054.

Note: This course is offered as needed.

MICR 2920 - Short Courses, Workshop, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

MICR 3012 GLB - Microbiology and Global Public Health

Credits: (2)**Typically Taught Summer Semester:** *Full Sem - Online***Typically Taught Fall Semester:** *Full Sem - Online***Typically Taught Spring Semester:** *Full Sem*

Description: This course focuses on microbial diseases that are major causes of morbidity and mortality worldwide (e.g. HIV, tuberculosis, malaria, influenza, etc.), diseases that are classified as emerging diseases (e.g. Ebola) and diseases that are being eliminated or eradicated, including certain Neglected Tropical Diseases. This course will analyze the pathogenesis, life cycles, epidemiology and societal impacts of these diseases, while emphasizing preventative interventions such as vaccinations, water and sewage treatment, and elimination and eradication strategies. The role of various agencies (e.g. WHO and CDC) in improving global health will also be discussed. This course consists of 1 two-hour lecture per week.

Pre-requisite(s): MICR 1113 or MICR 1153 or MICR 2054 or ZOOL 1610 or permission of the instructor.

MICR 3053 - Microbiological Procedures**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$25.00

Course Fee Purpose: Consumable laboratory supplies including, but not limited to, culture tubes, Petri plates, broth and agar media, gloves, pipets, staining reagents, microscope slides and coverslips, disinfectant, swabs, and chemicals and reagents used in media preparation.

Description: This course is designed to increase proficiency with basic laboratory skills in microscopy, staining methods, preparation of media, aseptic technique, preservation and maintenance of cultures, culture identification, and enumeration methods while developing practical and professional skills in data analysis, presentation, and instrumentation.

This course consists of 2 two-hour combined lecture and laboratory sessions per week.

Pre-requisite(s): MICR 2054, CHEM 1210/CHEM 1215, and MATH 1050 or MATH 1080 or MATH 1210.

MICR 3154 - Microbial Ecology**Credits: (4)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$25.00

Course Fee Purpose: This course has a lab fee that will help fund unique activities done in this course. This will include materials and kits needed for DNA extraction and sequencing. It will also support providing other laboratory materials, media, and reagents.

Description: Microbial Ecology is the study of microorganisms in their natural habitats and their interactions with other living organisms. Topics explored in this course include the evolution of life on Earth, the diversity of microorganisms, microbial biogeography, symbiotic microbial interactions, and biogeochemical cycles. Current and historical research in microbial ecology is emphasized throughout the course. The laboratory experiments may involve isolating, identifying, and studying novel microorganisms from unique environments, studying environmental microbiomes, finding novel antibiotic producing organisms, and modeling biogeochemical cycles. Experimental techniques used in the laboratory involve advanced methods of cultivation, molecular identification techniques, and chemical assays.

This course consists of 3 one-hour lectures and 1 three-hour laboratory per week.

Pre-requisite(s): MICR 2054 and CHEM 1210/CHEM 1215.

MICR 3203 - The Immune System in Health & Disease**Credits: (3)****Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course will focus on the study of the human immune system and its role in health and disease. The course topics include the innate and adaptive immune responses and their role in host defense as well as immunodeficiency and hypersensitivity responses. Manipulation of the immune system through pharmacological means, vaccination or transplantation will also be studied. This course is intended for the student studying Medical Lab Sciences or someone who wants to know more about the human immune system and who has already taken a course in Microbiology. The course is not intended as a first course in biology and it cannot be used as a Microbiology elective course for Microbiology majors. This course is only offered online with the exception of Fall Semester which also offers a face-to-face option consisting of 3 one-hour lectures per week.

MICR 3254 - Immunology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Consumable laboratory supplies including, but not limited to, culture tubes, Petri plates, broth and agar media, gloves, pipets, staining reagents, microscope slides and coverslips, disinfectant, swabs, and chemicals and reagents used in media preparation.

Description: This course will focus on the study of the human immune system and its role in health and disease. The course topics include the innate and adaptive immune responses and their role in host defense as well as immunodeficiency and hypersensitivity responses. Manipulation of the immune system through pharmacological means, vaccination or transplantation will also be studied.

This course consists of 3 one-hour lectures and 1 three-hour laboratory per week.

Pre-requisite(s): MICR 2054 or consent of instructor.

MICR 3305 - Medical Microbiology

Credits: (5)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: This course has a fee of \$30 that will help offset the costs of the laboratory supplies used in this course. This includes, but is not limited to, the purchase of supplies for microscopy, antibiotics, media, and DNA sequencing. Other consumable supplies, such as pipettes, Petri plates, and basic reagents are provided in the lab.

Description: Characteristics of clinically relevant pathogenic bacteria, fungi, and other microbes. From the point of view of the microbe, topics will include pathogenesis, virulence factors and toxins, mechanisms of immune evasion, and unique biological features. From the point of view of the human host, we will discuss epidemiology, disease symptoms, diagnosis, treatment, prevention, and control.

This course consists of 3 one-hour lectures and 2 two-hour laboratory per week.

Pre-requisite(s): MICR 2054.

Suggested Requisite(s): Pre-requisite of MICR 3254 or MICR 3203 is strongly recommended.

MICR 3340 - Information Resources in the Life Sciences

Credits: (2)

Description: A practical introduction to the literature and information resources of the life sciences. Students will expand their research skills and be able to develop effective research strategies to find and synthesize information available in academic libraries.

Two lecture hours per week.

Pre-requisite(s): ENGL 2010.

Cross listed in Botany, Library Sciences and Zoology.

Note: This course is offered as needed.

MICR 3403 GLB - Tropical Diseases

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: Study of tropical diseases caused by viral, bacterial, protozoan, fungal, and helminthic agents, including their transmission, disease course, pathogenesis, treatment, prevention, and control using a multi-disciplinary approach integrating case studies, labs, epidemiology, immunopathology as well as microbiology. This course consists of 2 hours of lecture and 1 three-hour laboratory per week.

Pre-requisite(s): MICR 2054.

MICR 3484 - Environmental Microbiology**Credits: (4)**

Typically Taught Spring Semester: *Full Sem*

Description: Applied environmental microbiology and biotechnology including transport of microorganisms through environment, microbial pathogens, and toxins in the environment. Biodeterioration, contamination control, and biosafety. Pollution microbiology, environmental management, bioremediation, waste treatment, biological insecticides. Microbiology of man-made environments.

This course consists of 3 one-hour lectures and 1 three-hour laboratory per week.

Pre-requisite(s): MICR 2054 and CHEM 1210/CHEM 1215.

MICR 3502 SUS - Environmental Health**Credits: (2)**

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Air and water quality, solid and hazardous waste management, food protection, environmental inspection, and testing.

This course consists of 1 two-hour lecture per week.

Pre-requisite(s): MICR 1113 or MICR 2054 or consent of instructor.

MICR 3570 - Foundations of Science Education**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: A thorough investigation of research in science learning and curricular standards at the state and national levels. Foundations of the philosophy of science and scientific inquiry as applicable to science teaching at the secondary level. This course serves as a foundation to a pre-service science teacher's education coursework.

Cross-listed with BTNY, CHEM, GEO, PHYS, and ZOOL.

MICR 3603 - Advanced Microbiology for the Health Professions**Credits: (3)**

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Characteristics of microorganisms and parasites - emphasizing mechanisms by which they cause disease in humans. Intended for students in the Clinical Laboratory Sciences program and those working in that field. The course is not intended as a first course in biology and it cannot be used as a Microbiology elective course for Microbiology majors. This course is only offered online.

MICR 3753 - Geomicrobiology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Consumable laboratory supplies including, but not limited to, culture tubes, Petri plates, broth and agar media, gloves, pipets, staining reagents, microscope slides and coverslips, disinfectant, swabs, and chemicals and reagents used in media preparation.

Description: Geomicrobiology is the study of the interactions between microorganisms and minerals. This course will explore the geological change mediated by microorganisms, microbial evolution driven by geologically diverse habitats, and applications of geomicrobiology, including understanding the evolution of life on earth, the study of life in extreme environments, and industrial application of geomicrobiology. The course includes classroom discussion, laboratories, and field trips.

This course consists of 2 hours of lecture and 1 two-hour laboratory.

Pre-requisite(s): CHEM 1210/CHEM 1215 or approval of the instructor.

Cross-listed with GEO 3753.

MICR 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MICR 3813 CRE - Bioinformatics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Bioinformatics is the use of computers to analyze biological data. Students will learn the basic concepts, methods, and tools used in bioinformatics, such as sequence alignment, phylogenetics, gene prediction, genomics, protein structure prediction, expression analysis, systems biology, sequence assembly, and metagenomics. This course consists of 3 one-hour lectures per week.

Pre-requisite(s): MICR 2054 or ZOOL 1610 or BTNY 2104.

MICR 3853 - Food Microbiology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: This course charges a fee. That fee is used to purchase specialty media and supplies used in the lab. These supplies are meant to help you practice valuable workplace skills. Any unused portion of the course fee will be used to purchase other consumable supplies or media required for this course.

Description: Role of microorganisms in food production, preservation, spoilage, and food borne disease.

This course consists of 2 one-hour lectures and 1 two-hour laboratory per week.

Pre-requisite(s): MICR 2054 and CHEM 1210/CHEM 1215.

MICR 4054 - Microbial Physiology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course Fee: As part of your registration, you paid a course fee for this course. That fee is used to purchase lab supplies for this class including: slides, staining reagents, culture media, pipettes, gloves, and other

disposable supplies. Any remaining money is used for maintenance of equipment used in this course.

Description: Structure, function, and physiology of microorganisms, with emphasis upon the bacteria. The course highlights the amazing diversity in metabolism found among bacteria.

This course consists of 3 one-hour lectures and 1 three-hour laboratory per week.

Pre-requisite(s): MICR 2054, CHEM 1220/CHEM 1225 and CHEM 2310/CHEM 2315.

Suggested Requisite(s): Completion of or concurrent registration in CHEM 3070/ CHEM 3075 is recommended.

MICR 4154 - Microbial Genetics

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Consumable laboratory supplies including, but not limited to, culture tubes, Petri plates, broth and agar media, gloves, pipets, staining reagents, microscope slides and coverslips, disinfectant, swabs, and chemicals and reagents used in media preparation.

Description: The genetics of microorganisms and its applications, including isolation and characterization of mutants, the biology and uses of plasmids, conjugation, transformation, the biology and uses of bacteriophages, transposition, recombinant DNA technology, gene regulation, and bioinformatics.

This course consists of 3 one-hour lectures and 1 three-hour laboratory per week.

Pre-requisite(s): MICR 2054 and CHEM 2310/CHEM 2315.

Suggested Requisite(s): Completion or concurrent of CHEM 3070/CHEM 3075 is recommended.

MICR 4253 - Cell Culture

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Consumable laboratory supplies including, but not limited to, culture tubes, Petri plates, broth and agar media, gloves, pipets, staining reagents, microscope slides and coverslips, disinfectant, swabs, and chemicals and reagents used in media preparation.

Description: Introduction to core skills used in the biotechnology industry for culturing animal cells in vitro, with some use of insect and/or plant cells. Skills include sterile technique, cell counts, and the culture, maintenance, and preservation of cell lines. Specialized experiences include transfections with foreign DNA, confocal microscopy, real-time PCR and viral infections.

This course consists of 2 two-hour combined lecture and laboratory sessions per week.

Pre-requisite(s): MICR 2054 or BTNY 2104 and BTNY 2121 and CHEM 1220/CHEM 1225.

MICR 4354 - Industrial Microbiology and Biotechnology

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: Experimental design for application of microbial physiology and biochemical ecology as potential solutions to current world problems, as well as exposure to traditional topics in product development.

This course consists of 3 one-hour lectures (presented in a laboratory) and 1 three-hour laboratory per week.

Pre-requisite(s): MICR 2054 and CHEM 1220/CHEM 1225.

Suggested Requisite(s): Pre-requisite of MICR 3053 is recommended.

MICR 4554 - Virology

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: The study of viruses and virus-like agent structure, classification, genetics, replication, and other

interaction with the host, with emphasis on bacteriophage and animal viruses.
This course consists of 3 one-hour lectures and 1 three-hour laboratory per week.
Pre-requisite(s): MICR 2054 and CHEM 1220/CHEM 1225.

MICR 4570 CEL - Secondary School Science Teaching Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Acquaintance and practice with various teaching and assessment methods. Development of science curricula including lesson and unit plans. It is recommended that this course be completed immediately before student teaching.

Pre-requisite(s): Admission to the Teacher Education Program.

Cross-listed with BTNY, CHEM, GEO, PHYS, and ZOOL.

MICR 4800 - Directed Research

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Independent research under the advisement of a faculty member. No more than 3 credit hours may count toward the major.

Pre-requisite(s): Consent of instructor and a minimum of 6 credits of upper division microbiology course work. May be repeated up to 10 times for credit.

MICR 4830 - Directed Readings

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Independent readings on advanced special topics under the direction of a faculty member. No more than 2 credit hours may count toward the major.

Pre-requisite(s): Consent of instructor and a minimum of 6 credits of upper division microbiology course work. May be repeated up to 10 times for credit.

MICR 4890 INT - Cooperative Work Experience

Credits: (1-5)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all students in the Microbiology Department who meet the minimum Cooperative Work Experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

Pre-requisite(s): CHEM 1210/CHEM 1215, CHEM 1220/CHEM 1225, and MICR 2054.

May be repeated up to 10 times for credit.

MICR 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and

credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.
Note: This course is offered as needed.

MICR 4991 - Microbiology Seminar

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Current topics in Microbiology.

This course consists of 1 one-hour lecture per week.

Pre-requisite(s): MICR 2054 and MICR 3053 or MICR 3154 or MICR 4054 or MICR 4154.

MICR 5034G - Microbiology for Teachers

Credits: (1-4)

Description: Science content course for teachers in the MEd Science Emphasis Program. To register, select another departmental course and develop a contract detailing additional work required for graduate credit. Contract must be approved by instructor, department chair, and Director of the Master of Education Program.

May be repeated twice with a maximum of 4 credit hours.

Note: This course is offered as needed.

MILS 1010 - Introduction to the Army and Critical Thinking

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The course fees in this course will be used to purchase training aides, training resources and academic materials. Course fees will be used to pay for expenses regarding field training exercises, food/meals, training site fees, transportation costs, uniform items and lab supplies.

Description: Introduces cadets to the personal challenges and competencies critical for effective leadership. Cadets learn how the personal development of life skills such as critical thinking, time management, goal setting, stress management and comprehensive fitness relate to leadership and the Army profession. A three hour weekly leadership lab is included, as well as one weekend field training exercise during the semester.

Participation in weekly physical fitness training is expected and should be taken as MILS 2400.

MILS 1020 - Introduction to Profession of Arms

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The course fees in this course will be used to purchase training aides, training resources and academic materials. Course fees will be used to pay for expenses regarding field training exercises, food/meals, training site fees, transportation costs, uniform items and lab supplies.

Description: Introduces cadets to the personal challenges and competencies that are critical for adaptive leadership. Cadets learn the basics of the communications process and the importance for leaders to develop the essential skills to effectively communicate in the Army. Students will examine the Army profession and what it means to be a professional in the U.S. Army. A three-hour weekly leadership lab is included as well as one weekend field training exercise during the semester.

Participation in weekly physical fitness training is expected and should be taken as MILS 2400.

MILS 1110 - Basic Rifle Marksmanship

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Description: Open to all Weber State University students. Introduction to safe use of a rifle and practical application of rifle marksmanship. Course includes weapons safety, mechanics, capabilities, and fundamentals of marksmanship. Includes visit to fire at indoor air rifle range. Materials and equipment furnished by Department of Military Science and Leadership (Army ROTC).

May be repeated twice for up to two hours of credit.

MILS 1220 - Wilderness Survival Skills

Credits: (1)

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Description: Open to all WSU students. This class will teach you how to build makeshift shelters, procure food and water, cook a meal, identify edible and poisonous plants, avoid dangerous animals, treat wounds and illness, navigate with the sun and stars, make equipment, and much more. The class covers wilderness survival and an urban survival situation. Materials and equipment furnished by Department of Military Science.

This course may be repeated once for a total of two credit hours.

MILS 2010 - Innovative Team Leadership

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The course fees in this course will be used to purchase training aides, training resources and academic materials. Course fees will be used to pay for expenses regarding field training exercises, food/meals, training site fees, transportation costs, uniform items and lab supplies.

Description: Builds on previous leadership instruction enhancing student skills in land navigation, small unit tactics, written and oral communication, event planning, group coordination and effectiveness and first aid. During this course, students develop basic skills for leading others in a tactical environment.

A three-hour weekly leadership lab is included as well as one weekend field training exercise during the semester.

Participation in weekly physical fitness training is expected and should be taken as MILS 2400.

MILS 2020 - Foundations of Tactical Leadership

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The course fees in this course will be used to purchase training aides, training resources and academic materials. Course fees will be used to pay for expenses regarding field training exercises, food/meals, training site fees, transportation costs, uniform items and lab supplies.

Description: This course focuses on leader effectiveness. Course content includes analysis of selected historical leaders and battles using the principles of war and other tenets. Student led discussions highlight lessons learned relative to leadership and organizational success. Oral communications skills are central to this course.

A three-hour weekly leadership lab is included as well as one weekend field training exercise during the semester.

Participation in weekly physical fitness training is expected and should be taken as MILS 2400.

MILS 2220 - Advanced Rifle Marksmanship

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Open to all Weber State University students. Course provides instruction on the fundamentals of

Advanced Rifle Marksmanship. Class is conducted once a week with topics including: Air Rifle, Small Bore firing, and advanced practical exercises of different shooting positions.

Pre-requisite(s): MILS 1110 or permission of Instructor.

May be repeated two times for credit for a total of two credit hours.

MILS 2400 - Physical Readiness

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A physical conditioning course that employs U.S. Army principles of fitness. Subjects include: body composition, nutrition, cardiorespiratory fitness, muscle endurance and strength, circuit training and drills. Students registered for MILS 1010, MILS 1020, MILS 2010, or MILS 2020 are encouraged to enroll in this course to gain the full perspective of the physical demands required to be an Army officer.

May be repeated 3 times with a maximum of 4 credit hours.

MILS 2600 - Leadership Under Fire

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will explore both functional and dysfunctional behavior in leadership roles. Using examples from military and civilian leadership, this course will teach leadership techniques essential for future managers and leaders that will be of great value to both civilian and military leaders. It will focus on ethical/moral, historical, and social influences and examine outlook, styles, skills, and behavior essential for providing successful leadership. This will culminate in a hands-on team-building exercise. No prerequisites. Students are NOT required to be enrolled in a ROTC course, nor to do so in the future.

MILS 2830 - Directed Readings, Projects and Research

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Independent reading/research on topic(s) of military interest under the supervision of a Military Science faculty member.

Pre-requisite(s): Requires instructor permission.

May be repeated 2 times with a maximum of 3 credit hours.

MILS 2921 - Cadet Initial Entry Training

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: A four-week leadership camp conducted at Fort Knox, Kentucky. Designed to introduce students to basic military skills and leadership requirements. Training includes rappelling, marksmanship, small unit tactics, physical fitness, leadership, and adventure training. Credit/no credit grade only.

Pre-requisite(s): Requires instructor permission.

MILS 2922 - Northern Warfare

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Description: A two week course conducted in Alaska. Provides training in cold weather survival and small unit

tactics. Credit/no credit grade only.

Pre-requisite(s): Include the completion of the basic course and instructor permission.

MILS 2923 - Air Assault

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Description: A two week course conducted at an Army installation in the continental U.S. Provides students training in helicopter operations to include sling loading and rappelling. Credit/ no credit grade only.

Pre-requisite(s): include successful completion of the basic course and instructor approval.

MILS 3000 - Leadership in Military History

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The Army Pre-Commissioning Military History course covers military history from early colonial warfare in the eighteenth century to the global war on terrorism in the twenty-first century. The purpose of this course is to lead Reserve Officer Training Corps (ROTC) Cadets to understanding the role military officers have played in the development of our country. Completion of this block of instruction is a prerequisite for commissioning as a Lieutenant in the United States Army.

Pre-requisite(s): Instructor approval is required.

MILS 3010 - Adaptive Team Leadership

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The course fees in this course will be used to purchase training aides, training resources and academic materials. Course fees will be used to pay for expenses regarding staff ride/battlefield tour (to include lodging, airfare/transportation, and meals), field training exercises, food/meals, training site fees, transportation costs, uniform items and lab supplies.

Description: Develops leadership skills within the framework of the U.S. Army. This course focuses on theory and application of decision making, planning, organizing, management control and communications.

The course also emphasizes small unit tactics and advanced land navigation skills; it includes a three-hour weekly leadership lab. Students must participate in up to three, one-hour physical fitness sessions per week, which may be taken as MILS 4400, to satisfy requirements of the Military Science minor. One weekend field training exercise is required during the semester.

MILS 3020 - Leadership in Changing Environments

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: The course fees in this course will be used to purchase training aides, training resources and academic materials. Course fees will be used to pay for expenses regarding staff ride/battlefield tour (to include lodging, airfare/transportation, and meals), field training exercises, food/meals, training site fees, transportation costs, uniform items and lab supplies.

Description: Focuses on theory and application of small unit tactics, leadership and land warfare. Subjects include preparing and issuing combat orders, organizing for combat, unit and individual movement techniques, communications and security.

A three-hour weekly leadership lab is included. Students must participate in up to three, one-hour physical fitness

sessions per week, which may be taken as MILS 4400, to satisfy requirements of the Military Science minor. One weekend field training exercise is required during the semester.

MILS 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MILS 4010 - Mission Command and the Army Profession, Part 1

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The course fees in this course will be used to purchase training aides, training resources and academic materials. Course fees will be used to pay for expenses regarding staff ride/battlefield tour (to include lodging, airfare/transportation, and meals), field training exercises, food/meals, training site fees, transportation costs, uniform items and lab supplies.

Description: This course focuses on the functions and roles of the commander/ leader and the staff. Subject matter includes problem solving, planning techniques and procedures, written and oral communications, training management and evaluation systems.

A three-hour weekly leadership lab to enhance leadership skills and apply classroom instruction to hands on training and execution is included. Students must participate in up to three, one-hour physical fitness sessions per week, which should be taken as MILS 4400, to satisfy requirements of the Military Science minor. One weekend field training exercise is required during the semester.

MILS 4020 - Mission Command and the Army Profession, Part 2

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: The course fees in this course will be used to purchase training aides, training resources and academic materials. Course fees will be used to pay for expenses regarding staff ride/battlefield tour (to include lodging, airfare/transportation, and meals), field training exercises, food/meals, training site fees, transportation costs, uniform items and lab supplies.

Description: A conference course addressing future roles and responsibilities of junior Army officers. Subject matter includes the world environment and future threats to U.S. security, the spectrum of Army requirements, Army modernization initiatives, the laws of war, joint operations and other issues designed to complete the cadet-to-lieutenant process.

A three-hour weekly leadership lab to enhance leadership skills and apply classroom instruction to hands-on training and execution is included. Students must participate in up to three, one-hour physical fitness sessions per week, which should be taken as MILS 4400, to satisfy requirements of the Military Science minor. One weekend field training exercise is required during the semester.

MILS 4400 - Advanced Physical Readiness

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides advanced instruction in physical fitness employing Army techniques and procedures. Students assist Military Science faculty in the planning/conduct of physical fitness training activities

performed by lower division students.

Pre-requisite(s): Requires instructor permission.

Suggested Requisite(s): (Students must be enrolled in one of the following courses: MILS 3010, MILS 3020, MILS 4010, or MILS 4020.)

May be repeated 3 times with a maximum of 8 credit hours.

MILS 4830 - Directed Readings, Projects and Research

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Independent reading/research on topics of military interest under the supervision of a Military Science faculty member. For each credit awarded the student will read approximately 1000 pages and prepare a written review or summary.

Pre-requisite(s): Requires instructor permission.

May be repeated for a maximum of 6 credit hours.

MILS 4921 - Cadet Leadership Course (CLC)

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: A five week leadership camp conducted at Fort Lewis, Washington. The Advanced Camp environment stresses small unit leadership under varying and challenging conditions. Credit/no credit grade only.

Pre-requisite(s): Requires instructor approval. Open only to students who have successfully completed basic course requirements, MILS 3010 and MILS 3020.

MILS 4922 - Airborne Operations

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Description: A three week course conducted at Fort Benning, Georgia. Provides students training in military sky diving techniques with practical applications. Credit/no credit grade only.

Pre-requisite(s): Requires instructor approval. Prerequisite includes completion of the basic course.

MILS 4923 - Cadet Troop Leader Training

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Description: A two week course conducted at an Army installation in the continental U.S. or overseas. Provides firsthand experience in an Army unit. Students learn about military life and the duties of a lieutenant. Credit/no credit grade only.

Pre-requisite(s): MILS 3010, MILS 3020, Advanced Camp, and instructor approval.

MIS 1100 SS - The Digital Society

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: The explosive growth of information technologies in general, and the Internet in particular, has irreversibly changed the way we work and play. This course prepares students to be knowledgeable citizens of cyberspace. It reviews our social institutions and how they are being impacted by information technology as well as

the ways in which technology has been shaped by our social institutions. The course also provides hands-on experience with a variety of Internet tools.

MIS 2010 - Business Computer Skills

Credits: (1)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Course Fee: \$5.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MIS Lab, software licenses, and program assessment materials.

Description: This course prepares all students in business and economics to demonstrate current competence in desktop software commonly used in the business environment. The course covers computer competencies students will use in their business functional and cross-functional core courses, using more complex features of desktop software. It is followed by a hands-on exam that tests these competencies. *Credit/No credit.*

MIS 2020 - Introduction to Information Systems

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MIS Lab, software licenses, and program assessment materials.

Description: Overview of the role and use of information systems to support individual, group, and business decision-making. Includes coverage of technology's role in supporting the business decision-making process. It will prepare students to use information technologies effectively to improve productivity and promote competitive position in the marketplace.

MIS 2030 - Introduction to Business Analytics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Business analytics refer to the ways in which organizations use data to gain insights and make better decisions, and has become a critical capability for organizations of all types and sizes. It is applied in various business functions including marketing, finance, human resources, operation and strategic planning. This course covers basic analytic methods used by organizations. Students will learn how to explore, manipulate and present data. They will also learn how to use data to develop insights and predictive capabilities by using predictive analytics techniques.

Pre-requisite(s): MATH 1040 or QUAN 2600.

MIS 2040 - Business Analytics with Python

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces Python within the context of business analytics. Students will learn Python programming basics and be exposed to the business analytics workflow, starting with interacting with SQL databases to query and retrieve data, through data wrangling, reshaping, summarizing, analyzing and ultimately reporting their

results.

Pre-requisite(s): MATH 1040 or QUAN 2600.

MIS 2110 - Software Development I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MIS Lab, software licenses, and program assessment materials.

Description: This course introduces the student to the fundamentals of software construction using a contemporary programming language. This includes the IDE (Integrated Development Environment), syntaxes of the language, basic programming constructs, data representation, object concepts, programming flow control and problem solving logic. Students will design, program and debug several business application projects.

Pre-requisite(s): Earn a "C" or better in MATH 1050, MATH 1080, or MATH 1210 or; earn a "C" or better in any math course for which either MATH 1050 or MATH 1080 or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS.

MIS 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MIS 2891 - Cooperative Work Experience

Credits: (1)

Description: Open to all associate's degree-seeking students who have been selected to serve an internship in the information technology field or who have identified a special MIS project with their current employer, subject to approval by the Management Information Systems Department.

Pre-requisite(s): Department Approval.

MIS 2892 - Cooperative Work Experience

Credits: (2)

Description: Open to all associate's degree-seeking students who have been selected to serve an internship in the information technology field or who have identified a special MIS project with their current employer, subject to approval by the Management Information Systems Department.

Pre-requisite(s): Department Approval.

MIS 2893 - Cooperative Work Experience

Credits: (3)

Description: Open to all associate's degree-seeking students who have been selected to serve an internship in the information technology field or who have identified a special MIS project with their current employer, subject to approval by the Management Information Systems Department.

Pre-requisite(s): Department Approval.

MIS 2894 - Cooperative Work Experience

Credits: (4)

Description: Open to all associate's degree-seeking students who have been selected to serve an internship in the information technology field or who have identified a special MIS project with their current employer, subject to approval by the Management Information Systems Department.

Pre-requisite(s): Department Approval.

MIS 3210 - Database Design and Implementation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MIS Lab, software licenses, and program assessment materials.

Description: This course provides a comprehensive coverage of business database systems. Students will learn how to design, implement and manage databases. They will learn both GUI interface and how to use the Structured Query Language (SQL). They will also gain experience in using an enterprise level, multi-user database.

Pre-requisite(s): MIS 2110 or MIS 2020 and earn a "C" or better in any math course for which either MATH 1050, MATH 1080, or MATH 1090 is a prerequisite or score 3 or higher on AP Calculus exam or score 70 or higher on ACCUPLACER College Level Math (CLM) or score of 26 or higher on Math ACT or score of 65 or higher on ALEKS.

MIS 3220 - Business Intelligence

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an understanding of the concepts of Business Intelligence (BI) as an information technology approach of data collection and data analysis to help enterprise users make better managerial decisions. The course explores the detailed discussion of the analysis, design, and implementation of systems for BI including enterprise data-warehousing, knowledge management systems, big data, and text mining. The course will help students learn analytical components and technologies to integrate, analyze and report data. The course will utilize Microsoft BI tools including Microsoft Power BI desktop, SQL Server Integration Services (SSIS), SQL Server Analysis Services (SSAS) and SQL Server Reporting Services (SSRS).

Pre-requisite(s): MIS 2030.

MIS 3230 - Data Mining for Business

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will examine how data mining technologies can be used to improve decision-making. Students will study the principles and techniques of data mining, including gaining knowledge of the algorithms and computational paradigms that allow computers to find patterns in large datasets. Students will examine real-world examples and cases to place data-mining techniques in context, to develop data-analytic thinking, and to illustrate that proper application is as much an art as it is a science.

Pre-requisite(s): MIS 2030.

MIS 3610 - Networks & Data Communications I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MIS Lab, software licenses, and program assessment materials.

Description: This course provides an introduction to the design, operation, and management of telecommunication systems. It covers computer network definitions, concepts and principles, including (but not limited to): server management; topologies; protocols; standards; and fundamental concepts related to data communication networks.

Pre-requisite(s): MIS 2020 or MIS 2410 .

MIS 3620 - Networks and Data Communications II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MIS Lab, software licenses, and program assessment materials.

Description: In this intensive hands-on course, the student will acquire the skills and techniques needed to configure, troubleshoot and support reliable TCP/IP internetworks. The student will learn the essentials of building an internetwork, including routing, configuring the Domain Name Server (DNS), setting up and managing a web server, configuring a firewall and IDS, and standards-based email. Students will also participate in configuring clients, redesigning networks and troubleshooting routing.

Pre-requisite(s): BSAD 2899 and MIS 3610.

MIS 3700 - E-business Technologies & Web Development

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MIS Lab, software licenses, and program assessment materials.

Description: This course provides students with knowledge of technologies needed in planning, implementing and supporting web-hosted applications and on-line commerce. Topics include web and commerce server design and deployment, search engines n-tier web architecture and supporting software, client-side/server-side programming with data-bound controls and session management, e-business application languages, markup languages, on-line payment mechanisms, systems reliability and security, scalability analysis, and solutions sourcing.

Pre-requisite(s): BSAD 2899 and MIS 2110, or MIS 2020.

MIS 3710 GLB - Global Issues in Information Technology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course shows how information technology is used as a key competitive advantage by multinational and transnational businesses. Topics include global perspectives on coordination and control, cultural dimensions, and geo-political considerations of global information technology applications.

Pre-requisite(s): BSAD 2899.

MIS 3740 - Business Machine Learning

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to teach and give students hands-on experience with cutting-edge machine learning methods used frequently in business contexts. Many companies have made significant contributions to the field of data analytics with products and services they've launched. This class is designed to prepare students to participate in such analysis to make significant business impact. We examine Netflix- and Amazon-style recommender systems and market basket analyses, customer segmentation and classification, Zillow-style prediction of home sale prices, and other business-relevant examples.

Pre-requisite(s): MIS 2030.

MIS 4600 - Information Security I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MIS Lab, software licenses, and program assessment materials.

Description: This course looks at management issues and practical implications related to securing information systems. This course focuses on the threat environment, security policy and planning, cryptography, secure networks, access control, firewalls, host hardening, application security, data protection, incident response, and networking and a review of TCP/IP.

Pre-requisite(s): Business Foundations; BSAD 2899 and MIS 2020, or MIS 3610.

MIS 4700 - Information Security II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course covers the basic principles and concepts in information security and information assurance. It examines the technical, operational, and organizational issues of securing information systems. Topics include operating system issues, viruses, security awareness at the executive, technical and user levels, physical security, personnel security issues, policies, procedures, and the need for an enterprise security organization. Case studies and exercises in the computer lab will be used to provide examples of the need for organizations to develop security procedures and policies.

Pre-requisite(s): BSAD 2899 and MIS 4600.

MIS 4710 - Enterprise Software Development

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces students to the concept of a business as an integrated set of business processes and associated systems designed to deliver value to customers. It focuses on enterprise systems, product lifecycle management, and supply chain management. This course also focuses on how to effectively manage enterprise projects with respect to organizational constraints. Students will learn how to manage project initiation, planning, execution, monitoring and closing.

Pre-requisite(s): BSAD 2899 and MIS 2020.

MIS 4720 - Emerging Information Technologies

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MIS Lab, software licenses, and program assessment materials.

Description: New information technologies can give early adopters significant competitive advantage when used with careful planning, or they can mean disaster if hastily implemented. This course covers how to conduct an environmental scan toward evaluating and implementing new information technologies.

Pre-requisite(s): BSAD 2899, and MIS 2410 , or MIS 2020.

MIS 4730 - IT Project Management and Systems Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: The course fees collected from students enrolled in this class are used for student-related expenditures. Examples of such expenditures are for periodic technology upgrades in the MIS Lab, software licenses, and program assessment materials.

Description: This course covers project management principles, methodology, and tools. It also provides the knowledge and skills to design and implement computer-based systems to solve business problems. Topics include the planning and management of IT and software development projects, requirement analysis, system design and development, implementation and testing.

Pre-requisite(s): Business Foundations; BSAD 2899 and MIS 3210 and MIS 3610 and MIS 2110.

MIS 4801 - Individual Projects

Credits: (1)

Description: This course is open only to senior MIS majors. Students will be required to complete an individual project, program, system, or research paper which will enhance their skills and marketability.

Pre-requisite(s): BSAD 2899, Management Information Systems Department approval, and Senior standing.

MIS 4802 - Individual Projects

Credits: (2)

Description: This course is open only to senior MIS majors. Students will be required to complete an individual project, program, system, or research paper which will enhance their skills and marketability.

Pre-requisite(s): BSAD 2899, Management Information Systems Department approval, and Senior standing.

MIS 4803 - Individual Projects

Credits: (3)

Description: This course is open only to senior MIS majors. Students will be required to complete an individual project, program, system, or research paper which will enhance their skills and marketability.

Pre-requisite(s): BSAD 2899, Management Information Systems Department approval, and Senior standing.

MIS 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MIS 4850 - Information Systems & Technology Study Abroad

Credits: (1-3)

Description: This course is designed for students who wish to explore information systems and technology theory and practice in countries other than the U.S. Students will study global information systems as offered through a partner university (or other university with department chair approval).

Pre-requisite(s): BSAD 2899.

May be repeated once up to 6 credits.

MIS 4891 - Cooperative Work Experience

Credits: (1)

Description: A structured professional-level field experience. The student will be counseled and supervised as he/she applies and integrates the knowledge and skills obtained through the MIS courses.

Pre-requisite(s): BSAD 2899 and instructor approval.

MIS 4892 - Cooperative Work Experience

Credits: (2)

Description: A structured professional-level field experience. The student will be counseled and supervised as he/she applies and integrates the knowledge and skills obtained through the MIS courses.

Pre-requisite(s): BSAD 2899 and instructor approval.

MIS 4893 INT - Cooperative Work Experience

Credits: (3)

Description: A structured professional-level field experience. The student will be counseled and supervised as he/she applies and integrates the knowledge and skills obtained through the MIS courses.

Pre-requisite(s): BSAD 2899 and instructor approval.

MIS 4894 - Cooperative Work Experience

Credits: (4)

Description: A structured professional-level field experience. The student will be counseled and supervised as he/she applies and integrates the knowledge and skills obtained through the MIS courses.

Pre-requisite(s): BSAD 2899 and instructor approval.

MIS 5930G - Professional Development Workshop in Information Technology

Credits: (1-4)

Description: Information technology professionals must remain current with new technologies to remain competitive in their careers. This course offers professional development in new systems and software as they enter the mainstream of information technology practice.

Pre-requisite(s): Permission of instructor.

MIS 6610 - Information and Communications Technologies for e-Business

Credits: (3)

Description: Covers the information and communications technology infrastructure required to support a robust e-business activity. Issues such as reliability, scalability, security, and responsiveness as well as n-tier architectures are reviewed.

Pre-requisite(s): MACC, MBA, or MIS Certificate program standing.

MIS 6620 - Databases & Information Systems

Credits: (3)

Description: This course covers the role of database technology in information systems. Through hands-on and conceptual knowledge, students will learn how databases are used to construct and operate information systems designed to support decision making. Various aspects of database systems including both correct methods and problems encountered during the design, implementation and operation of database systems will be covered. Students will gain hands-on familiarity with a relational database system.

Pre-requisite(s): Admittance to MACC or MBA program and MIS 2020 or equivalent.

MIS 6800 - Directed Studies

Credits: (1)

Description: Directed individual study and research on special topics related to information assurance.

Pre-requisite(s): Approval of Management Information Systems Department Chair and course instructor.
May be repeated for a cumulative total of three credit hours.

MKTG 3010 - Marketing Concepts and Practices

Credits: (3)

Typically Taught Summer Semester: 1st Blk, Full Sem Online

Typically Taught Fall Semester: Full Sem, Full Sem Online

Typically Taught Spring Semester: Full Sem, Full Sem Online

Description: This course includes planning, implementation, and control of the marketing process; consumer behavior; marketing research; segmentation and target marketing; and consideration of price, place, and promotion.

MKTG 3100 - Consumer Behavior

Credits: (3)

Typically Taught Fall Semester: Full Sem

Typically Taught Spring Semester: Full Sem

Description: Introduces students to the application of behavioral sciences to study consumers as they navigate the purchase decision journey. The course synthesizes relevant theories and methods to provide practitioner-oriented insights into internal, external, and situational factors affecting consumers and tools/strategies for targeting consumers as they engage in consumption activities.

Pre-requisite/Co-requisite: Prerequisite or concurrent enrollment: MKTG 3010.

MKTG 3200 - Selling and Sales Management

Credits: (3)

Typically Taught Fall Semester: Full Sem

Typically Taught Spring Semester: Full Sem

Description: Theory, methods, and techniques of personal selling in professional settings including analysis of buyer behavior, the delivery of customer satisfaction, and integration of personal selling with other marketing communication tools. Sales management includes managing the sales force, salesperson selection, deployment, compensation, training, field supervision and industrial marketing management.

Pre-requisite(s): MKTG 3010.

MKTG 3450 - Promotion Management

Credits: (3)

Typically Taught Fall Semester: Full Sem

Typically Taught Spring Semester: Full Sem

Description: Strategic development of advertising, sales, sales management, public relations, and sales promotion programs.

Pre-requisite(s): BSAD 2899, MKTG 3010. Prerequisite or concurrent enrollment: MKTG 3100.

MKTG 3500 - Services and Sports Marketing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Marketing education has traditionally focused on the marketing of goods. However, services account for the majority of the economic activity in the United States and much of the developed world. In order to successfully develop and manage service products, marketers must understand the characteristics that differentiate them from conventionally manufactured goods. This course aims to systematically study these characteristics and the challenges they present to marketers in service organizations. The latter half of the course will focus on sports marketing as a special form of services marketing.

Pre-requisite(s): BSAD 2899, MKTG 3010.

MKTG 3600 GLB - International Marketing

Credits: (3)

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: In this course students will learn the problems and procedures of marketing in foreign countries, including effects of foreign cultures and marketing systems on the design of marketing programs.

Pre-requisite(s): BSAD 2899; MKTG 3010.

MKTG 3700 - Business Studies Abroad - International Marketing

Credits: (3)

Description: Basic principles of international marketing. Fundamentals of international market research including macro and micro-level analysis. Discusses international marketing as part of a global strategy. This course is taught at Fachhochschule Hof, Germany during each fall semester. Students enrolled in this course have to participate in the Study Abroad Program (Contact: Doris Geide-Stevenson, ext. 7634, dgsteven@weber.edu).

Pre-requisite(s): BSAD 2899, MKTG 3010.

MKTG 4200 - Digital Marketing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course integrates proven marketing concepts with contemporary tools. Topics will include, but are not limited to, the modern consumer decision process, paid search, website usability, search engine optimization, social media, and mobile marketing.

Pre-requisite(s): BSAD 2899, MKTG 3010.

MKTG 4300 - Social Media Marketing & Strategy

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course will enable students to plan, develop and implement social media marketing strategies in order to create, maintain, and grow a firm's social media presence. Students will learn platform-specific foundations of social media marketing focusing on the use of social media in growing and sustaining a business. The course objectives involve teaching students to create social media campaigns to boost brand recognition, run targeted ads to drive sales, manage social media crises, enable influencer marketing, and achieve organizational goals. Students will

be able to create, manage and strategize a firm's social media presence across multiple platforms to drive business growth after completing this course.

Pre-requisite(s): BSAD 2899, MKTG 3010.

MKTG 4400 - Marketing Strategy

Credits: (3)

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: This course centers on gaining and sustaining competitive advantages. It entails analyzing customers, competitors, and internal capabilities; then making appropriate product, pricing, promotion, and distribution decisions.

Pre-requisite(s): BSAD 2899; ACTG 2020; MGMT 3200 or PS 3250; ENGL 3100 or ENGL 3530 or SCM 3200.

MKTG 4800 - Independent Research

Credits: (1-3)

Description: Directed research and study on an individual basis.

Pre-requisite(s): BSAD 2899; Senior Standing; Written Instructor Approval.

May be repeated until a total of 4 hours credit is accumulated.

MKTG 4850 - Marketing Study Abroad

Credits: (1-3)

Description: This course is designed for students who wish to explore marketing theory and practice in countries other than the U.S. Students will study international marketing as offered through a partner university (or other university with department chair approval).

Pre-requisite(s): BSAD 2899.

May be repeated once up to 6 credits.

MKTG 4860 INT - Marketing Internship

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A structured professional-level field experience. The student will be counseled and supervised as he/she applies and integrates the knowledge and skills obtained through the Marketing courses.

Pre-requisite(s): BSAD 2899; Instructor approval.

MLS 1001 - Online Orientation for AAS Degree

Credits: (1)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course is designed to prepare the student for the academic environment and requirements of the MLS program, accommodating both online and campus-based learners. Course components include study and computer skills pertinent to our digital and physical resources, understanding of diverse learning styles, comprehensive guidance through the MLS student handbook, interactive library tutorials, introductions to our dedicated faculty, essential contact and troubleshooting information, and personalized academic advisement tailored specifically for the AAS degree MLS students, ensuring seamless integration into relevant campus and online platforms.

MLS 1010 INT - Core Clinical Laboratory Skills

Credits: (4)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: The MLS 1010 course is designed to teach core clinical laboratory skills to individuals from various health care professions. The curriculum will focus on basic laboratory methods in quality control, quality assurance, information recording and transfer, normal and abnormal laboratory values, and problem recognition. Students will receive basic technical instruction in laboratory safety, microscopy, phlebotomy, specimen collection and processing, and laboratory instrumentation in the areas of hematology, serology, urinalysis, and clinical chemistry and microbiology. Students must have the support of a clinical laboratory to fulfill the laboratory requirement. The laboratory component will address applications with a focus on Point of Care testing (POCT). Students will be required to spend a minimum of 4 unpaid hours per week working on laboratory competency. Upon successful completion of the course students will receive a Certificate of Completion from the Dr. Ezekiel R. Dumke College of Health Profession's Clinical Laboratory Assistant (CLA) program.

Pre-requisite(s): Departmental Approval.

MLS 1113 - Introduction to Medical Laboratory Practices

Credits: (4)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$52.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: Principles and applications to laboratory testing including safe practices for the laboratory practitioner, specimen quality assurance, phlebotomy, urinalysis, basic concepts in clinical immunology, clinical chemistry, and clinical microbiology. Laboratory session addresses the principles and applications involved in medical laboratory assisting to include safety, microscopy, specimen processing, quality assurance, phlebotomy, and urinalysis; with a focus on Point of Care testing (POCT) in clinical immunology, clinical chemistry, and clinical microbiology. *Acceptance into the Online MLS AAS Program required to take this course Online.

Note: *Acceptance into the MLS AAS Program required

MLS 1114 - Principles of Hematology and Hemostasis

Credits: (4)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$52.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: Fundamental theories of hematopoiesis, routine laboratory evaluation of blood components using standard instrumentation and microscopic methods, including safety and quality control. Fundamental theories of hemostasis and introduction to abnormal hematology. Introduction to routine laboratory methods in hemostasis. At least one semester of chemistry and one semester of anatomy/physiology is recommended prior to taking this course. *Acceptance into the Online MLS AAS Program required to take this course Online.

Pre-requisite(s): MLS 1113. *Acceptance into the MLS AAS Program required.

MLS 2003 - Applied Laboratory Mathematics and Operations

Credits: (3)**Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem, Full Sem Online*

Description: A discipline-specific course that covers basic laboratory mathematics and statistics, along with applications to discipline-specific areas. Topics to include; reagent preparation, specimen dilution protocols, quality assurance and quality control, practical applications of common statistical tests, and method comparison.

MLS 2210 - Principles of Immunohematology**Credits: (5)****Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem Online***Typically Taught Spring Semester:** *Full Sem, Full Sem Online***Course Fee:** \$65.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: Lecture and laboratory covering the theory and principles of Immunohematology relevant to blood group serology, antibody detection and identification, compatibility testing, component preparation and therapy in blood transfusion service, quality controls, donor screening and phlebotomy, transfusion reactions and hemolytic disease of the newborn.

Pre-requisite(s): MLS 1113. *Acceptance into the MLS AAS Program required.

MLS 2211 - Principles of Clinical Chemistry I**Credits: (4)****Typically Taught Summer Semester:** *Full Sem - Online***Typically Taught Fall Semester:** *Full Sem, Full Sem - Online***Typically Taught Spring Semester:** *Full Sem - Online***Course Fee:** \$65.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: Basic concepts and techniques in clinical chemistry and quality control utilizing manual and automated laboratory procedures. Emphasis on blood and body fluid assessments of carbohydrates, bilirubin, non-protein nitrogen testing and electrolyte acid/base balance.

Pre-requisite(s): CHEM 1110 and CHEM 1120 or CHEM 1210 and CHEM 1220.

*Acceptance into the MLS AAS Program required

MLS 2212 - Principles of Clinical Microbiology I**Credits: (5)****Typically Taught Summer Semester:** *Full Sem - Online***Typically Taught Fall Semester:** *Full Sem, Full Sem - Online***Typically Taught Spring Semester:** *Full Sem - Online***Course Fee:** \$52.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: This course provides an in-depth coverage of clinically significant pathogenic cocci and Gram negative rods, including epidemiology, pathogenicity, and procedures for traditional laboratory identification.

Pre-requisite/Co-requisite: MICR 1113 or MICR 2054. *Acceptance into the MLS AAS Program required.

MLS 2213 - Principles of Clinical Chemistry II

Credits: (4)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$65.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: Continuation of MLS 2211 with the introduction to methods for the assessment of proteins, lipids, enzymology, therapeutic drug monitoring, toxicology and basic endocrinology.

Pre-requisite(s): MLS 2211.

*Acceptance into the MLS AAS Program required

MLS 2214 - Principles of Clinical Microbiology II

Credits: (5)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$52.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: This course is a continuation of MLS 2212 including, antimicrobial testing, clinical mycology, virology, parasitology and miscellaneous clinical bacteria including Gram positive bacteria, mycobacteria, and anaerobes.

Pre-requisite(s): MLS 2212. *Acceptance into the MLS AAS Program required.

MLS 2256 INT - Supervised Clinical Experience I

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$13.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: Off campus supervised clinical experiences administered in conjunction with clinical faculty in WSU affiliated health care institutions. Offered CR/NC only.

Co-Requisite(s): MLS 2257.

Online students receive credit for clinical experience. *Acceptance into the MLS AAS Program required

MLS 2257 INT - Supervised Clinical Experience II

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$13.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: Off campus supervised clinical experiences administered in conjunction with clinical faculty in WSU affiliated health care institutions. Offered CR/NC only.

Co-Requisite(s): MLS 2256.

Online students receive credit for clinical experience. *Acceptance into the MLS AAS Program required

MLS 2830 - Directed Reading

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Topics in Laboratory Medicine under the direction of departmental faculty advisor.

*Acceptance into the MLS AAS Program required May be repeated for a maximum of 6 hours.

MLS 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Acceptance into the MLS AAS Program required.

MLS 3301 - Online Orientation for BS Degree

Credits: (2)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course is designed to prepare the student for the online environment and specifics of the MLS program. Course components include: study and computer skills, learning styles, MLS student handbook, library tutorial, faculty introductions, contact and troubleshooting information, academic advisement, Power Point Presentations, an abbreviated overview of the core MLS disciplines such as hematology, clinical chemistry, clinical microbiology, clinical immunohematology, and a short referenced paper writing and using library resources tailor-made specifically for BS degree MLS students online.

MLS 3302 - Biostatistics, Research Methods, and Laboratory Practices

Credits: (4)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Course Fee: \$0.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: Advanced theory to include laboratory instrument systems comparison, evaluation, and CLIA 88 validation procedures with emphasis on scientific research design and statistical analysis. Interrelated topics in the medical laboratory sciences to include educational strategies for laboratory personnel, approaches to work-load management, budgeting and marketing strategies for laboratory services. Students also learn about and evaluate the new diagnostic technology available to medical laboratories, as well as learning how to select, evaluate, design, perform, and document CLIA-88 acceptable validations studies on new chemistry instrumentation or analytical methods. Interrelated topics in the medical laboratory to include workload management, designing and implementing standards for quality assurance, budgeting laboratory operations, and investigative concepts related to new method and instrument evaluation, selection, and validation.

**Acceptance into the MLS BS Program required

MLS 3310 - Advanced Immunohematology

Credits: (4)**Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem, Full Sem Online***Typically Taught Spring Semester:** *Full Sem Online***Course Fee:** \$52.00**Course Fee Purpose:** The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.**Description:** Advanced blood banking theory and specialized procedures as they pertain to transfusion, quality assurance and regulatory issues pertaining to Transfusion Medicine. **Acceptance into the MLS BS Program required.**MLS 3312 - Clinical Laboratory Immunology and Virology****Credits: (4)****Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem Online***Typically Taught Spring Semester:** *Full Sem, Full Sem Online***Course Fee:** \$52.00**Course Fee Purpose:** The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.**Description:** This course provides MLS students with clinical immunology theory and simulated laboratory experience necessary to prepare students for a career in a clinical laboratory setting. The course will be divided into four sections: basic concepts in immunology, clinical immunology techniques, immune related disease states, and diagnostic virology and will focus heavily on clinical immunology laboratory methods as well as in-depth clinical immunology techniques applicable for the clinical laboratory sciences student. **Acceptance into the MLS BS Program required**MLS 3313 - Advanced Hematology and Hemostasis****Credits: (4)****Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem, Full Sem Online***Typically Taught Spring Semester:** *Full Sem Online***Course Fee:** \$52.00**Course Fee Purpose:** The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.**Description:** Correlation of medical laboratory hematology and hemostasis with emphasis on hematopathology specialized procedures and hematological abnormalities in human cellular components. Routine and specialized coagulation procedures will also be used to detect hemorrhagic and thrombotic problems.

**Acceptance into the MLS BS Program required

MLS 3314 - Advanced Clinical Chemistry**Credits: (4)****Typically Taught Summer Semester:** *Full Sem - Online***Typically Taught Fall Semester:** *Full Sem - Online***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online***Course Fee:** \$39.00**Course Fee Purpose:** The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.**Description:** This problem-solving oriented course provides a review of basic clinical chemistry test results and then goes deeper and allows students to make connections to organ-related diseases, such as renal, hepatic, and endocrine diseases. The students will learn how to use clinical correlation as a quality assurance tool to detect patient testing errors. Students also learn about and evaluate the new diagnostic technology available to medical laboratories.

Students also learn about and evaluate the new diagnostic technology available to medical laboratories, as well as learning how to select, evaluate, design, perform, and document CLIA-88 acceptable validation studies on new chemistry instrumentation or analytical methods. Interrelated topics in the medical laboratory include workload management, and designing and implementing standards for quality assurance. Additionally, Therapeutic Drug Monitoring and Toxicology studies are presented. Urinalysis is also reviewed throughout the semester, to include the full scope of both microscopic and macroscopic evaluations.

Pre-requisite(s): Acceptance into the BS program.

MLS 3316 - Advanced Clinical Microbiology and Molecular Diagnostics

Credits: (4)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$52.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: This course begins with a comprehensive review of introductory clinical bacteriology and mycology, along with a culture site approach to clinical bacteriology for the laboratory identification of pathogens by traditional manual methods. Diagnostic molecular biology of infectious microorganisms will also be covered and will include background of nucleic acid chemistry along with current molecular methodologies of detection.

MLS 3318 - Clinical Molecular Diagnostics

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem, Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This is a discipline specific course that focuses on analyzing nucleic acids to diagnosis diseases and pathogens. The course covers basic molecular biology and genetics but through the lens of clinical diagnostic methods and applications. The laboratory portion of the course will coincide with lecture content to review how basic molecular techniques like nucleic acid extraction, amplification, electrophoresis, sequencing, and analysis, are utilized in the clinical laboratory. The course will also review the special validation and quality control procedures that need to be used for molecular based clinical assays.

MLS 4409 - Clinical Correlation

Credits: (1)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course will enable students to better integrate material from all the major medical laboratory science disciplines including Blood Bank, Chemistry, Hematology, Immunology, Microbiology, and Urinalysis. The case studies presented will also include information about the pathophysiology, etiology and epidemiology. Students will correlate results with disease states, and develop problem solving and critical thinking skills based on real scenarios. Students will also develop skills on how to write and present a case study of their own based on an assigned disease, which will include data gathered from all disciplines and will be presented to the class. **Acceptance into the MLS BS Program required

MLS 4410 SUS - Interdisciplinary Health Care Teams

Credits: (3)

Typically Taught Summer Semester: *Full Sem online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$39.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: This course provides an interdisciplinary experience with the team concept as a priority. The students learn the role of the health care team members, each with their different skills and objectives. The course teaches students to practice an interdisciplinary approach as they research, interact, and learn in the interdisciplinary environment of a health care setting. **Acceptance into the MLS BS Program required.

MLS 4411 - MLS Simulated Laboratory I

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Course Fee: \$52.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: Foundational principles for establishing a simulated working laboratory in which students refine technical skills, problem identification and solving, refine work-load management and decision-making skills, development of strategies for managing and implementing the rules and regulations that govern medical laboratory testing.

Pre-requisite/Co-requisite: MLS 3302.

MLS 4412 - MLS Simulated Laboratory II

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$52.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: A continuation of project-based applications set forth in MLS 4411. Students staff a simulated medical laboratory and assume responsibilities associated with all facets of laboratory operations. Clinical and academic faculty serve as advisors/managers to each team of students. The process develops team building skills critical to the modern health care setting. MLS 4411 expands to examine issues that cross all health care disciplines.

Pre-requisite(s): MLS 4411.

MLS 4415 - Laboratory Teaching and Supervision

Credits: (3)

Typically Taught Summer Semester: *Full Sem online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: On Campus: Students will learn basic instructional and pedagogical theory as it applies to the field of medical laboratory science. Theory will be applied through collaborative learning and short presentations, as well as laboratory employee in-service training projects. Basic principles and applications of running a medical laboratory to include system approaches to management, leadership of groups, human resource management, and technical supervision will also be covered. Concepts will be reinforced through case study analysis and online discussions.

Campus students will also participate as laboratory assistants in at least two lower division MLS courses, assisting the faculty in the administration of laboratory instruction, and applying instructional skills one-on-one with students entering the MLS program. Online: Students fulfill the laboratory requirement by completing a series of management

projects specifically designed for the laboratory provided in their clinical rotation.

Pre-requisite(s): **Acceptance into the MLS BS Program required.

MLS 4453 INT - Supervised Clinical Experience I

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$13.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: Off campus supervised clinical experiences administered in conjunction with clinical faculty in WSU affiliated health care institutions. Emphasis on experiences associated with laboratory administrative functions. Offered CR/NC only.

Co-Requisite(s): MLS 4454.

Online students receive credit for clinical experience. **Acceptance into the MLS BS Program required

MLS 4454 INT - Supervised Clinical Experience II

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$13.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: Off campus supervised clinical experiences administered in conjunction with clinical faculty in WSU affiliated health care institutions. Emphasis on experiences associated with laboratory administrative functions. Offered CR/NC only.

Co-Requisite(s): MLS 4453.

Online students receive credit for clinical experience. **Acceptance into the MLS BS Program required

MLS 4800 - Special Problems

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Pre-requisite(s): Consent of instructor prior to registration.

May be repeated twice for a maximum 3 credit hours.

Note: **Acceptance into the MLS BS Program required

MLS 4803 CRE - Research Projects in Medical Laboratory Sciences I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$26.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: In this first of two courses, students will identify a significant laboratory related research question and develop an original research design to address that question. Students will work closely with faculty mentors and will prepare a grant application for funding of supplies and reagents, and write an IRB (Institutional Review Board) application. Actual research will be conducted spring semester in the course MLS 4804.

Pre-requisite/Co-requisite: Pre/Co-requisite: MLS 3302. **Acceptance into the MLS BS Program required.

MLS 4804 CRE - Research Projects in Medical Laboratory Sciences II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$26.00

Course Fee Purpose: The course fees that are assigned to this course will pay for consumables (e.g. pipette tips and reagents), non-consumables (e.g. instrumentation), and in some cases software and instrument maintenance.

Description: This course is a continuation of MLS 4803, Research Projects in MLS I. Students will continue working on their original research project that was initiated fall semester. After completing the project, students will present their research findings in poster and oral formats, along with preparing a formal manuscript for publication in the university undergraduate research journal ERGO and possibly in other appropriate scientific journals.

Pre-requisite(s): MLS 4803. Acceptance into the MLS BS Program required.

MLS 4830 - Directed Readings

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Advance topics related to the correlation of medical laboratory data to disease processes. Students may work as a group or independently with academic or clinical faculty. Consent of instructor prior to registration.

May be repeated twice for a maximum 3 credit hours.

Note: **Acceptance into the MLS BS Program required.

MLS 4850 - Study Abroad

Credits: (1-6)

Variable Title

Description: The purpose of this course is to provide opportunities for students in health professions to experience a study abroad program that is designed to explore healthcare, culture, and clinical experience.

May be repeated 5 times with a maximum 6 credit hours.

Note: Check with Department for course availability.

MLS 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Acceptance into the MLS BS Program required.

MLS 5101 - Applications in Clinical Chemistry in Medical Laboratory Sciences

Credits: (4)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Concepts, methods and clinical correlation of clinical chemistry tests are presented. Emphasis is on testing methods and quality control practices covering carbohydrates, bilirubin, non-protein nitrogen, electrolytes, proteins, lipids, enzymes, therapeutic drug monitoring, toxicology, and endocrinology. These topics will include

clinical correlation with diseases, allowing students to understand conditions in which abnormal results and or data might be obtained.

MLS 5102 - Clinical Applications in Hematology and Hemostasis

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course covers the concepts, analytical methods, and clinical correlation of hematology and hemostasis as it applies to the medical laboratory. In addition to normal functions, the topics will include clinical correlation with various hematological and hemostatic disease processes. Current testing and instrumentation will be included as well as regulatory and competency information.

Pre-requisite(s): For medical laboratory personnel.

MLS 5103 - Clinical Laboratory Microbiology I

Credits: (3)

Typically Taught Fall Semester: *Full Sem Online*

Description: This course provides an in-depth coverage of clinically significant pathogenic cocci and Gram negative rods, including epidemiology, pathogenicity, procedures for traditional laboratory identification.

Pre-requisite(s): For medical laboratory personnel.

MLS 5104 - Clinical Laboratory Microbiology II

Credits: (3)

Typically Taught Spring Semester: *Full Sem Online*

Description: This course is a continuation of MLS 5103, including antimicrobial testing clinical mycology, virology, parasitology and miscellaneous clinical bacteria including Gram positive bacteria, mycobacteria, and anaerobes.

Pre-requisite(s): MLS 5103; for medical laboratory personnel.

Note: This course is not offered on campus.

MLS 5105 - Clinical Immunohematology

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course covers the theory and principles of immunohematology relevant to blood group serology, antibody detection and identification, compatibility testing, component preparation and therapy in blood transfusion service, quality control parameters, donor screening and phlebotomy, transfusion reactions and hemolytic disease of the newborn. This non-laboratory course is for MLS or MLT professionals who would like to update their didactic skills and knowledge in immunohematology as it is practiced in today's hospitals and clinics. Additionally, the course may also be of interest to individuals with a BS/BA degrees in non-medical laboratory science who wish to obtain current education in clinical immunohematology.

Pre-requisite(s): For medical laboratory personnel.

MLS 5112 - Clinical Laboratory Immunology

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides MLS students with clinical immunology theory and virtual laboratory simulations necessary to prepare for a career in a clinical laboratory setting. The course will be divided into four sections: basic concepts in immunology, clinical immunology techniques, immune related disease states, and diagnostic virology and will focus heavily on clinical immunology laboratory methods as well as in-depth clinical immunology techniques applicable for the clinical laboratory sciences student.

MLS 5201 - Technologist in Microbiology: Clinical Microbiology I

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course will cover bacterial structures, bacterial metabolism, taxonomy, Gram staining, media selection and composition, colony morphology, biochemical tests, antimicrobials, and identification of pathogens. The organisms studied will include aerobic Gram-positive cocci, aerobic Gram-negative diplococci, Gram positive rods, spirochetes, and aerobic Gram-negative bacilli.

MLS 5202 - Technologist in Microbiology: Clinical Microbiology II

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course will cover anaerobes of clinical importance, mycobacteria, obligate intracellular parasites, viruses, parasites of clinical importance, mycology, and molecular diagnostics. The identification and pathogenesis of these organisms will also be reviewed. The emphasis of this course will be to present clinically relevant material to the clinical microbiology laboratory.

MLS 5203 - Technologist in Microbiology: Applied Laboratory Mathematics and Operations

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course covers basic concepts in clinical laboratory mathematics and calculations, quality assurance and control, discipline specific calculations, postanalytical procedures, and laboratory administration.

MLS 5204 - Technologist in Microbiology: Supervised Clinical Experience

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: The student will attend a four-week rotation at a clinical affiliate of the Medical Laboratory Science (MLS) Program at Weber State University. It is the goal of these institutions to assist students in completing their education by providing a variety of clinical laboratory experiences and exposure to the professional workplace. All student placements are scheduled and coordinated through the clinical rotation coordinator.

MLS 5301 - Fundamentals of Immunohematology

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course provides foundational instruction for individuals pursuing the blood bank categorical program. The course covers fundamental concepts in immunology, hematology, hemostasis, and clinical chemistry as related to immunohematology and transfusion medicine, and this course prepares students for advanced immunohematology.

MLS 5302 - Advanced Immunohematology and Transfusion Medicine

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course provides advanced instruction for individuals pursuing the blood bank technologist categorical program. The course covers advanced immunohematology theory and specialized procedures as they pertain to blood banking, quality assurance, and regulatory issues in transfusion medicine.

MLS 5304 - Clinical Rotation in Immunohematology

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This is the final course of the Blood Bank Technologist categorical program. Students will perform a clinical rotation within a clinical immunohematology laboratory with a minimum duration of 160 hours. In addition to completing a clinical competency checklist under the supervision of qualified preceptors, students will complete a practice blood bank (BB) board of certification (BOC) exam at the conclusion of this course.

Suggested Requisite(s): MLS 5301.

MLS 5810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 12 credit hours.

MPAS 6001 - Professional Development 1

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: The first in a series of courses focused on historical and future directions of the PA profession, the importance of professionalism in medical practice, medical ethics, fiduciary duty, and working as part of a healthcare delivery team.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6002 - Professional Development 2

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Description: The second course in the Professional Development series focuses on the health care provider's roles and responsibilities in the area of public health and the practice of preventive medicine. There is a continued emphasis on the display and development of professionalism as it applies to clinical practice.

Pre-requisite(s): Student must be accepted into the PA Program.

MPAS 6003 - Professional Development 3

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: The third course in the series of Professional Development teaches students strategies to build the confidence, skills, and presence needed to become leaders in the field of medicine. There is a continued emphasis on the display and development of professionalism as it applies to clinical practice.

Pre-requisite(s): Student must be accepted into the PA Program

MPAS 6004 - Professional Development 4

Credits: (1)

Description: The fourth course in the Professional Development series is taken at the onset of the student's supervised clinical practice experiential learning. The focus during this transitional phase is in preparation for clinical practice. There is a continued emphasis on the display and development of professionalism as it applies to clinical practice.

Pre-requisite(s): Admission to the Physician Assistant Program.

MPAS 6005 - Professional Development 5

Credits: (1)

Description: The fifth course in the Professional Development series introduces students to topics related to their future roles as a medical provider and what it means to be a medical professional. This course examines the organizational and economic elements of a systems-based practice. There is continued emphasis on the display and development of professionalism as it applies to clinical practice.

Pre-requisite(s): Admission to the Physician Assistant Program.

MPAS 6006 - Professional Development 6

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Description: The sixth and final course in the Professional Development series has students discussing and reflecting on issues they will face as they head toward graduation and enter into clinical practice.

Pre-requisite(s): Admission to the Physician Assistant Program.

MPAS 6010 - Mechanisms of Health and Disease

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: The MOHD course provides an introduction to fundamental mechanisms of general pathology covering the basic principles of cell biology, immunology, genetics, infectious processes, microbiology, biochemistry, and environmental effects on health. Integration of this material will allow for an understanding of human disease processes and the molecular mechanisms underlying disease development. Disease-specific pathophysiology is integrated and taught in systems-based courses.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6020 - Introduction to History and Physical

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: This foundational course introduces students to the art and science of taking an effective, culturally sensitive history and performing a thorough, technically proficient general physical examination. It focuses on normal physical exam findings in pediatric, adult, and geriatric populations. Students participate in small group, application-

based laboratory exercises focusing on the general principles of physical examination as well as recognition of topographic anatomical landmarks on classmates and identification of important surgical anatomy. In addition, students receive instruction and practice in documenting comprehensive health histories and physical exam findings.
Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6030 - Introduction to Clinical Pharmacology

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: This course provides a foundation for students to understand and utilize the basic principles of pharmacotherapy in the practice of medicine. Topics include pharmacokinetics, pharmacodynamics, drug-drug interactions, adverse drug reactions, and autonomic nervous system pharmacology. Emphasis is placed on individualization of drug therapy and patient-centered care. Specific drug classes will be introduced in relevant medicine courses.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6040 - Introduction to Medical Diagnostics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on the fundamental principles of, and provides practical experience in selecting, ordering, and interpreting common diagnostic studies used to screen and diagnose disease. Further detail and use of diagnostic studies is integrated within systems-based medicine courses.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6050 - Evidence-Based Practice 1

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: This course provides foundational knowledge needed by students to integrate evidence-based medicine into their clinical practice. It reviews basic statistics, epidemiological concepts and principles, research methodology and design, and ethical standards in research. Students will learn how to critically evaluate scientific evidence and will be asked to use that knowledge to critically appraise research articles in this course and during systems-based medicine courses.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6051 - Evidence-Based Practice 2

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: The second EBP course continues teaching the principles of evidence-based medicine, and is designed to assist students in planning their masters project, which will be completed and presented during their clinical year of training. Students will create a PICO question that will be the basis of their masters project, develop an annotated bibliography, and create a plan for writing a literature review.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6060 - Eyes, Ears, Nose, and Throat

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of commonly encountered medical

conditions affecting the eyes, ears, nose, and throat (EENT).

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6070 - Dermatology

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of conditions commonly encountered in Dermatology.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6080 - Infectious Disease

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course provides a solid foundation in the diagnosis and management of infectious diseases. Common bacterial, viral, fungal, and parasitic pathogens are explored by examining mechanisms of disease transmission and pathogenicity, epidemiology, pathophysiology, clinical presentation, diagnosis, and medical management, including antimicrobial pharmacotherapy.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6100 - Hematology/Oncology

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of commonly encountered medical disorders in hematology and oncology. Specific oncology disorders are covered in systems-based courses.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6101 - Clinical Integration 1

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: The first Clinical Integration course teaches students how to care for patients (and their families) from diverse backgrounds and various life phases, in ways that are meaningful and valuable to individual patient preferences. Students learn about healthcare disparities and their impact on health and wellness, and are challenged to identify and reflect on how their own potential biases may affect patient care.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6102 - Clinical Integration 2

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: The second Clinical Integration course focuses on ambulatory care medicine with integration of preventive care and principles of public health.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6103 - Clinical Integration 3

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The third in this series of Clinical Integration courses focuses on longitudinal management of established patients, admission orders, inpatient management, progress notes, discharge summaries, management of surgical patients, rehabilitative care, and issues surrounding end-of-life care.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6110 - Pulmonology

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of commonly encountered pulmonary disorders.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6120 - Genitourinary (Nephrology/Urology)

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of commonly encountered medical disorders in nephrology and urology.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6130 - Endocrinology

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of commonly encountered medical conditions affecting metabolism and organs of the endocrine system.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6140 - Obstetrics and Gynecology

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of disorders commonly encountered in women's health.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6150 - Musculoskeletal Disorders 1

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of commonly encountered musculoskeletal disorders. The first course in this series focuses on rheumatological disorders, osteoarthritis, osteoporosis, and bone tumors.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6170 - Neurology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of commonly encountered medical conditions in neurology.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6180 - Cardiovascular Medicine

Credits: (5)

Typically Taught Fall Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of commonly encountered medical conditions affecting the cardiovascular system. Students will also be challenged to learn the fundamentals of interpreting an electrocardiogram (EKG) with an emphasis on identifying common abnormal EKG patterns and differentiating these patterns from normal and normal variant EKG tracings.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6190 - Gastroenterology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of commonly encountered medical disorders in gastroenterology.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6200 - Musculoskeletal Disorders 2

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: A systems-based course that examines and integrates the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of commonly encountered musculoskeletal disorders. This second course in the series focuses on orthopedic injuries and disorders.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6210 - Psychiatry

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A systems-based course that emphasizes the psychosocial aspects of medicine, examining and integrating the epidemiology, anatomy, physiology, pathophysiology, clinical presentation, diagnosis, and medical management of commonly encountered medical disorders in psychiatry. This course also emphasizes internal behavior patterns that motivate or cause behaviors.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6500 - Preceptorship 1

Credits: (12)

Typically Taught Spring Semester: *Full Sem*

Description: Supervised clinical practicum experience in primary care or specialty care in medical practice settings.

May also include assignments and objective examinations.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6510 - Preceptorship 2

Credits: (12)

Typically Taught Summer Semester: *Full Sem*

Description: Supervised clinical practicum experience in primary care or specialty care in medical practice settings.

May also include assignments and objective examinations.

Pre-requisite(s): Student must be accepted to the PA program.

MPAS 6520 - Preceptorship 3

Credits: (12)

Typically Taught Fall Semester: *Full Sem*

Description: Supervised clinical practicum experience in primary care or specialty care in medical practice settings.

May also include assignments and objective examinations.

Pre-requisite(s): Student must be accepted to the PA program.

MPC 5080G - Intercultural Communication

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Explores theoretical perspectives in intercultural communication. Through analysis of various intercultural theories, students will become aware of cultural influences on communication in both international and domestic cultures. This course may not apply toward graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit.

MPC 5090G - Gender and Communication

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to help students understand the influence that communication has upon the shaping of gender and the influence that gender has in shaping communication interactions. Students become aware of, sensitive to, and more experienced in the issues, implications and skills necessary to successfully and meaningfully communicate with males and females, and about males and females in a wide range of communication contexts. This course may not apply toward graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit.

Pre-requisite(s): Permission of MPC program director.

MPC 5100G - Small Group Facilitation and Leadership

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Theories and practical communication processes are examined and applied to develop fundamental attitudes and skills for facilitating and leading effective groups. This course may not apply toward graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit.

Pre-requisite(s): Permission of MPC program director.

MPC 5220G - Editing

Credits: (3)**Typically Taught Fall Semester:** *Online*

Description: Develops editing knowledge and skills for print and online publications. Covers copy editing, content editing and page editing. This course may not apply toward graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit.

Pre-requisite(s): Permission of MPC program director.

MPC 5400G - Public Relations Media and Campaigns**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: Apply communication principles to internal and external publics; research, plan and evaluate social interrelationships; study of the controlled and uncontrolled media and their role in public relations; prepare a major public relations campaign for a selected client. This course may not apply toward graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit.

MPC 5500G - Topics in Communication**Credits: (1-3)****Variable Title****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: The study and application of communication in contemporary society is dynamic and ever changing. This course will provide students with opportunities to explore specialized topics in contemporary journalism, electronic mediated communication, human communication studies, and public relations in a seminar format. This course may not apply toward graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit.

Pre-requisite(s): Permission of MPC program director.

This course may be taken twice with different designations (topics).

MPC 5550G - Organizational Communication**Credits: (3)****Typically Taught Fall Semester:** *Full Sem*

Description: Study of communication organizations from various theoretical perspectives with an emphasis on the organizational culture perspective. Includes topics such as communicating with external audiences, decision-making, conflict resolution, and power relationships. This course may not apply toward graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit.

Pre-requisite(s): Permission of MPC program director.

MPC 5650G - Communication Law**Credits: (3)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: First Amendment origins, interpretations and philosophy underlying regulation of the mass media. This course may not apply toward graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit.

Pre-requisite(s): Permission of MPC program director.

MPC 5820G - Persuasive Communication

Credits: (3)**Typically Taught Fall Semester:** *Full Sem*

Description: Study of theories and principles of persuasion from classical to modern times. Examines persuasion as a means of influence in interpersonal communication, public speaking, advertising, politics, and other contexts. This course may not apply toward graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit.

Pre-requisite(s): Permission of MPC program director.

MPC 5850G - Advertising**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: A practical and theoretical study of advertising. Course is designed for students planning careers in advertising, as well as for those who are simply lifelong consumers of advertising and want to understand its role in the economic system. This course may not apply toward graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit.

Pre-requisite(s): Permission of MPC program director.

MPC 6010 - Introduction to Graduate Study and Communication Theory**Credits: (3)****Typically Taught Fall Semester:** *1st Blk***Typically Taught Spring Semester:** *1st Blk*

Description: This course provides a survey of major theoretical perspectives in the field of communication with an emphasis on how theory can be applied in interpersonal, group, organizational and mass communication contexts. Students also learn about the logic of communication inquiry, the nature and expectations of graduate study, and techniques for conducting literature searches and writing literature reviews.

MPC 6100 - Team Building and Facilitation**Credits: (3)****Typically Taught Fall Semester:** *Full Sem*

Description: Creating, facilitating and coaching effective work groups and teams is one of the hardest soft skills for organizational professionals to master. This course examines the impact that different structures and communication processes have on group and team collaboration effectiveness, as well as the central role competent communication plays in effective group and team facilitation. It investigates structural and process issues of team building, interpersonal and group communication, and effective problem solving and decision-making skills in collaborative environments. Students should have a greater understanding of their own collaborative teaming abilities upon completion. The purpose of this course is to teach-and have students experience-strategies and tactics for building, working effectively within, and facilitating collaborative teams in the work place.

MPC 6150 - Writing for Professional Communicators**Credits: (3)****Typically Taught Fall Semester:** *1st Blk***Typically Taught Spring Semester:** *1st Blk*

Course Fee: \$15.00

Course Fee Purpose: Maintaining computer lab & software for writing course

Description: Good writing skills are critical to achieving a professional image. Individuals and organizations are judged by the quality of written documents they produce. In this course, students learn to plan and organize, to write clearly, concisely and correctly, and to develop polished final projects. Students undergo an intensive review of basic writing and editing principles and then apply them to specific writing projects. Genres of writing may include funding

proposals, yearly reports, executive plans, organizational descriptions, Web sites, social networking messages, and marketing materials.

MPC 6210 - Presentational Speaking in the Workplace

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Description: The professional work environment benefits from the communication competency of its members. This course is designed to enhance the communication skills required by the professional communicator across a broad set of communication media: oral presentations, written texts, and digital interactions. Primary emphasis will be placed on combining strategic thinking with powerful writing to produce a variety of effective messages aimed at different audiences. In addition, students will develop a broad-based understanding of how each of these modes of communications function both separately and independently to produce a coherent organizational message.

MPC 6250 - Interviewing

Credits: (3)

Description: This course will explore various types of interviews conducted in work and personal situations: Recruiting, Performance Appraisals, Informational, Survey, Persuasion, Counseling, and Health Care. While core communication skills are important across types of interviews, interviewing strategies can differ greatly based on different contexts, specific situations, and personalities of interviewers and interviewees.

Note: This course is offered as needed.

MPC 6300 - New Media in Professional Communication

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Course Fee: \$50.00

Course Fee Purpose: Purchasing of required items on a yearly basis necessary to teaching digital media course

Description: New media allow all individuals and organizations to effectively interact with their audiences on an ongoing basis. This course addresses how new and emerging media technologies such as social networks, social media, blogs, podcasts, video sites, search engine management tools, and even virtual worlds can be leveraged by communication professionals in order to further meaningful relationships with their internal and external audiences. This course will give students greater understanding of new media required to allow a rethinking of the overall communication process. As a result students will develop effective communication strategies specifically geared toward the needs of their organization or field of interest.

MPC 6350 - Visual Communication in the Workplace

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Course Fee: \$15

Course Fee Purpose: Maintaining computer lab & software for writing course.

Description: Visual messages are a powerful way to inform, persuade and educate. Within the workplace, the ability to effectively communicate goals, ideas and client information through combinations of visual and textual elements is an invaluable skill. This course introduces students to philosophical and theoretical perspectives that enable effective visual presentation in the organization. It also exposes them to practical design principles, skills and tactics that generally guide effective screen and print design. Additionally, students will learn how to critically analyze visual communication materials and aids according to standards that reflect sensitivity to fairness, diversity, good ethics and effectiveness.

MPC 6400 - Leadership Communication

Credits: (3)

Typically Taught Spring Semester: *1st Blk, 2nd Blk*

Description: Communication is the core of organizational leadership. This course is designed to explore both the theoretical and practical aspects of leader- and followership embedded in complex environments with an emphasis on recognizing and managing change. Leadership in organizations will be examined from a variety of perspectives including historical, ethical and critical. Key topics include leadership traits and skills, leadership roles and behaviors, power and influence, theories of leadership, leading change, ethical leadership, and developing leadership skills. The course includes experiential activities using cases, role plays, and action learning projects to develop relevant skills.

MPC 6450 - Advanced Organizational Communication

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course provides a graduate-level overview and introduction to the discipline of organizational communication in a global world. Class readings and discussions will include topics such as organizational structure/process, rationality and decision-making, (sub)cultures and socialization, individual and collective identities, networks, leadership, teams, power/control, conflict, change, technologies, and ethics. Case studies from current events and guest speakers will be used to apply theoretical concepts to actual organizational life.

MPC 6500 - Org Comm Consulting

Credits: (3)

Variable Title

Typically Taught Summer Semester: *2nd Blk*

Description: The purpose of this course is to explore organizational communication assessment, organizational consulting, and executive coaching concepts, practices, and methodologies. This class will teach students how to effectively work with and in organizations to improve their communication processes, management communication strategies, and strategic long-term planning in order to optimize talent and performance. The skills acquired in this class will prepare students to apply evidence-based communication best practices in organizations.

MPC 6500 - Topics in Professional Communication

Credits: (3)

Variable Title

Description: The study and application of professional communication in contemporary society is dynamic and ever changing. This course will provide students with opportunities to explore specialized topics in a seminar format.

Pre-requisite(s): MPC 6010 or permission of MPC program director.

This course may be taken twice as elective credit with different titles and topics.

Note: This course is offered as needed.

MPC 6600 - Strategic Communication

Credits: (3)

Typically Taught Spring Semester: *1st Blk, 2nd Blk*

Description: Effective strategic communication and planning is essential to any organization. This course helps students to understand and develop skills to create and manage internal and external messages for different situations, industries, and locations. Students prepare for effective strategic communication by asking and answering the right questions about the goals of the organization, its members, stakeholders and others who impact its operation, such as regulatory bodies. Effective strategic communication and its planning consist of the optimal use of people, budgets, tactical elements, and media in a chaotic, changing world.

MPC 6620 - Conflict Resolution and Mediation

Credits: (3)**Typically Taught Summer Semester:** *2nd Blk*

Description: Communication is at the center of any negotiation or mediation process. It is in and through communication that resolution becomes possible. This class will explore the key interpersonal skills that are central to managing the processes of conflict resolution and mediation competently.

MPC 6700 - Qualitative Communication Research & Analysis**Credits: (3)****Typically Taught Fall Semester:** *2nd Blk***Typically Taught Spring Semester:** *2nd Blk*

Description: Research skills are essential for answering questions and solving problems. This course reviews qualitative investigations in communication. In this course, students will learn to read, interpret, and critically evaluate qualitative communication research. Students will be exposed to qualitative concepts, research designs, and the fundamentals of conducting and analyzing research using interviewing, ethnography, constant comparative analysis, and content analysis. In addition, students will design and execute their own research study, which entails: an appropriate qualitative design, data collection, data analysis, and a formal research report.

Pre-requisite(s): MPC 6010 or permission of MPC program director.

MPC 6710 - Communication Survey Design and Analysis**Credits: (3)****Typically Taught Fall Semester:** *2nd Blk***Course Fee:** \$15.00

Course Fee Purpose: This course uses course fees to maintain computer lab & software for research purposes.

Description: Research skills are essential for answering questions and solving problems. This course reviews quantitative communication research methods, with an emphasis on survey design and statistical analysis, and explores vocational/professional applications of communication research. In this course, students will learn to read, interpret, and critically evaluate quantitative communication research reports. Students will be exposed to basic social science concepts, research designs, and the fundamentals of conducting and analyzing research. In addition, students will design and execute their own research study, which entails: a survey design, data collection, data analysis, and a formal research report.

Pre-requisite(s): MPC 6010.

MPC 6840 - Data Visualization & Storytelling**Credits: (3)****Typically Taught Fall Semester:** *2nd Block***Course Fee:** \$15.00

Course Fee Purpose: Maintaining computer labs for design course.

Description: This course teaches students the skills necessary to be effective data storytellers. Students taking this course will study the fundamentals of compelling data-driven storytelling and become familiar with associated Visual Communication tools. Moreover, students will learn how to detect and articulate the stories behind datasets and how to tell data stories in different ways for different audiences and stakeholders. Finally, students will sharpen their skills to evaluate data visualizations and visual analysis tools.

MPC 6900 - Thesis/Project I**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: In this course students will begin their theses or projects under the direction and with the support of their faculty committees. They will write, present and have their thesis or project proposal approved.

Pre-requisite(s): MPC 6010 or permission of MPC program director.

Note: **Please note that students who, for any reason, do not finish their thesis or project or program of courses within the two-year framework suggested in this program, must pay continuing enrollment and tuition the semester they defend their thesis or project.*

MPC 6950 - Thesis/Project II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course will allow students to complete their workplace project or traditional academic thesis. Students will prepare, present and defend their projects or theses during this semester for review and approval.

Pre-requisite(s): MPC 6010 or permission of MPC program director.

This course is repeatable for a total of two times for a total of nine credit hours of which only three will apply to degree completion.

Note: **Please note that students who, for any reason, do not finish their thesis or project within the two-year framework suggested in this program, must pay continuing enrollment and tuition the semester they defend their thesis or project.*

MSAT 6080 - Research Methods I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course explores the process and methods of scientific inquiry and interpretation of research findings in athletic training. Students will gain familiarity with the major elements of research including literature review, quantitative and qualitative methodology, design, evaluation of research, statistical analysis, presentation of data, and ethical considerations. This course also provides an overview of statistics including descriptive and inferential statistics and one-way ANOVA. Students should have a basic understanding of conducting library and Internet information searches prior to taking this course.

MSAT 6085 - Research Methods II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$100.00

Course Fee Purpose: Thesis research supplies.

Description: This course is designed to help students develop a master's thesis research project proposal that is carefully researched and professionally written. Students will prepare an introduction, literature review, detailed methodology, and IRB proposal.

Pre-requisite(s): MSAT 6080.

MSAT 6090 - Research Methods III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is designed to help students complete a master's thesis research project. Basic statistical analysis will be reviewed and advanced statistics will be introduced. Students will collect and analyze data and synthesize results. At the completion of the course, students will submit a full manuscript, suitable for publication, along with an abstract and a professional poster.

Pre-requisite(s): MSAT 6085.

MSAT 6095 - Research Methods IV

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course allows students to choose one of the following options: 1) complete their master's thesis requirements from MSAT 6090; 2) prepare a manuscript for publication or formal oral presentation for a professional conference, or 3) participate in additional research above and beyond the master's thesis.

May be taken twice up to 9 credit hours.

MSAT 6100 - Advanced Emergency Care in AT

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$61.00

Course Fee Purpose: American Red Cross Emergency Responder (EMR) Certification, blood pressure kit with stethoscope, pressure dressing and hemostatic gauze.

Description: To prepare graduate athletic training students to respond to life and limb-threatening emergencies. This course also includes advanced wound care, equipment removal, and emergency drug administration. When successfully completed, this course leads to a two-year American Red Cross certification in Emergency Medical Response, CPR/AED for Professional Rescuers, Emergency Oxygen administration, and one-year certification in Bloodborne Pathogens Training.

MSAT 6200 - Mental and Behavioral Health in Injury and Rehabilitation

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Description: This course is designed to provide a basic understanding of the psychology of sport, injury, and rehabilitation. Topics covered include emotional and cognitive response to injury and rehabilitation, motivation, mental skills training and use, psychological antecedents of injury, psychology of injury and rehabilitation, using mental skills with injured athletes, career transition and termination, disabilities, rehabilitation/exercise adherence, eating disorders, alcohol and drug/substance abuse, gender and cultural diversity, and research methods related to psychology of sport, injury and rehabilitation. The graduate student will get an advanced approach, including in-depth application of psychological interventions with injured athletes and a more comprehensive investigation of psychosocial aspects.

MSAT 6300 - Orthopedic Assessment and Diagnosis I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Goniometers, anatomical models, 2-point discriminators.

Description: Content of this course addresses the principles of orthopedic evaluation techniques and the diagnosis and care for most common musculoskeletal injuries for master's of athletic training students. The student must integrate knowledge of anatomical structures, physiology principles and evaluative techniques to provide a basis for critical decision-making in an injury management environment.

MSAT 6301 - Orthopedic Assessment and Diagnosis II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Inclinatorimeters, penlights, anatomical models.

Description: This course is a continuation of MSAT 6300 - Orthopedic Assessment and Diagnosis I. Content from

this course will further develop students' current knowledge and skills to evaluate musculoskeletal injuries while furthering their understanding of less commonly reported injuries. The students will integrate knowledge of anatomical structures and principles of physiology to appropriately select, perform, and correctly interpret results from an orthopedic evaluation technique, and to make critical decisions regarding treatment, injury management, and return to play.

Pre-requisite(s): MSAT 6300.

MSAT 6350 - Assessment and Care of General Medical Conditions

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Stethoscopes, blood pressure cuffs, otoscopes, ophthalmoscopes, glucose meters, peak flow meters.

Description: Content of this course addresses evaluation and care for general medical conditions of athletes and active individuals. The student must integrate knowledge of anatomy, physiology, pharmacology and injury related to athletics and sport in order to provide a basis for clinical decision making as athletic trainers.

MSAT 6390 - Foundations of Therapeutic Interventions

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: This course is designed to introduce students to the contemporary usage and foundation of common therapeutic interventions in musculoskeletal rehabilitation (i.e., cryotherapy, thermotherapy, proprioceptive neuromuscular facilitation, etc.). Through lecture, discussion, and laboratory experience, the scientific basis of musculoskeletal rehabilitation involving these therapeutic interventions will be examined. Students will learn about the body's response to musculoskeletal injury and the subsequent healing process. Emphasis will be placed on theoretical and physiological effects of therapeutic interventions, their indications and contraindications, and application based on the goals in each phase of rehabilitation.

MSAT 6400 - Therapeutic Modalities for Musculoskeletal Injuries

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: Equipment and supplies for ice, heat, massage, compression.

Description: Through lecture, discussion, and laboratory experience, the scientific basis of musculoskeletal rehabilitation involving therapeutic modalities will be examined. This course is designed to build upon the introductory foundations of therapeutic modalities established in MSAT 6390. Topics for discussion include the application of electrotherapy devices, therapeutic ultrasound, and other therapeutic modalities.

Two lecture and 2 lab hours per week.

Pre-requisite(s): MSAT 6300 and MSAT 6390

MSAT 6401 - Innovations in Therapeutic Modalities

Credits: (2)

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$45.00

Course Fee Purpose: Equipment and supplies for electrical stimulation, ultrasound, laser, diathermy, and traction.

Description: This course is designed to introduce students to novel therapeutic modalities that are being integrated in modern musculoskeletal rehabilitation. Through lecture, discussion, and laboratory experience, both the theoretical and scientific basis of new therapeutic modalities will be examined. Students will learn the foundational concepts and techniques of these modalities, and review the literature to determine their effectiveness from an

evidence-based perspective.

Pre-requisite(s): MSAT 6400.

MSAT 6430 - Principles of Athletic Training

Credits: (3)

Description: This course is designed to give graduate-level athletic training students an overview of athletic training principles. Students will gain knowledge in the areas of musculoskeletal injuries, environmental risk factors, mechanisms and characteristics of sports trauma, and the cooperative sports medicine team.

Pre-requisite(s): HLTH 2300 or RHS 2300.

Note: This course is not currently offered.

MSAT 6431 - Orthopedic Taping and Durable Medical Equipment

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$110.00

Course Fee Purpose: White and elastic tape, kinesiotape, braces.

Description: Graduate students in this course will be instructed in evidence-based applications and use of orthopedic and kinesiology taping, padding, and wrapping techniques as well as durable medical equipment including sport performance or stability braces, manufactured splints, and crutches/canes. Students will also learn how to properly fit protective sports equipment. Students will learn to apply a variety of techniques to support the trunk and extremities.

MSAT 6432 - Casting and Orthotic Fabrication

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$120.00

Course Fee Purpose: Casting supplies.

Description: Graduate students in this course will be exposed to evidence-based applications including orthopedic casting custom splints, and orthotics. Students will learn to apply a variety of techniques to support orthopedic injuries of the trunk and extremities.

Pre-requisite(s): MSAT 6431.

MSAT 6450 - Therapeutic Rehabilitation I

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Therapy tables, towels, cleaning supplies, hand sanitizer, goniometers, tape measures.

Description: Content of this course provides a foundational understanding and concepts of therapeutic exercise as it relates to the rehabilitation process of musculoskeletal injuries. Course provides understanding and skills associated with hands-on techniques used in the rehabilitation of athlete/patient from an injury state to a high level of function for return to sport, occupational activities, and/or general activities of daily living.

Pre-requisite(s): MSAT 6300.

MSAT 6451 - Therapeutic Rehabilitation II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Rehabilitation equipment such as weights, swiss balls, theraband, wobble boards, etc.

Description: Content of this course provides advanced understanding of therapeutic rehabilitation as it relates to designing, implementing, and instructing patients through a therapeutic rehabilitation program. This course provides advanced instruction and hands-on techniques in the rehabilitation of a patient from an injury state to a high performance level in sport, occupation, or other activities reflective of the patient's environment and movement goals.
Pre-requisite(s): MSAT 6450.

MSAT 6452 - Advanced Manual Therapy Techniques

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Content of this course provides a specialized understanding of therapeutic rehabilitation as it pertains to manual therapy techniques. This course provides advanced instruction and hands-on techniques such as massage, soft-tissue mobilization, joint mobilizations, myofascial release, traction, and muscle energy techniques. This course will also introduce and discuss emerging rehabilitation techniques.

Pre-requisite(s): MSAT 6390.

MSAT 6480 - Advanced Principles of Evidence-Based Practice

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Description: This course will expand students' understanding and application of Evidence-Based Practice (EBP) skills introduced in MSAT 6080. Students will be expected to read, critically analyze, and participate in the discussion of peer-reviewed research articles.

MSAT 6500 INT - Foundations of Athletic Training

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$335.00

Course Fee Purpose: Polo shirt, jacket, crutches, canes, student supply kits.

Description: Through lecture, discussion, and laboratory experiences, the recognition and management of environmental illnesses will be examined. Explores the history and governance of the AT profession. Orients students to the graduate athletic training program including professional writing and clinical experiences.

MSAT 6501 INT - Graduate Practicum I

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Taping supplies, football helmets, shoulder pads, spineboards, anatomical models, goniometers, inclinometers.

Description: Provides an opportunity for graduate-level athletic training students to review athletic training concepts and skills from prior coursework and demonstrate proficiency in orthopedic assessment and treatment. Students will participate in clinical rotations and other clinical experiences.

Pre-requisite(s): MSAT 6500.

MSAT 6502 INT - Graduate Practicum II

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$20.00

Course Fee Purpose: Anatomical models, goniometers, inclinometers.

Description: Provides an opportunity for graduate-level athletic training students to review athletic training

concepts and skills from prior coursework and demonstrate proficiency in orthopedic assessment and treatment. Students will participate in clinical rotations and other clinical experiences.

Pre-requisite(s): MSAT 6501.

MSAT 6503 INT - Graduate Practicum III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Basic modalities equipment and supplies.

Description: Provides an opportunity for graduate-level athletic training students to review athletic training concepts and skills from previous coursework and demonstrate proficiency in orthopedic assessment, therapeutic rehabilitation, and treatment. Students will participate in clinical rotations and other clinical experiences.

Pre-requisite(s): MSAT 6502.

MSAT 6504 INT - Graduate Practicum IV

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Advanced modalities equipment and supplies such as E-stim, Ultrasound, laser, diathermy.

Description: Provides an opportunity for graduate-level athletic training students to review athletic training concepts and skills from previous coursework and demonstrate proficiency in orthopedic assessment, therapeutic rehabilitation, manual therapy, and treatment. Students will participate in clinical rotations and other clinical experiences.

Pre-requisite(s): MSAT 6503.

MSAT 6600 - Administration and Management in Athletic Training

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Provides an overview of the necessary policies, procedures, maintenance, and daily operation of athletic training facilities. Applies principles of facility design and planning, information management, legal and ethical considerations in health care, and professional development as it relates to athletic training.

Pre-requisite(s): MSAT 6502.

MSAT 6700 - Advanced Diagnostic Imaging for the Athletic Training Profession

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an opportunity for students to gain exposure to the diagnostic imaging techniques commonly used by the medical community in diagnosis of injury in the athlete. Upon completion of the course, students will be able to identify anatomy and understand terminology used by health professionals when discussing diagnostic images and have an advanced understanding of indications, contraindications, and clinical implications.

Pre-requisite(s): MSAT 6350.

MSAT 6740 - Nutrition for Athletic Trainers

Credits: (1)

Typically Taught Summer Semester: *1st Blk, 1st Blk Online*

Description: Graduate students in this course will expand their nutritional knowledge and skills in counseling

athletes in common athletic training situations. This course will also include special situations like nutrition role in concussion recovery and popular diet and sports misconceptions.

MSAT 6750 - Evidence-Based Evaluation and Treatment of the SI Joint and Spine

Credits: (2)

Typically Taught Spring Semester: *1st Blk*

Description: This course will focus on evidence-based evaluation and management of the spine and pelvis, including the cervical spine, thoracic spine, lumbar spine and the sacroiliac joints. The student must integrate anatomical structures, physiology principles, and evaluative techniques to provide a basis for critical decision-making and management for these pathologies.

Pre-requisite(s): MSAT 6300, MSAT 6301.

MSAT 6760 - Suturing, Joint Relocation and Advanced AT Skills

Credits: (1)

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk, 1st Blk*

Course Fee: \$40.00

Course Fee Purpose: Suturing Practice Kit and e-book.

Description: Graduate students in this course will learn advanced wound closure techniques such as skin adhesives and basic suturing. This course will also include advanced clinical skills such as reducing dislocations.

MSAT 6810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title will appear on student's transcript along with the authorized credit.

May be repeated for a total maximum of 6 credit hours.

MSAT 6998 - Master's Board of Certification (BOC) Exam Preparation

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$60.00

Course Fee Purpose: Cover the cost of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. The course fee expenditures for this specific course are for BOC self-assessment exam student vouchers.

Description: This course prepares Graduate Athletic Training students to take the Athletic Trainer Board of Certification (BOC) Exam. This course will review content from all courses in the Master of Science in Athletic Training program as well as content from the program's prerequisite courses.

Pre-requisite(s): MSAT 6450.

May be repeated 2 times up to 3 credit hours.

MSAT 6999 - Special Topics in Athletic Training

Credits: (1-3)

Typically Taught Spring Semester: *Full Sem*

Description: The profession of Athletic Training evolves quickly and frequently new skills and techniques are required. This course will present cutting edge athletic training skills and concepts.

MSE 1210 - Metal Processing and Joining for Engineers

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: Consumables (aluminum, steel, tools), paper, lab support, computers, software licenses, lab equipment

Description: Manufacturing processes for cost-effective, high-quality production. Consideration of technical capabilities and limitations of alternative methods. Includes Metal Removal, forming, welding concepts and non-tradition manufacturing processes. Course project required. Laboratory experiments include mill and lathe work, welding techniques, friction coefficients analysis and milled surface evaluation.

MSE 3040 - Cost Estimating and Engineering Economic Analysis

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Software licensing, lab computers and support

Description: This course focuses on effective design and implementation of reliable, economically competitive, and environmentally benign manufacturing processes and systems. Topics will include an overview of the manufacturing systems approach in production, control, quality, automation, an introduction to facilities planning and design, an introduction to operations research and simulation in manufacturing, and engineering economics. An introduction to government manufacturing systems engineering will also be presented.

Pre-requisite(s): MATH 1210, MSE 3700.

MSE 3360 - Manufacturing Process and Materials Lab

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Paper, lab support, computers, software licenses, lab equipment

Description: Manufacturing processes for cost-effective, high-quality production. Consideration of technical capabilities and limitations of alternative methods. Includes forming, removal, casting, joining, heat treating, molding, finishing and coating. Course project required. Laboratory experiments include heat treating, deep drawing, powder metallurgy, casting, injection molding, fabricating composites, friction coefficients analysis and milled surface evaluation.

Pre-requisite(s): ENGR 2010, ENGR 2160.

MSE 3460 - Product Design and Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Software licensing, lab computers and support

Description: An advanced computer-aided design course using state-of-the-art solid modeling CAD/CAM software. Topics include: 3D parametric solid modeling, applications associativity, design-by- feature, assembly modeling, injection mold design, flat pattern development, design analysis using FEA, realistic rendering, and detailing.

Pre-requisite(s): ENGR 1000, PDD 1160.

MSE 3700 - Manufacturing Systems I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers, and support.

Description: This course focuses on effective design and implementation of reliable, economically competitive, and environmentally benign manufacturing processes and systems. Topics will include an overview of the manufacturing systems approach in production, control, quality, automation, an introduction to facilities planning and design, an introduction to operations research and simulation in manufacturing, and engineering economics. Students will also be introduced to DoD systems engineering terminology.

Pre-requisite(s): MFET 2320 and ENGR 2140.

MSE 3710 - Computer Aided Manufacturing and Additive Manufacturing/Lab

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: This course will introduce and explain concepts behind Computer-Automated Manufacturing (CAM). It will define elements, terms, and concepts involved with CAM. Elements of rapid prototyping will also be covered from conceptual design in solids to production of tooling and parts. This course is designed for those who have the basic understanding of the setup and operation of CNC machine tools and programming. Software will be used to perform the CAM operations, such as part generation and post processing.

Pre-requisite(s): MSE 1210, PDD 1010, PDD 1160 or MSE 3460.

MSE 3850 - Statistical Process Control and Reliability

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Software licensing, lab computers and support

Description: Control of quality with statistical analysis; typical control techniques and underlying theory. Development of reliability models and procedures for product assurance. Course will utilize Minitab and Microsoft Excel Spreadsheet software.

Pre-requisite(s): MFET 2410 or MATH 1040 or MATH 3410.

Pre-requisite/Co-requisite: MATH 1210 or MATH 1110

MSE 3910 - Six Sigma Methods and Tools in Manufacturing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Labs and software (Minitab & Excel)

Description: Six Sigma methods use statistical tools to bring about continual improvement of quality in manufactured goods and services and to document that positive change has occurred. These tools include Failure Mode and Effects Analysis (FMEA), Measurement Systems Analysis (gage R&R), Control Charts, Process Capability Analysis, and Design of Experiments. Students will learn and apply these methods and tools through class participation and completion of required projects. Course will utilize Minitab and Microsoft Excel spreadsheet software.

Pre-requisite(s): MSE 3850 or MFET 3810.

MSE 4010 - Facility Design and Material Handling

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Software licensing, lab computers and support

Description: In-depth concepts in the planning and design of manufacturing facilities, product analysis, manufacturing processes and equipment selection, and schedule design; flow, space, activity relationships and space planning; location and layout; material handling systems; and facilities planning models.

Pre-requisite(s): MSE 3360, MSE 3460, and MSE 3700.

MSE 4590 - Lean Manufacturing Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Software licensing, lab computers and support

Description: This course addresses the organization, design, and management of production systems using lean manufacturing techniques. Topics include work standardization, visual manufacturing, workplace organization, poke-yoke methodology, value stream mapping, setup reduction, batch size reduction, kaizen, total productive maintenance, pull systems/kanbans, cellular manufacturing design concepts, & cellular plant layout concepts.

Pre-requisite(s): MFET 2300 or MFET 2320.

MSE 4600 - Production Systems Modeling and Analysis/Lab

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: Design and analysis of production systems. Fixed, flexible, and programmable automation. Modeling and simulation of alternative production systems in conjunction with the systems-design process.

Pre-requisite(s): MSE 3460, MSE 3700.

MSE 4610 - Project Management for Engineers

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: This course is focused on teaching methods and tools for planning and managing complex product and system development projects. The class will focus on the preparation, planning, monitoring and adaptation of projects. The class is organized into five loosely interwoven modules; project planning and simulation techniques, case studies, project tracking, international projects, and project management resources.

Pre-requisite(s): MSE 3040, MSE 3460.

Co-Requisite(s): MSE 4615.

MSE 4615 - Lab: Senior Project Design I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Equipment maintenance and replacement, tools, software, consumables, materials, manuals, supplies and instructional resources.

Description: This is an engineering laboratory subject for manufacturing systems engineering seniors. Major emphasis is on interplay between analytical and experimental methods in solution of research and development problems. Communication (written and oral) of results is also a strong component of the course. Groups of three or

more students work together for two terms on an assigned engineering and design project. Must be taken concurrent with MSE 4610 Project Management for Engineers.

Co-Requisite(s): MSE 4610.

MSE 4620 - Lab: Senior Project Design II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: Continuation of MSE 4615. Team assignments will lead to the construction, testing and optimization of the design. This includes detailed engineering analysis and testing of prototypes, final parameter and tolerance design, and economic analysis of the project. Senior Project II culminates in a final design review based on formal student presentations of the documented final product and verification that the final product meets all requirements.

Pre-requisite(s): MSE 4610, MSE 4615.

MSE 4700 - Manufacturing Systems Engineering II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course consumables(controllers, robotics, etc.), software licensing, lab computers and support.

Description: This course covers the following topics: models of manufacturing systems, including transfer lines and flexible manufacturing systems; calculation of performance measures, including throughput, in-process inventory, and meeting production commitments; real-time control of scheduling; effects of machine failure, set-ups, and other disruptions on system performance. Also A study of the elements used in the automation of manufacturing processes including: programmable logic controllers, robotics (servo and non-servo), vision systems, and material handling devices.

Pre-requisite(s): MSE 3040, MSE 3700.

MSE 4800 - Individual Research Problems

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Software licensing, lab computers and support

Description: With permission and under the direction of faculty, the student researches a specific problem in the manufacturing systems engineering field.

Pre-requisite(s): Permission of department.

May be taken 3 times and up to 3 credits.

MSE 4830 - Directed Readings for Manufacturing Systems Engineering

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: With permission and under the direction of faculty, the student studies a topic taken from the mechanical engineering literature.

Pre-requisite(s): Permission of department.

May be taken 3 times and up to 3 credits.

MSE 4890 INT - Cooperative Work Experience

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides academic credit for engineering work experience. Permission of department required.

Pre-requisite(s): Permission of department.

May be taken 3 times and up 3 credits.

MSE 4900 - Special Topics

Credits: (1-3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A special topic in manufacturing systems engineering is selected by the faculty to be taught on a one-time basis. With departmental approval, may substitute for a technical elective.

Pre-requisite(s): Permission of department.

May be repeated three times with a maximum of three credit hours.

MSE 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for current offering under this number. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): Permission of department.

May be repeated for a total maximum of 6 credit hours.

Note: With departmental approval, may substitute for a technical elective.

MSE 5010 - Foundation of Systems Engineering

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Course Fee: \$25.00

Course Fee Purpose: Per class registration, allocated partially to computer lab refurbishment, lab aids and software licenses.

Description: The Foundation of Systems Engineering course is an introductory overview of the systems engineering perspective and is presented to set the conceptual and practical framework of the entire systems engineering graduate program. The course covers the foundational components of systems engineering, from the concept development stage through the process steps of engineering development. Several issues related to post-development, disposal, and special topics areas are also presented.

MSE 5020 - Engineering Project and Program Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Course Fee: \$25.00

Course Fee Purpose: Per class registration, allocated partially to computer lab refurbishment, lab aids and

software licenses.

Description: The Engineering Project and Program Management course provides participants the opportunity to gain skills and experience applying the framework, processes, and knowledge areas of the *Project Management Body of Knowledge (PMBOK)* as defined by the Project Management Institute (PMI). Students apply methods and tools through in-class lab work, deliverables, and portfolio generation.

MSE 5140 - Design for Operational Feasibility

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Course Fee: \$25.00

Course Fee Purpose: Per class registration, allocated partially to computer lab refurbishment, lab aids and software licenses.

Description: This course will introduce the application of engineering and management efforts to maximize the likelihood that the resulting system design will be operationally feasible and perform as intended in an effective and efficient manner. The objective of the course is to study the characteristics that are known to have a significant impact on the success of a system and the customer's need. Topics include Design for reliability, maintainability, human factors, logistics, producibility, and affordability.

MSE 5810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MSRS 6100 - Research Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course assists students to critique, evaluate, and use research within their health science education careers. The research process including the theoretical/conceptual basis of health sciences research, methods, and critique strategies are examined in detail. There is a focus on evaluation of published research reports to evaluate the appropriateness of application of findings to clinical practice.

This course is cross-listed with NRS 6110.

MSRS 6120 - Research and Statistics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on the development of research skills used to evaluate data in support of the utilization of findings in clinical practice. Skills related to statistical analysis of quantitative data will be emphasized. Parametric and non-parametric methods of statistical analysis will be discussed.

This course is cross-listed with NRS 6120.

MSRS 6130 - Functional Hemodynamics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course offers the fundamental principles and indications for invasive hemodynamic monitoring. The indications, possible contraindications and possible complications involved with the insertion of central Venous

lines, arterial lines, Pulmonary artery catheters and ICP monitoring with the expected CVP, RV, PAP, PCWP, CO and CI reading, waveforms and troubleshooting.

MSRS 6140 - Clinical Laboratory Correlation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course covers the concepts, analytical methods and clinical correlation of laboratory values as they relate to radiographic imaging, pathology and patient history.

MSRS 6150 - Grant Writing for the Imaging Clinical Scientist

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students will learn to write competitive imaging clinical grant proposals. These proposals will be specific to resources required by professionals within Radiologic Sciences. For example, grants may be obtained for equipment, International RADAID (a humanitarian imaging group), and/or professional development. Learners will achieve competence in writing typical grant components including statements of need/rationale, implementation of strategies, outcomes, personnel, evaluation, budgets, and executive summaries.

MSRS 6200 - Population Health in Radiologic Sciences

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: The course addresses the integration of population health concepts into strategic planning and managerial decision-making in health services organizations. Course work includes environmental analysis of health behaviors and lifestyle that impact demand on health care delivery systems. The student will evaluate models for integration of health services, preventive programs, demand management, and policy issues affecting continuity of care.

This course is cross-listed with MHA 6000.

MSRS 6210 - Global Health in Medical Imaging

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of this course is to explore the role of radiology in addressing healthcare disparities. This course will identify the challenges and strategies in providing radiologic services within a resource-poor complex systems with various stakeholders, advanced technologies, diverse education, volunteer management, and legal and financial considerations.

MSRS 6220 - International Competency in Medical Imaging

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to identify the clinical role of medical imaging in developing worlds. The current challenges of managing unique illnesses with limited resources will be discussed. Some common diseases and radiologic findings will be addressed regarding diagnosis and treatment.

Course Objectives

Students will gain and understanding and develop skills necessary to:

1. Identify methods for optimization of Radiologic services in the developing world.
2. Discuss public health and international epidemiology for radiology
3. Identify appropriate disaster response
4. Discuss infectious disease and imaging.
5. Discuss interventional, cardiac, and pediatric services in a global health environment.
6. Identify challenges in maternal-fetal medicine and women's health in a global health environment.

MSRS 6263 - Advanced Diagnostic Services Pharmacology

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to enhance student knowledge of pharmaceuticals and their impact on patients undergoing advanced imaging procedures. The content addresses the intent of pharmaceuticals and their effect on patient diseases, conditions, and physiology. After acquiring this content and the appropriate clinical skills, students will review the patients' past and current clinical condition and history to gain an understanding of medication significance relevant to the imaging procedure.

MSRS 6310 - Evaluation of the Cardiac System

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The content of this course is designed to enhance student knowledge of the diagnostic procedures performed in the cardiac catheterization laboratory to identify atherosclerotic coronary or peripheral artery disease, abnormalities of the heart muscle, and valvular or congenital heart abnormalities.

MSRS 6311 - Interventional Cardiac Procedures I

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to enhance student knowledge of the interventional procedures performed in the cardiac catheterization laboratory that address coronary artery disease & myocardial infarction; The foundations of percutaneous coronary intervention techniques will be presented including indications, contraindications, and complications.

MSRS 6312 - Interventional Cardiac Procedures II

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: This course is designed to enhance student knowledge of the interventional procedures performed in the cardiac catheterization laboratory that address pericardial and myocardial disease, heart failure and cardiogenic shock. The principles of hemodynamic data collection techniques will be presented including pressure pathology, waveform interpretation and cardiac output. Course content will also include mechanical circulatory support technologies such as the left ventricular assist devices (LVAD) and the intra-aortic balloon pump (IABP).

MSRS 6313 - Interventional Cardiac Procedures III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is designed to enhance student knowledge of the interventional procedures performed in the cardiac catheterization laboratory that address valvular disease, septal defects, and vascular disease. Transcatheter structural heart repair devices deployed in the cath lab have largely replaced open-heart

surgery as the therapy of choice and many labs are incorporating vascular procedures into cardiac cath. Patient preparation, medical instrumentation, and performance of these procedures will be presented.

MSRS 6403 - Evaluation of the Osseous System

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Imaging evaluation of pathological conditions, abnormalities and anomalies of the osseous system.

MSRS 6413 - Evaluation of the Chest

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Imaging evaluation of pathological conditions, abnormalities and anomalies of the chest.

MSRS 6423 - Evaluation of the Abdomen and G I System

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Imaging evaluation of pathological conditions, abnormalities and anomalies of the abdomen and gastrointestinal system.

MSRS 6433 - Evaluation of the Genitourinary System

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Imaging evaluation of pathological conditions, abnormalities and anomalies of the genitourinary system.

MSRS 6443 - Clinical Pathways

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Studying clinical pathways for patients based on disease processes and trauma.

MSRS 6450 - Managing Health Information

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This introductory course is to help students develop a basic vocabulary and understanding of the principles of medical information systems. Students will additionally be introduced to the basic principles of health insurance and medical billing and coding. The main goals of this course are (1) Understanding current networking and communication systems and (2) Application of knowledge of specialized medical terminologies, insurance, and regulation systems.

This course is cross-listed with MHA 6450.

MSRS 6453 - Evaluation/CNS and Facial Structures

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Imaging evaluation of pathological conditions, abnormalities and anomalies of the central nervous system and facial structures.

MSRS 6461 - Leadership in Clinical Practice

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: The purpose of this course is to identify essential leadership and management behaviors that support a clinical practice in medical imaging. Students will gain an essential understanding of clinical organization, power, and empowerment. Career and professional considerations regarding quality, safety, work environment, communication, and career development will be critically discussed.

MSRS 6463 - Problem Patient Management

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Determination of pathological conditions utilizing problem-solving case studies.

MSRS 6473 - Non-vascular Invasive Imaging

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Patient preparation and student performance of medical imaging non-vascular invasive procedures.

MSRS 6481 - Current Trends in Pediatric Imaging

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to help students develop the knowledge and cognitive skills required for advanced pediatric imaging. The main goals of this course are (1) Understanding the differences in the appearance of neonate, infant, and child normal anatomy; (2)Assisting or performing various pediatric imaging studies; (3)Recognizing normal/pathologic advanced imaging appearance of common pediatric conditions; (4)Becoming familiar with common conditions diagnosed in the pediatric patient

MSRS 6482 - Current Trends in Cardiovascular Imaging

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The content of this course is designed to enhance student knowledge of contemporary cardiovascular imaging techniques and the pathology they address. Advances in modalities used to image the heart, including conventional radiography, angiography, echocardiography, cardiac magnetic resonance, and cardiovascular computed tomography, have fundamentally advanced the understanding and treatment of cardiovascular disease in the 21st century. This course will present the latest advances in the field and compare the strengths and weaknesses of each modality. Course content will focus on heart defects, endocarditis, coronary heart disease, cardiomyopathies, myocarditis, cardiac tumors, pericardial diseases, pulmonary vascular diseases, and diseases of the thoracic aorta. Student will discuss anatomy, pathophysiology, and clinical features, encouraging the technologist to think critically, problem-solve, and evaluate the need for therapeutic intervention.

MSRS 6483 - Musculoskeletal Sonography

Credits: (3)**Typically Taught Fall Semester:** *Full Sem*

Description: The (MSK) Sonography course will provide concepts in musculoskeletal anatomy and sonographic scanning technique and protocols necessary to produce and evaluate diagnostic images in the clinical setting for diagnosis of musculoskeletal pathology.

MSRS 6484 - Sonographic Fundamentals for Invasive Guidance**Credits: (3)****Typically Taught Fall Semester:** *Full Sem*

Description: The purpose of this course is to aid in the development of knowledge and skills necessary to perform invasive procedures under the guidance of medical imaging.

Course Objectives

Students will review and become competent in concepts and skills including (1) common invasive procedures (2) location, appearance, and approach for masses, cysts, and/or vascular access using medical imaging (3) procedural safety, confidence, and risks. Areas of interest will include:

- Liver Biopsy
- Renal Biopsy
- Extra Visceral Abdominal Mass Biopsy
- Chest Mass Biopsy
- Breast Biopsy
- Fine-Needle Aspiration of Thyroid Nodules
- Superficial Lymph Node Biopsy
- Endovaginal Procedures
- Transrectal Prostate Biopsy
- Ultrasound Guided Access and Drainage for Vascular, Percutaneous Nephrostomy, and Transhepatic Biliary Drainage

MSRS 6485 - Current Trends in Visual Analytics**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: The purpose of this course is to provide an understanding of the evolution in the application for artificial intelligence (AI) within healthcare and radiology. Students will learn about the technological background of AI and how this technology has impacted emerging technology, clinical practice, and patient care.

MSRS 6486 - Pathological Review Across Imaging Modalities**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: The purpose of this course is to help students develop the knowledge and cognitive skills required for advanced imaging in various modalities. Students will become familiar with how different imaging modalities enhance and complement radiographic diagnosis of common pathologies and conditions.

MSRS 6487 - Current Trends in Pain Management

Credits: (3)**Typically Taught Spring Semester:** *Full Sem***Description:** The purpose of this course is to overview the etiology, classification, evaluation, imaging, and treatment for pain management.**Course Objectives**

Students will gain an understanding and develop skills necessary to:

1. Discuss the taxonomy of chronic and acute pain.
2. Identify challenges in the training, education, and certification of pain medicine
3. Determine psychosocial aspects of pain and consider appropriate assessments
4. Identify clinical conditions related to pain and pharmacologic treatments.
5. Discuss nerve block techniques and interventional techniques.
6. Characterize best practice in image modalities for procedures targeted for pain management.
7. Consider research, ethics, and reimbursement in regards to pain management.

MSRS 6493 - Advanced 3D Medical Imaging**Credits: (3)****Typically Taught Summer Semester:** *Full Sem***Course Fee:** \$25.00**Course Fee Purpose:** Lab Supplies, Phantoms, software upgrades and maintenance**Description:** The Advanced 3D Medical Imaging course will provide instruction on the creation, manipulation, and printing of three-dimensional data-sets of different anatomical parts of the body. The data-sets will originate from diagnostic images (provided by the department or the student), particularly Magnetic Resonance Imaging (MRI) and Computer Tomography (CT) images. The course will include a hands-on learning lab where the student will use software to create a three-dimensional digital image and a three-dimensional print of an anatomical body part.**MSRS 6501 - Advanced Practice Simulation I****Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Description:** Advanced imaging simulation courses are designed to help students develop the knowledge and cognitive skills required for the performance of advanced imaging clinical assignments.**MSRS 6502 - Advanced Practice Simulation II****Credits: (1)****Typically Taught Spring Semester:** *Full Sem***Description:** Advanced imaging simulation courses help students develop the knowledge and cognitive skills required for the performance of advanced medical imaging clinical assignments.**MSRS 6503 - Advanced Practice Simulation III****Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Description:** Advanced imaging simulation courses help students develop the knowledge and cognitive skills required for the performance of advanced medical imaging clinical assignments.**MSRS 6504 - Pediatric Sedation and Physical Exam**

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides information for advanced imaging procedure-related sedation and physical exam. Sedation standards, techniques, and regulations for pediatric imaging procedures will be provided. Essential aspects of collaboration with other medical providers are emphasized in the course to benefit pediatric patients during imaging exams and procedures.

MSRS 6505 - Pediatric Simulation Imaging I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Simulation of advanced imaging and evaluation of pathological conditions, abnormalities, and anomalies of the pediatric systems.

MSRS 6506 - Pediatric Simulation Imaging II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Simulation, practice, and discussion of the performance of advanced imaging and evaluation of pediatric patients.

MSRS 6507 - Pediatric GI and GU Imaging

Credits: (6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Advanced imaging and evaluation of pathological conditions, abnormalities and anomalies of the pediatric GI and GU systems.

MSRS 6508 - Pediatric Respiratory and Musculoskeletal Imaging

Credits: (6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Advanced imaging and evaluation of pathological conditions, abnormalities, and anomalies of the pediatric respiratory and musculoskeletal systems.

MSRS 6509 - Pediatric Neurologic Imaging

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Advanced imaging and evaluation of pathological conditions, abnormalities, and anomalies of the pediatric neurologic system.

MSRS 6850 - Study Abroad

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students will gain knowledge and cultural experiences developed to address historical, community, political, economic, educational, geographical, and literary/artistic variables.

MSRS 6860 INT - Clinical Preceptorship I

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Experience in a radiology department. Consent of instructor needed.

MSRS 6861 INT - Clinical Preceptorship II

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Continuation of MSRS 6860.

MSRS 6862 INT - Clinical Preceptorship III

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Continuation of MSRS 6861.

MSRS 6863 - Vascular Invasive Imaging Procedures

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Patient preparation and performance of medical imaging vascular invasive procedures are presented.

MSRS 6900 INT - Capstone: Clinical Fellowship & Portfolio

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Experience in a radiology department and interventional Radiology coordinated by Weber State University under the supervision of a radiologist or other Medical Practitioner. Review and evaluation of student competencies, clinical performance and professional development as required by certification.

MSRS 6910 - Transition to Practice

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Transition to practice provides students with a pertinent review of the content, skills, and processes

necessary to gain and maintain imaging credentials and elevate professional practice. The course explores the fundamental aspects of professionalism, interprofessional communication, quality in practice, and professional resilience.

MSRS 6992 - Advanced Practice Seminar

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to enhance students' knowledge of current research and advances in the Radiologic Sciences.

MSRS 6999 - Master's Thesis in Radiologic Sciences

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Description: Students will enroll for this course as they complete their master's thesis under the direction of a departmental graduate advisor. Departmental seminars and readings may also be assigned as part of this course. Students will finish their Master of Science in Radiologic Sciences degree by first completing a course of classroom or didactic study, then writing an original research monograph for their thesis. This course is to be used during the time the student is writing the thesis and getting approval for the thesis.

MSRT 6010 - Medical Writing, Research Methods & Design

Credits: (3)

Typically Taught Fall Semester: *2nd Blk - Online*

Description: This course will assist students in developing writing skills that meet professional journal requirements. Students will learn how to write research reports, abstracts, clinical case reports and scientific posters. Students will develop skills in effective editing, reviewing and proofreading. They will also develop skills that allow them to critically read published research articles in order to understand the validity and implications of the study results.

Pre-requisite(s): Acceptance into MSRT program.

MSRT 6020 - Medical Pathophysiology/Cardiopulmonary Case Reviews

Credits: (3)

Typically Taught Spring Semester: *1st Blk*

Description: Advanced-practice pathology of the heart and lungs presented in case study format for articulating a working diagnosis, treatment, and follow-up care based on an abundance of patient assessment techniques including patient history/physical, signs, symptoms, and ancillary radiographic evidence. Medical information gathered from research database articles are presented to enhance a decision-making rationale for the treatment of cardiopulmonary diseases.

Pre-requisite(s): Acceptance into MSRT program.

MSRT 6030 - Adult Learning Theory & Simulation Strategies

Credits: (3)

Typically Taught Spring Semester: *1st Blk - Online*

Description: An application of teaching and learning theories for adult learners across variable clinical, laboratory, simulation lab, and in face-to-face interactions are explored within both traditional and non-traditional classroom settings. Teaching strategies and simulation designs are designed to support student learning for future respiratory

therapy educators and clinical instructors.

Pre-requisite(s): Acceptance into MSRT program.

MSRT 6040 - Respiratory Care Education

Credits: (3)

Typically Taught Spring Semester: *2nd Block Online*

Description: This course aims to explore concepts of teaching and learning theories (adult learners) in a rapidly changing healthcare environment. Included are knowledge, attitudes, and skills needed to train future respiratory therapy educators, clinical educators for expanding roles in healthcare.

Pre-requisite(s): Admitted to MSRT Program

MSRT 6050 - Respiratory Care Curriculum and Course Design

Credits: (3)

Typically Taught Fall Semester: *1st Block Online*

Description: This course aims to explore concepts of course design and curriculum development specific to respiratory therapy education. Essential elements will include developing a syllabus, determining course materials, selecting optimal teaching methods, and designing appropriate assessments. The course will also address course management, teaching diverse students, using technology in teaching, and meeting accreditation standards.

Pre-requisite(s): Admitted to the MSRT program

MSRT 6130 - Evidence-based Practice

Credits: (3)

Typically Taught Fall Semester: *1st Blk*

Description: This course explores research-based evidence of best practices for advanced respiratory care practitioners (RCP's) by identifying important questions, i.e., medication, ventilation strategies, protocols, etc. in the evaluation, diagnosis, or treatment of patients suffering abnormalities of the cardiopulmonary system. A methodological approach to evaluate practice is explored through a systematic literature search whereby the evidence manifest through particular treatments of a population can be expected.

Pre-requisite(s): Acceptance into MSRT program.

MSRT 6140 - Applied Research in Respiratory Care

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Research is a fundamental part of healthcare. This course will explore research opportunities specifically in the field of respiratory care. Basic statistical concepts will be reviewed. Nominal, ordinal, and continuous methods will also be studied. Publishing the findings through an original research paper, an abstract, case report, and poster presentation will be a main focus for this course.

Pre-requisite(s): Acceptance into MSRT program.

MSRT 6150 - Research Methods in Respiratory Care

Credits: (3)

Typically Taught Summer Semester: *1st Block Online, 2nd Block Online*

Typically Taught Fall Semester: *1st Block Online, 2nd Block Online*

Typically Taught Spring Semester: *1st Block Online, 2nd Block Online*

Description: Research involves a process of "sense-making" of interrelated activities rather than a simple description or basic understanding of unrelated events. Appreciating the sequence of events and the diverse methods of inquiry can lead a researcher in multiple directions. It is important to ground your initial question in methods that enhance understanding. Researchers must develop a "toolkit" with methods that address a central question and

provide a means to thoroughly evaluate a stated outcome. Methods can assist healthcare researchers to identify problems to be studied with ideas that answer the questions or central problem in the inquiry process. In this way, practitioners need to know quantitative, qualitative, and mixed approaches of inquiry to develop an indepth understanding of multiple research designs and procedures used in research today. Through this course, students will gain an understanding of reserach used in the field of Respiratory Care and apply and evaluate methods of inquiry in the discovery of new medical knowledge.

Pre-requisite(s): Acceptance in the MSRT program

MSRT 6300 - Respiratory Care Internship

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Description: This course has been designed as a way for students to put "theory into practice" by seeing a project (curriculum proposal, administrative problem, or research question) through to completion. It has been developed to provide course participants with an opportunity to work with a self-identified mentor to prepare a course, identify an organizational problem and implement its solution, or to design and answer a "best-practice" procedure to improve clinical outcomes. The course includes a strategy to work closely with an instructor approved mentor to implement a deliverable written project outlining the problem encountered, the process implemented to overcome the problem, or the literature necessary to address the practice.

MSRT 6410 - Certified Pulmonary Function Technologist (CPFT)

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Evaluation and assessment of pulmonary disease is an important skill for the advanced-practice respiratory care practitioner (RCP). Requisite to making an accurate diagnosis, practitioners must understand diagnostic measurements and recommend treatment of patients with specific pulmonary diseases. This course is essential to gain knowledge to pass the CPFT (NBRC) exam for Certified Pulmonary Function Technologists.

Pre-requisite(s): Acceptance into MSRT program.

MSRT 6420 - Sleep Disorders Specialty (SDS)

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is essential to gain knowledge in the evaluation and treatment of sleep disorders in the context of a polysomnography lab and to pass the SDS (NBRC) credential for sleep disorder specialists.

Pre-requisite(s): Acceptance into MSRT program.

MSRT 6460 - Neonatal Pediatric Specialty (NPS)

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course prepares the advanced-practice respiratory care practitioner (RCP) to optimally participate in the assessment, management, and care of newborn and pediatric populations. The course includes development, common disease pathology, pharmacology, and management of neonatal patients, emergency treatment, and evaluation of conditions and abnormalities of the cardiopulmonary systems. This course will prepare the practitioner for a national neonatal and pediatric specialty examination (NPS).

Pre-requisite(s): Acceptance into MSRT program.

MSRT 6470 - Adult Critical Care Specialty (ACCS)

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course prepares the advanced-practice respiratory care practitioner (RCP) to effectively evaluate, assess, manage and provide appropriate care to critically ill adult patients. This course extensively covers advanced airway and cardiovascular management, mechanisms of respiratory failure, analysis of laboratory and imaging results, specialty medical gasses and pharmacological agents, management of patients with infectious disease and sepsis, assisting and performing advanced procedures, and end-of-life care in the adult population. This course will prepare the practitioner for an advanced critical care specialty credentialing examination (ACCS).

Pre-requisite(s): Acceptance into MSRT program.

MSRT 6480 - Asthma Educator Specialty Credential (AE-C)

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course prepares the advanced-practice respiratory care practitioner (RCP) to optimally educate patients and family members of patients suffering with asthma. The course includes disease pathophysiology, assessment, pharmacology, classification, and management of asthma based on severity, emergency treatment and evaluation of treatment programs. This course will prepare the practitioner for a national asthma education certification examination (AE-C).

Pre-requisite(s): Acceptance into MSRT program.

MSRT 6600 - Patient Education and Disease Management

Credits: (3)

Typically Taught Fall Semester: *2nd Blk Online*

Description: The course will provide students with opportunities to hone techniques for effective communication and patient education in a variety of settings. Students will advance knowledge and skills necessary in disease management for common respiratory care disorders, specifically chronic illnesses.

MSRT 6700 - Capstone Project

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to be self-directed, faculty supervised culminating project specific to the educational track that the student has chosen within the MSRT program (Education, Research or Health Administration). The student will demonstrate their firm grasp of their educational track and their mastery of professional/scientific writing through the development of a research paper. This course requires that the student develop a research question, prepare a learning contract that outlines their approach to the research question, and complete 40 hours of documented time with a mentor(s) who have a minimum of a Master's degree in a related area or in performing original research. The student will also assemble a formative committee to act as a resource as the student develops the research project and summative committee to evaluate and validate the student's research. The formative and summative committees each consist of three professionals with a minimum of a Master's degree. The student will complete a Masters level research paper that is a minimum of 40-50 pages in APA format.

Pre-requisite(s): Acceptance into MSRT program.

May be repeated once up to 6 credit hours.

MSRT 6810 - Experimental Course

Credits: (1-6)

Experimental

Description: Individual courses offered on an experimental basis, identified by specific name and description. The specific title will appear on student's transcript along with the authorized credit.

May be repeated for a total maximum of 6 credit hours.

MSW 6010 - Foundations of Social Work

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A thorough review of the history, philosophy, and fundamental principles of social work, emphasizing the knowledge, values and skills needed for social work practice in all settings.

Pre-requisite(s): Formal admittance to the MSW program.

MSW 6100 - Behavior, Environment & Social Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A graduate level introduction to the ecological model, examining in-depth, the relationship between human development (individuals, families, groups, communities, and organizations) and the social environment. Systems and theory are examined critically in the biological, psychological, sociological, and spiritual arenas, with an emphasis on social justice and the intersectionality of race, ethnicity, sexuality, gender, economic status and other dimensions of diversity on the developmental process.

Pre-requisite(s): Formal admittance to the MSW program.

MSW 6150 - Behavioral Health, Diagnostics, and Mental Health

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to introduce students understanding to the mental health diagnoses associated with the DSM-V.

MSW 6200 - Human and Social Diversity and Oppression

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A study of diversity among individuals, groups, and communities and dynamics of oppression locally, regionally, nationally, and globally. Application of knowledge, skills, and interventions to alleviate social inequities and human suffering will be stressed.

Pre-requisite(s): Formal admittance to Master of Social Work program.

MSW 6235 - Loss Across the Lifespan

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will provide an overview of loss as a normal and necessary part of life and growth. It will also provide the foundation of classical grief theory and its evolution to more modern grief theory and work. While death and dying at different stages in the lifespan will be addressed, each life stage will also be explored for the normative losses that occur at that stage.

Pre-requisite(s): Formal admittance to Master of Social Work Program, or other WSU graduate program.

MSW 6245 - Aging Services

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Overview of older adults as a population group and of aging as a biopsychosocial process. The course explores aspects of social services and health care systems intended to help individuals, families, and communities confront aging-related challenges and capitalize upon aging-related strengths.

Pre-requisite(s): Formal admittance to Master of Social Work program or WSU graduate program.

MSW 6255 - Sexuality in Social Work Practice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A graduate-level introduction and thorough overview of the nature and meaning of sexuality and an in-depth consideration of various ways that sexuality is part of social work practice. Students will examine the knowledge, values, and skills needed to address sexuality in social work practice.

Pre-requisite(s): Formal admittance to the MSW program, MSW 6300, MSW 6910.

MSW 6265 - Crisis Intervention and Trauma

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to prepare students to develop assessment, diagnostic and evidenced based interventions to assist those in critical need during and after a crisis or trauma. A crisis is defined as an event that exceeds and overwhelms an individual's coping skills to the point where equilibrium is disrupted. Micro, mezzo, and macro crises as well as trauma will be explored.

Pre-requisite(s): Formal admittance into the MSW program, or other WSU graduate program.

MSW 6275 - Harm Reduction in Practice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An in-depth analysis of harm reduction and its use in clinical social work practice. Considers harm reduction in assessment, treatment planning, intervention, and evaluation of effectiveness of services. Explores the history and context of harm reduction as a therapeutic model, as well as its applications at the micro, mezzo, and macro areas of practice.

Pre-requisite(s): Formal admittance to Master of Social Work Program, or other WSU graduate program.

MSW 6285 - Dialectical Behavior Therapy

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Dialectical Behavior Therapy or DBT, is a theoretical practice model that was conceptualized to address suicidal and para-suicidal behaviors. It is one of the first evidence-based models to document reductions in para-suicidal and suicidal behaviors. Originally developed as an adult model working with Borderline Personality Disorder it has proven effective in treating many other disorders and in working with adolescents and their families as well. It has gained in popularity as a treatment model and many states and insurance payers have recognized it as the treatment of choice for certain diagnoses.

Pre-requisite(s): Formal admittance to the MSW program, or other WSU graduate program.

MSW 6300 - Ethics, Ethical Practice, Ethical Decision-Making

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Description: An exploration of professional social work roles, values, and ethical principles. Students will review the history and evolution of the National Association of Social Workers' Code of Ethics, as well as other statements of ethical principles in social welfare. An ethical problem-solving model will be introduced and course activities will assist students in using these guidelines in making ethical decisions in professional practice.

Pre-requisite(s): Formal admittance to the MSW program and MSW 6900 OR formal admittance to the MSW program with advanced standing.

Co-Requisite(s): Must be taken concurrently with MSW 6910.

MSW 6400 - Macro Aspects of Clinical Practice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A consideration of practical aspects of clinical social work practice and social service programs. Content covers administration, budgeting, program development, marketing, and institutional policy. Work with Latino communities provides a context for exploring these topics.

Pre-requisite(s): Formal admittance to MSW program, Advanced Standing Status, or MSW 6300 and MSW 6500.

MSW 6500 - Social Policy and Social Work Practice

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: An examination of the major political issues faced by social work as a profession. Examples of challenges and related social, public and social welfare policies will be identified and studied. Knowledge of local, state, and federal legislation, as well as professional, membership, and international organizations will assist in review of lobbying, funding, development, and implementation strategies used in the support of clinical social work practice and meeting human service needs. Methods for political and organizational analysis of processes and policy will be discussed.

Pre-requisite(s): Formal admission to the MSW program.

MSW 6600 - Research I: Research Informed Practice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A study of advanced research methods and statistical procedures as they inform and shape professional social work practice. The class reviews basic qualitative, quantitative, and single system research methodologies; analysis of data, including statistical procedures; analysis and evaluation of theoretical bases, research questions, methodologies, statistical procedures, and conclusions of research reports; and relevant technological advances. Students apply activities such as needs assessments, satisfaction surveys, and other research tools to the creation, implementation, and evaluation of evidence-based practices. The course also prepares students to examine the empirical basis of practice models and how to effectively access, critique and appraise literature in order to find best evidence-based solutions. Ethics and sensitivity to research with various groups will be emphasized.

Pre-requisite(s): Formal admittance to the MSW program, MSW 6010 (or advanced-standing status), MSW 6300, and MSW 6910.

MSW 6700 - Research II: Practice-Informed Research

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Research II: Practice-Informed Research - A study of advanced research methods and statistical

procedures as they relate to and are guided by professional social work practice. Students learn about empirical research designs and how to conduct program evaluations, including needs assessments, process evaluations and outcome evaluations. Students also learn about strategies to communicate research outcomes effectively with clients, colleagues, and stakeholders to ensure the implementation sound and empirically supported prevention and intervention strategies and models of practice. Ethics and sensitivity to research with various groups will be emphasized.

Pre-requisite(s): Formal admittance to the MSW program, MSW 6010 (or advanced-standing status), MSW 6300, MSW 6910, and MSW 6930.

MSW 6760 - Foundation Field I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The first 200 hours of the first-year supervised field practicum in an approved social service setting, with a focus on the application of social work knowledge, ethics, values, theory, skills, and practice evaluation and the development of competencies and behaviors necessary for effective clinical practice with individuals, families, and groups. The course includes regular meetings with an on-site field supervisor, the program's field director, and other field students in a professional seminar. The seminar links professional social work practice with academic content.

Pre-requisite(s): Formal admittance to the MSW program.

MSW 6761 - Foundation Field II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The second 200 hours of the first-year supervised field practicum in an approved social service setting, with a focus on the application of social work knowledge, ethics, values, theory, skills, and practice evaluation and the development of competencies and behaviors necessary for effective clinical practice with individuals, families, and groups. The course includes regular meetings with an on-site field supervisor, the program's field director, and other field students in a professional seminar. The seminar links professional social work practice with academic content.

Pre-requisite(s): Formal admittance to the MSW program.

MSW 6850 - Graduate Social Work Study Abroad

Credits: (1-4)

Description: The purpose of this course is to provide opportunities for graduate students in social work to experience study abroad or study away programs that are designed to explore issues relevant to graduate-level social work theory and practice with individuals, families, groups, communities, and organizations.

Pre-requisite(s): Admission into the Master of Social Work (MSW) program or other graduate program with permission of the instructor.

MSW 6860 - Advanced Field I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The first 250 hours of the second-year supervised field practicum in an approved social service setting, with a focus on the application of social work knowledge, ethics, values, theory, skills, and practice evaluation and the development of competencies and behaviors necessary for effective clinical practice with individuals, families, and groups. The course includes regular meetings with an on-site field supervisor, the program's field director, and other field students in a professional seminar. The seminar links professional social work practice with academic content.

Pre-requisite(s): Formal admittance to the MSW program, MSW 6760 (or advanced-standing status), and MSW 6761 (or advanced-standing status).

MSW 6861 - Advanced Field II

Credits: (3)**Typically Taught Spring Semester:** *Full Sem*

Description: The second 250 hours of the second-year supervised field practicum in an approved social service setting, with a focus on the application of social work knowledge, ethics, values, theory, skills, and practice evaluation and the development of competencies and behaviors necessary for effective clinical practice with individuals, families, and groups. The course includes regular meetings with an on-site field supervisor, the program's field director, and other field students in a professional seminar. The seminar links professional social work practice with academic content.

Pre-requisite(s): Formal admittance to the MSW program, MSW 6760 (or advanced-standing status), and MSW 6761 (or advanced-standing status).

MSW 6900 - Clinical Practice I: Traditional Theories and Model**Credits: (3)****Typically Taught Fall Semester:** *Full Sem*

Description: An overview of common traditional theories and models of social work practice at micro, mezzo, and macro levels. The course combines lecture and hands on application experiences.

Pre-requisite(s): Formal admittance to the MSW program.

MSW 6910 - Clinical Practice II: Vulnerable and At-Risk Populations**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: Clinical Practice II - A study of clinical social work practice theories and models with vulnerable and at-risk populations at micro, mezzo, and macro levels, with an emphasis on work with Latino clients, families, and communities. Content also covers harm reduction, advocacy, social action, and social justice practice. The course combines lecture and hands on application experiences.

Pre-requisite(s): Formal admittance to the MSW program and MSW 6900, OR formal admittance to the MSW program with advanced standing.

Co-Requisite(s): Must be taken concurrently with MSW 6300.

MSW 6920 - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Description: Consult the semester class schedule for the current offering under this number. The specific title with the credit authorized for the particular offering will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MSW 6930 - Clinical Practice III: Evidence-Based Practice**Credits: (3)****Typically Taught Fall Semester:** *Full Sem*

Description: An advanced course of study of evidence-based clinical social work practice theories and models for work with individuals (e.g., EMDR, DBT, CBT, Trauma-Focused CBT, Cue Exposure-Response Prevention, ACT, PCIT, Motivational Interviewing). The course combines lecture and hands on application experiences.

Pre-requisite(s): Formal admittance to the MSW program, MSW 6900 (or advanced-standing status), and MSW 6910.

MSW 6940 - Clinical Practice IV: Group Work**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: An advanced course of study of evidence-based clinical social work practice theories and models for work with groups and families. The course combines lecture and hands on application experiences.

Pre-requisite(s): Formal admittance to the MSW program, MSW 6900 (or advanced-standing status), MSW 6910, and MSW 6930.

MTAX 6210 - Business Law and Legal Liability

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Description: A study of important business law topics accounting and taxation professionals should be familiar with including contracts, business organizations, securities, discrimination, banking, and property will be discussed. Legal liability of accounting and taxation professionals will also be addressed.

MTAX 6400 - Tax Research & Procedure

Credits: (3)

Typically Taught Summer Semester: *1st Blk or 2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Description: Techniques in effective tax research, planning and communication. Also includes a discussion of tax policy.

MTAX 6405 - Accounting for Income Taxes

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Cash and accrual methods of accounting, inventories, accounting for book/tax disparities, income statement tax provision, original issue discount, depreciation methods, amortization, long-term contracts, changes in methods of accounting, accounting periods, capitalization vs. expense, and other topics critical to bridging financial accounting and tax accounting.

MTAX 6410 - International Taxation

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Principles of U.S. taxation applicable to inbound and outbound international transactions. Also covers issues related to international tax treaties.

MTAX 6430 - Advanced Individual Taxation

Credits: (3)

Typically Taught Summer Semester: *1st Blk or 2nd Blk*

Typically Taught Spring Semester: *Full Sem*

Description: In-depth coverage of advanced individual tax issues such as alternative minimum tax, loss limitations, real estate transactions, stock options, employment taxes, tax credits, charitable contributions, interest classification, related-party transactions, and timing of income/loss recognition.

MTAX 6437 - State & Local Tax/Exempt Orgs

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: State income taxation, nexus multijurisdictional operations, constitutional limitations, sales tax, excise

tax, property tax; types of exempt organizations, application for exempt status, public charities, private foundations, unrelated business income tax, and compliance issues.

MTAX 6455 - Gifts, Estates, Trusts & Real Estate Taxation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Principles of gift and estate taxation. Includes a discussion of wills and the income taxation of estates and trusts. Also covers taxation of real estate transactions including like-kind exchanges, involuntary conversions, leases, personal residences, real estate development, and cost segregation.

MTAX 6460 - Advanced Corporate Taxation

Credits: (3)

Typically Taught Summer Semester: *1st Blk or 2nd Blk*

Typically Taught Spring Semester: *Full Sem*

Description: Income taxation of corporations and shareholders. Includes in-depth analysis of tax issues related to corporate formations, operations, distributions and liquidations. Also covers the taxation of S corporations.

MTAX 6470 - Advanced Partnership Taxation

Credits: (3)

Typically Taught Summer Semester: *1st Blk or 2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Description: Income taxation of partnerships and partners. Includes in-depth analysis of tax issues related to partnership formations, operations, distributions and liquidations. Also covers issues related to limited liability companies.

MTAX 6487 - Retirement Plans

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Discussion of qualified retirement plans including defined contribution and defined benefit plans. Also includes discussion of IRA's, Roth IRA's, and other retirement-related, tax favored investments provided for in the Internal Revenue Code.

MTAX 6490 - Mergers, Acquisitions and Consolidations

Credits: (3)

Typically Taught Summer Semester: *1st Blk or 2nd Blk*

Description: In-depth coverage of advanced corporate tax topics such as tax-free corporate reorganizations, taxable stock acquisitions, taxable asset acquisitions, affiliated groups, consolidated returns, and corporate tax shelters.

Pre-requisite(s): (Recommended) MTAX 6460.

MTAX 6495 - Graduate Tax Internship

Credits: (1-3)

Typically Taught: **Various**

Description: A significant professional-level field experience in the area of accounting or taxation. The student will be counseled and supervised as he/she applies and integrates the knowledge and skills obtained through MAcc/MTax courses. Credit/No Credit.

Pre-requisite(s): Admission to the MAcc or MTax program; approval by department chair and program director. Can be repeated once up to three credit hours.

MTAX 6695 - VITA Quality Review Team

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: VITA provides a valuable service to Weber State students and the surrounding community. As part of the quality review team for Weber State's VITA program, you will assist undergraduate students as they prepare individual income tax returns and review these returns to ensure they are complete and accurate. As a VITA volunteer, you will research clients' issues, resolve questions, and navigate difficult tax scenarios. You will apply what you have learned in the classroom and gain first-hand experience working with actual clients' real tax situations. VITA provides a unique service learning opportunity that will benefit both you and your community.

MTAX 6700 - CPA Examination Review: FAR

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is a directed self-study course designed to help students prepare for the Financial Accounting and Reporting (FAR) section of the CPA examination. This is a review course and assumes that the student has already taken a number of financial accounting courses. A faculty member will monitor the student's progress and a grade will be determined by the student's performance on weekly quizzes and a final examination.

Pre-requisite(s): The student must be admitted to the Master of Accounting (MAcc) or Master of Taxation (MTax) program.

MTAX 6750 - Study Abroad

Credits: (3)

Variable Title

Description: This course integrates international travel and site visits with the study of accounting and international business practices. Through readings, assignments, discussions, and visits to important business and cultural sites, the course builds understanding and competence as it relates to the history of accounting, the global accounting profession, and the business and cultural environment in the host countries.

Pre-requisite(s): The student must be admitted to the Master of Accounting (MAcc) or Master of Taxation (MTax) program.

MTAX 6801 - Individual Study

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual work, or work in small groups, by arrangement, on special topics, not included in the announced course offerings.

Pre-requisite(s): Approval of the Master of Taxation Program Director and instructor.

MTAX 6802 - Individual Study

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual work, or work in small groups, by arrangement, on special topics, not included in the announced course offerings.

Pre-requisite(s): Approval of the Master of Taxation Program Director and instructor.

MTAX 6803 - Individual Study

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual work, or work in small groups, by arrangement, on special topics, not included in the announced course offerings.

Pre-requisite(s): Approval of the Master of Taxation Program Director and instructor.

MTAX 6810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MTHE 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MTHE 3015 - Middle School Algebra from a Teaching Perspective

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Students will explore algebraic topics pertinent to teaching middle school algebra standards from Grade 6 to Grade 9.

Pre-requisite(s): MATH 2015.

MTHE 3020 - Methods and Technology for Teaching Advanced Secondary Mathematics

Credits: (3)

Description: Aspects of teaching advanced mathematics in a high school setting, including methods of presentation, exploration, assessment and classroom management. An emphasis is placed on the use of computers, graphing calculators, and other technology.

Pre-requisite(s): MTHE 4000.

Note: This course is offered as needed.

MTHE 3060 - Probability and Statistics from a Teaching Perspective

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Students will explore topics in probability and statistics, beginning with concepts in middle and high school standards and extending to the college level. These ideas will be interwoven with strategies for teaching probability and statistics at the appropriate levels.

Pre-requisite(s): MATH 1210 or MATH 2010.

MTHE 3070 - Middle School Geometry from a Teaching Perspective

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Basic Geometry with an emphasis on the topics and methods pertinent to prospective elementary school teachers.

Pre-requisite(s): MATH 2020.

MTHE 3080 - Number Theory for Elementary Teachers

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Survey of elementary number theory concepts with applications to topics of interest plus teaching suggestions.

Pre-requisite(s): MATH 2015.

MTHE 3115 - Algebra from a Secondary Teaching Perspective

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Students will explore topics in algebra, beginning with concepts in middle and high school standards and extending to college level algebra. These ideas will be interwoven with strategies for teaching algebraic ideas at the middle and high school level.

Pre-requisite(s): MATH 1210.

MTHE 3117 - Geometry from a Secondary Teaching Perspective

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Students will explore topics in Euclidean geometry, beginning with concepts in secondary geometry standards and extending beyond these topics. These ideas will be interwoven with strategies for teaching geometry at the secondary level.

Pre-requisite(s): MATH 3110.

MTHE 4000 - Methods and Technology for Teaching Secondary Mathematics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Basic topics in secondary mathematics are taught to prospective teachers using a variety of methods of presentation and up-to-date technology, including the use of graphing calculators and computers.

Pre-requisite(s): MTHE 3015, MTHE 3060, MTHE 3070, MTHE 3080, MTHE 3115, MTHE 3117.

MTHE 4010 - Capstone Mathematics for High School Teachers II

Credits: (3)

Description: Prospective high school teachers revisit mathematics topics from the secondary school curriculum and

examine them from an advanced perspective. The major emphasis is on topics from geometry.

Pre-requisite(s): MTHE 3115.

Note: This course is offered as needed.

MTHE 4040 - Mathematical Problem Solving for Grade K-8 Teachers

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Mathematical problem solving, discussion of process, writing solutions, and writing extensions.

Pre-requisite/Co-requisite: MATH 2015.

MTHE 4100 - Intuitive Calculus for Elementary Teachers

Credits: (3)

Description: An active, hands-on, discovery approach to understanding the three main components of calculus (limits, integration, differentiation), and how they relate to the improved teaching of elementary school mathematics. This course is no longer offered.

Pre-requisite(s): MATH 2010 and MATH 2020.

MTHE 4700 - Senior Project in Elementary Mathematics Teaching

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Projects in preparing, teaching and revising sequential mathematics lessons for elementary students.

Pre-requisite(s): MATH 2010 and MATH 2020.

MTHE 5010G - Methods and Technology for Teaching Secondary Mathematics

Credits: (3)

Description: Topics in secondary mathematics are taught to in-service teachers using a variety of methods and technology to make them better prepared for teaching secondary mathematics. Expository presentations about a current mathematics education research area are expected.

Note: This course is offered as needed.

MTHE 5210G - Calculus with Analytic Geometry

Credits: (4)

Description: Analytic geometry, differentiation, integration, and applications.

Pre-requisite(s): MATH 1050 and MATH 1060 or MATH 1080 or placement test.

Note: This course is offered as needed.

MTHE 5220G - Calculus with Analytic Geometry

Credits: (4)

Description: Transcendental functions, techniques of integration, conic sections, polar coordinates, infinite series, introduction to partial derivatives.

Pre-requisite(s): MTHE 5210G.

Note: This course is offered as needed.

MTHE 5230G - Mathematics Computer Laboratory

Credits: (1)

Description: Computer solution of mathematics problems.

Pre-requisite(s): Approval of instructor.

Suggested Requisite(s): May be taken concurrently with any lower division mathematics course.

MTHE 5310G - Multivariable and Vector Calculus**Credits: (4)**

Description: Vectors, vector valued functions, motion in space, multivariable functions, partial derivatives, multiple integrals, integration in vector fields.

Pre-requisite(s): MTHE 5220G.

Note: This course is offered as needed.

MTHE 5350G - Linear Algebra and Differential Equations**Credits: (4)**

Description: Introduction to Linear Algebra and Differential Equations. Systems of linear equations, matrices, vector spaces, eigenvalues. First and second order differential equations and models, higher order linear equations, linear systems.

Pre-requisite(s): MTHE 5220G.

Note: This course is offered as needed.

MTHE 5920 - Workshop**Credits: (1-6)**

Description: This course provides professional development workshops for inservice K-12 teachers around the teaching and learning of mathematics. This is a flexible credit hour course ranging from 1-6 credit hours. May be repeated up to 24 credit hours.

MTHE 5920G - Short Courses, Workshops, Institutes and Special Programs**Credits: (1-6)****Variable Title**

Description: This course provides professional development workshops for inservice K-12 teachers around the teaching and learning of mathematics. This is a flexible credit hour course ranging from 1-6 credit hours.

May be repeated up to 24 credit hours.

Note: This course is offered as needed.

MTHE 6120 - Euclidean and Non-Euclidean Geometry**Credits: (3)**

Description: Axiomatic development of geometry; Euclidean and non-Euclidean.

Pre-requisite(s): MTHE 5220G.

Note: This course is offered as needed.

MTHE 6160 - Number Theory**Credits: (3)**

Description: An overview of beginning number theory including the integers, modulo arithmetic, congruencies, Fermat's theorem and Euler's theorem.

Pre-requisite(s): MTHE 5210G.

Note: This course is offered as needed.

MTHE 6350 - Linear Algebra

Credits: (3)

Description: Theory and applications of linear algebra including abstract vector spaces and canonical forms of matrices.

Pre-requisite(s): MTHE 5350G.

Note: This course is offered as needed.

MTHE 6410 - Probability and Statistics

Credits: (3)

Description: The mathematical content of probability and statistics at the undergraduate post calculus level. An understanding of the application of probability and statistics is also stressed.

Co-Requisite(s): MTHE 5310G or prerequisite of MTHE 5220G and consent of instructor.

Note: This course is offered as needed.

MTHE 6420 - Probability and Statistics

Credits: (3)

Description: The mathematical content of probability and statistics at the undergraduate post calculus level. An understanding of the application of probability and statistics is also stressed.

Pre-requisite(s): MTHE 6410.

Note: This course is offered as needed.

MTHE 6550 - Introduction to Mathematical Modeling

Credits: (3)

Description: Formulation, solution and interpretation of mathematical models for problems occurring in areas of physical, biological and social science.

Note: This course is offered as needed.

MTHE 6610 - Graph Theory

Credits: (3)

Description: Principles of Graph Theory including methods and models, special types of graphs, paths and circuits, coloring, networks, and other applications.

Note: This course is offered as needed.

MTHE 6620 - Enumeration

Credits: (3)

Description: Principles of Enumeration including counting principles, generating functions, recurrence relations, inclusion-exclusion, and applications.

Note: This course is offered as needed.

MTHE 6630 - Boundary Value Problems

Credits: (3)

Description: Series solutions, Fourier series, separation of variables, orthogonal functions.

Note: This course is offered as needed.

MTHE 6640 - Differential Equations II

Credits: (3)

Description: Matrix approach to linear systems, nonlinear systems, Laplace transforms.

Note: This course is offered as needed.

MTHE 6650 - Complex Variables**Credits: (3)**

Description: Analysis and applications of a function of a single complex variable. Analytic function theory, path integration, Taylor and Laurent series and elementary conformal mapping are studied.

Pre-requisite(s): MTHE 5310G and MTHE 5350G.

Note: This course is offered as needed.

MTHE 6660 - Modern Algebra I**Credits: (3)**

Description: Logic, sets, and the study of algebraic systems including groups, rings, and fields.

Pre-requisite(s): MTHE 5350G.

Note: This course is offered as needed.

MTHE 6670 - Modern Algebra II**Credits: (3)**

Description: Continuation of MATH 4110: advanced topics from groups, rings, and fields including the Sylow theorems and Galois theory.

Pre-requisite(s): MTHE 6660.

Note: This course is offered as needed.

MTHE 6680 - Introductory Real Analysis**Credits: (3)**

Description: Develop the analysis underlying calculus. In-depth study of limits, continuity, integration, differentiation, sequences and series. Other topics may include Lebesgue measure and integration and Fourier Analysis.

Pre-requisite(s): MTHE 5310G and MTHE 5350G

Note: This course is offered as needed.

MTHE 6690 - Introductory Real Analysis**Credits: (3)**

Description: Develop the analysis underlying calculus. In-depth study of limits, continuity, integration, differentiation, sequences and series. Other topics may include Lebesgue measure and integration and Fourier Analysis.

Pre-requisite(s): MTHE 6680

Note: This course is offered as needed.

MTHE 6700 - Topology**Credits: (3)**

Description: Introduction to point-set topology, including metric and topological spaces, continuity, homeomorphisms, compact and connected spaces, and complete metric spaces. Other topics may include the Baire Category Theorem and Tietze Extension Theorem.

Pre-requisite(s): MTHE 5310G and MTHE 5350G.

Note: This course is offered as needed.

MTHE 6710 - Numerical Analysis

Credits: (3)

Description: Introduction to numerical methods. Use of the digital computer in solving otherwise intractable problems.

Pre-requisite(s): MTHE 5350G and CS 1410 or other approved programming language

Note: This course is offered as needed.

MTHE 6720 - Numerical Analysis

Credits: (3)

Description: Introduction to numerical methods. Use of the digital computer in solving otherwise intractable problems.

Pre-requisite(s): MTHE 6710

Note: This course is offered as needed.

MTHE 6730 - Partial Differential Equations

Credits: (3)

Description: First order equations, characteristics and classifications, Green's identities, models, transforms.

Pre-requisite(s): MTHE 6630.

Note: This course is offered as needed.

MTHE 6740 - Mathematics for Teaching - Numbers and Operations

Credits: (3)

Description: Provides teachers a deeper understanding of our number system and relate its structure to computation, arithmetic, algebra and problem solving. Course topics will include number, number sense, computation, and estimation and instructional strategies to facilitate the instruction of this content for elementary teachers.

Pre-requisite(s): A Bachelor's degree and at least one year of experience teaching elementary or junior high school mathematics.

Note: This course is offered as needed.

MTHE 6750 - Mathematics for Teaching - Rational Numbers and Proportional Reasoning

Credits: (3)

Description: Provides practicing teachers a deeper understanding of rational numbers, operations with rational numbers, and proportionality, and instructional strategies to facilitate the instruction of this content for elementary students.

Pre-requisite(s): A Bachelor's Degree and at least one year of teaching experience in an elementary or junior high school.

Note: This course is offered as needed.

MTHE 6760 - Mathematics for Teaching - Algebraic Reasoning

Credits: (3)

Description: Provides practicing teachers a deeper understanding of algebraic expressions, equations, functions, real numbers, and instructional strategies to facilitate the instruction of this content for elementary students.

Pre-requisite(s): A Bachelor's Degree and at least one year of teaching experience in an elementary or junior high school.

Note: This course is offered as needed.

MTHE 6770 - Mathematics for Teaching - Geometry and Measurement

Credits: (3)

Description: Provides practicing teachers a deeper understanding of the geometry and measurement content that exists in the state core and instructional strategies to facilitate the instruction of this content.

Pre-requisite(s): A Bachelor's Degree and at least one year of teaching experience in an elementary or junior high school.

Note: This course is offered as needed.

MTHE 6780 - Mathematics for Teaching - Problem Solving and Data Analysis

Credits: (3)

Description: This course will develop a firm problem-solving foundation. Using skills and strategies applied in mathematical contexts practicing teachers will learn to think, work with others, present solutions, and facilitate problem solving instruction in the classroom. This course will also provide practicing teachers a deeper understanding of probability and statistics content in the state core and instructional strategies to facilitate the instruction of this content.

Pre-requisite(s): A Bachelor's degree and at least one year of teaching experience in an elementary or junior high school.

Note: This course is offered as needed.

MUSC 1006 - Concert Attendance I

Credits: (0)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: To be a successful musician, it is essential to develop excellent listening skills. Professional musicians are familiar with a wide variety of genres and styles. This course provides music students with opportunities to become familiar with the diversity of music that exists in our world. With this in mind, music majors and minors are expected to attend concerts and recitals on a regular basis. During the first two years of study, concert attendance is required and tracked by the department office staff. Students must concurrently enroll in applied music lessons.

Credit/No Credit grading.

May be repeated once.

MUSC 1010 CA - Introduction to Music

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$6.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: An introduction to music, its elements, language, and historical development. The course focuses on European and American music with components of jazz, world, and popular genres. Concert attendance outside of regularly scheduled class time is required. Not available to music majors.

MUSC 1015 - Movie Music

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Music is the heart and soul of film! Film scores can animate, enhance, enliven, magnify, and transcend movies. Movie music is a young genre compared to its predecessors like opera, ballet, and theatre music. Film music is less than 100 years old. In spite of its short history, movie music continues to have a global impact.

In this course, students will develop a greater appreciation and enjoyment of movies by understanding the artistic merit and compositional skill associated with movie music. Students will engage in the study of the aesthetic and technical practices of movie music and the enriching and expressive power music brings to film.

MUSC 1020 - What Makes Us Human?: Creativity and the Humanities

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will provide a broad Introduction to the Arts and Humanities as seen through the lenses of Plato's "Big Three": The Good, The True and The Beautiful. The perspective of the Good will be taken to look at the Arts and Humanities in society (their Role), that of the True to explore their scientific side (their Nature), and that of the Beautiful to investigate our interior, personal experience (their Meaning).

MUSC 1025 CA - History of Country Music

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$6.00

Course Fee Purpose: Course fees are used to support the technological infrastructure to support audio and visual presentations.

Description: This course is a survey of Country Music styles from ca. 1920 to the present. We also discuss related styles such as Hillbilly, Rock, jazz, folk, Bluegrass and popular song, reaching back into the nineteenth century. We will not only study the changing history of country music (which requires discussion of non-country music as well), but also the cultural forces that gave rise to those changes. Because of this historical perspective, our approach will be largely chronological, with an eye toward how various styles influenced one another.

MUSC 1030 CA - Introduction to Jazz

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: A survey of jazz in America, including blues, ragtime, traditional jazz, swing, bebop, cool, and fusion. Concert attendance outside of regularly scheduled class time is required.

MUSC 1033 CA - Introduction to American Music

Credits: (3)

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Survey of music in America, including classical, jazz, rock, folk, and ethnic, within the context of American history.

MUSC 1035 CA - History of Rock and Roll

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$6.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: This course is a survey of Rock Music styles from ca. 1950 to the present. We also discuss pre- and proto- rock styles such as Jazz, Blues, and popular song, reaching back into the late nineteenth century. In the course we will not only study the changing history of rock music (which requires discussion of non-rock music as well), but also the cultural forces that gave rise to those changes. Because of this historical perspective, our approach will be largely chronological, with an eye toward how various styles influenced one another.

MUSC 1036 CA - Experiencing Latin American Music

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: In this course students will develop critical insights about Latin American music and how it has been and continues to be shaped by a unique blend of cultural, geopolitical, and economic forces and realities. This course will also include a survey of local practices and trends in Latin American music with particular focus on Mexican influences.

MUSC 1040 CA - Music of World Cultures

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$6.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: An introduction to the music of cultures around the world, including India, Middle East, China, Japan, Indonesia, Sub-Saharan Africa, Europe, Latin America, Caribbean, Native American music, and Ethnic North America. The course discusses the influence of music on, and its relationship to, the various cultures and populations.

MUSC 1043 HU - Music, the Arts & Civilizations

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is a chronological introduction to mostly western music that also explores its relationship to the other arts.

MUSC 1063 CA - Music in Religion

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: An introduction to music in world religions such as Judaism, Christianity, Islam, Hinduism, Sikhism, and Buddhism.

MUSC 1100 - Fundamentals of Music

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Basic melody, harmony, rhythm, notation, ear training, and sight-singing skills.

MUSC 1110 - Music Theory I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Elementary harmony, primary and secondary triads with inversions, non-harmonic tones, and modulation.

Pre-requisite(s): Students with an AP Music Theory score of 5 are exempt from MUSC 1110 and may enroll in MUSC 1120. AP scores are only recognized for one year after taking the exam.

Co-Requisite(s): Must be taken concurrently with MUSC 1130.

Note: Music Majors and Minors only.

MUSC 1120 - Music Theory II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Continuing study of elementary harmony, primary and secondary triads with inversions, non-harmonic tones, and modulation.

Pre-requisite(s): Completion of both MUSC 1110 and MUSC 1130 with a grade of C or better. Students with an AP Music Theory score of 5 may enroll directly in MUSC 1120.

Co-Requisite(s): Must be taken concurrently with MUSC 1140.

Note: Music Majors and Minors only.

MUSC 1130 - Sight-Singing & Aural Skills I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Development of aural skills needed to function as a musician and teacher. Emphasis on progressively advancing aural perception.

Pre-requisite(s): Complete Theory Placement exam with a score of 70% or higher or MUSC 1100 with a grade of "C" or higher. A student scoring a 3 on the AP Music Theory Exam may enroll in Sight-Singing and Aural Skills without taking the placement exam. A student scoring a 4 on the AP Music Theory Exam may enroll in Sight-Singing and Aural Skills II (MUSC 1140) without taking the placement exam. A student scoring a 5 on the AP Music Theory Exam may enroll in Sight-Singing and Aural Skills III (MUSC 2130). The student, however, must enroll in these courses within a year of completing the AP Music Theory Exam. After one year, the student will be required to take the Music Theory Placement Exam and their former AP score is no longer recognized.

Co-Requisite(s): Must be taken concurrently with MUSC 1110.

Note: Music Majors and Minors only.

MUSC 1140 - Sight-Singing & Aural Skills II

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Development of aural skills needed to function as a musician and teacher. Emphasis on progressively advancing aural perception. Continuation of MUSC 1130.

Pre-requisite(s): MUSC 1130 and MUSC 1110. A student scoring a 4 on the AP Music Theory Exam may enroll in Sight-Singing and Aural Skills II (MUSC 1140) without taking the placement exam. A student scoring a 5 on the AP Music Theory Exam may enroll in Sight-Singing and Aural Skills III (MUSC 2130). The student, however, must enroll in these courses within a year of completing the AP Music Theory Exam. After one year, the student will be required to take the Music Theory Placement Exam and their former AP score is no longer recognized.

Co-Requisite(s): Must be taken concurrently with MUSC 1120.

Note: Music Majors and Minors only.

MUSC 1143 - Music Theory and Piano for Musical Theatre

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: Development of aural, piano and sight-singing skills as they pertain to the Musical Theatre performer and practitioner. Emphasis on harmony, melody, rhythm, notation and applicable keyboard skills.

MUSC 1150 - Class Piano I

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Beginning piano instruction with emphasis on reading, technical facility and sound musicianship.

Pre-requisite/Co-requisite: MUSC 1110.

MUSC 1160 - Class Piano II

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Continuation of MUSC 1150 with emphasis on further development of music reading, technical facility, and expanded concepts of musicianship in the students' piano skills.

Pre-requisite(s): MUSC 1150

Pre-requisite/Co-requisite: MUSC 1120

Note: Music Majors and Minors only

MUSC 1321 - Basic Piano for Adults

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Beginning instruction in keyboard for non-music majors and minors. Students must have access to a piano for practice.

MUSC 1500 - Beginning & Intermediate Classical Guitar

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Beginner and intermediate class instruction in classical guitar, including technique, repertoire, and history of the instrument.

May be repeated up to 10 times for credit.

MUSC 1501 - Modern Guitar Styles

Credits: (1)

Description: This entry-level course offers instruction in pick-style guitar. Styles covered include folk, rock, jazz, and popular. Special emphasis on note reading and basic musicianship.

MUSC 1502 - Violin Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1503 - Viola Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1504 - Cello Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

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May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1505 - String Bass Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1506 - Guitar Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1507 - Harp Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1510 - Trumpet Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1511 - French Horn Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1512 - Trombone Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1513 - Euphonium/Tuba Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1520 - Percussion Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1530 - Voice Master Class

Credits: (1)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1540 - Flute Master Class**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1541 - Oboe Master Class**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1542 - Clarinet Master Class**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1543 - Saxophone Master Class

Credits: (1)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1544 - Bassoon Master Class**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1601 - Private Instruction**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$320.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Individual lessons, vocal or instrumental. For those students not pursuing a major or minor in music. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 19 times with a maximum of 20 credit hours.

MUSC 1610 - Applied Keyboard: Piano**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Music Majors or Minors with a Keyboard Emphasis only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 1611 - Applied Keyboard: Organ**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.
May be repeated 3 times with a maximum of 4 credit hours.

MUSC 1673 - Private Instruction

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$890.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Music majors and minors only. For vocal or instrumental students. Two hours of instruction/week. Minimum of 18 hours/week practice required. One-half hour special assignment. By consent of instructor only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be taken for credit up to three times in any area of specialization.

MUSC 1681 - Private Instruction

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$445.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Individual private instruction for music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.
May be repeated 4 times with a maximum of 4 credit hours.

MUSC 1682 - Private Instruction

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual private instruction for music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.
May be repeated 4 times with a maximum of 8 credit hours.

MUSC 1720 - Analog Audio

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$39.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as used in class for hands on activities and lab / studio maintenance.

Description: Emphasis on the electrical (non-digital) transmission of sound. Covers cable types, uses, and construction as well as microphones, speakers, and signal processors. Students will achieve familiarity with the fundamentals and best practices regarding audio components, studio communication, and studio infrastructure.

Critical listening skills will be developed throughout the course.

Pre-requisite(s): Acceptance in the Sound Production/Recording program.

MUSC 1721 - Live Sound in the 21st Century

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$29.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as used in class for hands on activities and lab / studio / performance space maintenance.

Description: Focusing on advances in live sound technologies students will learn to assemble and optimize modern sound systems using DANTE and AVB network protocols and digital consoles. Best practices and common system setup will also be covered.

Pre-requisite(s): Acceptance in the Sound Production/Recording program, MUSC 1720.

MUSC 1722 - History of Recording

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Multimedia based course examining the complete history of recorded sound. Covering everything from Edison's cylinder to the advent of the MP3 and modern digital recording. Focusing on the inventors and milestones of the last 150 years.

Pre-requisite(s): Acceptance in the Sound Production/Recording program.

MUSC 1723 - Field Recording/Sound for Picture

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$27.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as used in class for hands on activities and lab / studio maintenance.

Description: This course will combine the art of capturing live sound in the field, Foley, and ADR in a post-production workflow combining dialog and music to video.

Pre-requisite(s): Acceptance in the Sound Production/Recording program.

MUSC 1724 - Studio Construction

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$27.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as used in class for hands on activities and lab / studio maintenance.

Description: During construction of the recording spaces students will observe and understand the recording studio construction process. This experience may be repeated until studio completion. Credit/No Credit grading.

Pre-requisite(s): Acceptance in the Sound Production/Recording program.

May be taken 3 times up to 3 credits.

MUSC 1725 - Alternative Digital Audio Workstations

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$54.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as

used in class for hands on activities and lab maintenance.

Description: An introduction to non-Pro Tools recording and music production applications. Covering setup, optimization, and basic operation. This may include but is not limited to Reason, Ableton LIVE, Digital Performer, Logic, and Garageband.

Pre-requisite(s): Acceptance in the Sound Production/Recording program.

MUSC 1726 - Creative Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$27.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as used in class for hands on activities and lab maintenance.

Description: A live performance / recording project ensemble. Turntables, folk instruments, world instruments, electronic musicians, rock / pop musicians etc. Audition not required.

Pre-requisite(s): Acceptance in the Sound Production/Recording program.

May be taken 3 times up to 3 credits.

MUSC 1727 - Critical Listening for Audio Production

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Critical Listening Explores techniques to develop skills to correctly evaluate sound in both the recording studio and live sound applications, with focus on manipulation and identification of sound quality and textures.

MUSC 1730 - Keyboard Ensemble

Credits: (1)

Description: Training in piano ensemble situations to develop fluency in reading. Keyboard majors and minors only. Fulfills the major ensemble requirement for music majors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1740 - Weber State Concert Choir

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Fulfills the major ensemble requirement for music majors and minors. No audition required.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1741 - Chamber Choir

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A highly select group of approximately 24 singers performing the entire range of small choir literature. Fulfills the chamber ensemble requirement for music majors. By audition only.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1743 - Vocal Chamber Ensemble

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Training in small vocal groups such as trios, quartets, and sextets. Fulfills the chamber ensemble requirement for music majors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1744 - Musical Theatre

Credits: (1-2)

Description: Rehearsal and performance of musical theatre productions. By audition only.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1750 - Symphonic Band

Credits: (1-2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Emphasis is on the study and preparation of modern symphonic band literature. Fulfills the major ensemble requirement for music majors and minors.

May be repeated 7 times with a maximum of 14 credit hours.

MUSC 1751 - Wind Ensemble

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Emphasis is on study and performance of literature for selected wind and percussion ensembles of varying size. Participants may be required to participate in symphonic band. Fulfills the major ensemble requirement for music majors and minors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1752 - Marching Band

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: By audition and/or consent of the director to students on flags, rifles, and band instruments. Fulfills the major ensemble requirement for music majors and minors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1753 - Jazz Ensemble

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1754 - Percussion Ensemble

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1755 - Instrumental Chamber Ensemble

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Training in instrumental chamber ensembles such as trios, quartets, quintets, and sextets. Fulfills the chamber ensemble requirement for music majors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1756 - Pep Band

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Plays at athletic functions using contemporary jazz, rock, and popular music. By audition. Does not fulfill any ensemble requirement for music majors or minors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1760 - Weber State Symphony Orchestra

Credits: (1-2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Full symphony orchestra instrumentation. Fulfills the major ensemble requirement for music majors and minors.

May be repeated 7 times with a maximum of 14 credit hours.

MUSC 1761 - Chamber Orchestra

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1762 - Theatre Orchestra

Credits: (1-2)

Description: Membership by audition or consent of instructor. Instrumentation determined by the music production being presented. Does not fulfill any ensemble requirement for music majors or minors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1763 - Guitar Ensemble

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Fulfills the major ensemble requirement for music

majors and minors.
May be repeated 7 times with a maximum of 8 credit hours.

MUSC 1810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

MUSC 1820 - The Art and Science of Recording I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$31.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as used in class for hands on activities and lab / studio maintenance.

Description: Utilizing the "flipped classroom" model, students will learn the fundamentals and best practices of capturing live audio in a multimedia-rich environment that is self-paced. In the classroom, students will receive face-to-face instruction from experienced producers, engineers, and visionaries delivering real world experience and valuable career guidance.

Pre-requisite(s): Acceptance in the Sound Production/Recording program. MUSC 2820 / MUSC 4820, MUSC 2823 / MUSC 4823, MUSC 1720.

MUSC 1821 - The Art and Science of Recording II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$31.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as used in class for hands on activities and lab / studio maintenance.

Description: Utilizing the "flipped classroom" model, students will learn the fundamentals and best practices of capturing live audio in a multimedia-rich environment that is self-paced. In the classroom, students will receive face-to-face instruction from experienced producers, engineers, and visionaries delivering real world experience and valuable career guidance.

Pre-requisite(s): 80% or better completion of MUSC 1820 - The Art and Science of Recording I. Acceptance in the Sound Production/Recording program.

MUSC 1901 - Music: The Successful Musician

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: The purpose of this course is to help students survive and thrive as music majors/minors by exploring success strategies applicable to all college students alongside those addressing the specific needs of music students.
Note: Music Majors and Minors only

MUSC 1911 - Introduction to Music Technology

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Introduction to uses of technology in music teaching and performance, including use of music composition and multimedia software.

Note: Music Majors and Minors only

MUSC 2006 - Concert Attendance II

Credits: (0)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: To be a successful musician, it is essential to develop excellent listening skills. Professional musicians are familiar with a wide variety of genres and styles. This course provides music students with opportunities to become familiar with the diversity of music that exists in our world. With this in mind, music majors and minors are expected to attend concerts and recitals on a regular basis. During the first two years of study, concert attendance is required and tracked by the department office staff. Students must concurrently enroll in applied music lessons.

Credit/No Credit grading.

May be repeated once.

MUSC 2110 - Music Theory III

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Continuation of Theory II. Includes altered, borrowed, and other unique chord sonorities; advanced modulation; 20th century compositional techniques; analysis; and projects that will explore application of theoretical concepts.

Pre-requisite(s): MUSC 1120 and MUSC 1140 or equivalents. A student scoring a 5 on the AP Music Theory Exam may enroll in Music Theory III for up to one year after completing the AP Music Theory Exam. After one year, their former AP score is no longer recognized.

Co-Requisite(s): Must be taken concurrently with MUSC 2130.

Note: Music Majors and Minors only.

MUSC 2120 - Music Theory IV

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Continuation of Theory III. Includes altered, borrowed, and other unique chord sonorities; advanced modulation; 20th century compositional techniques; analysis; and projects that will explore application of theoretical concepts.

Pre-requisite(s): MUSC 2110 with a grade of "C" or better.

Co-Requisite(s): Must be taken concurrently with MUSC 2140.

Note: Music Majors and Minors only.

MUSC 2130 - Sight Singing & Aural Skills III

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Continuation of Sight-Singing & Aural Skills II. Development of more advanced listening skills and of ability to recognize and correct performance errors.

Pre-requisite(s): MUSC 1120 and MUSC 1140. A student scoring a 5 on the AP Music Theory Exam may enroll in MUSC 2130 (Sight -singing & Aural Skills III) for up to one year after completing the AP Music Theory Exam. After one year, their former AP score is no longer recognized.

Co-Requisite(s): Must be taken concurrently with MUSC 2110.

Note: Music Majors and Minors only.

MUSC 2140 - Sight Singing & Aural Skills IV

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Continuation of Sight Singing & Aural Skills III. Development of more advanced listening skills and of ability to recognize and correct performance errors.

Pre-requisite(s): MUSC 2110 and MUSC 2130 or equivalents.

Co-Requisite(s): Must be taken concurrently with MUSC 2120.

Note: Music Majors and Minors only

MUSC 2150 - Class Piano III

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Continuation of MUSC 1160 with emphasis on advanced reading, further development of music reading, technical facility, and expanded concepts of musicianship in the students' piano skills.

Pre-requisite(s): MUSC 1160 or placement by audition.

Pre-requisite/Co-requisite: MUSC 2110.

Note: Music Majors and Minors only.

MUSC 2170 - Functional Piano Skills for Piano Majors/Minors

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$9.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Continuation of MUSC 1160 with emphasis on advanced reading, further development of technical facility and expanded concepts of musicianship.

Pre-requisite(s): MUSC 1160 or placement by audition, and MUSC 1120 and MUSC 1140.

Note: Music Majors and Minors only.

MUSC 2202 - Survey of Music History & Literature I

Credits: (2)

Description: A survey of the development of the historical and stylistic periods of European art music from ca 400-1750. Required for Music History credit for all Music Minors.

Pre-requisite(s): MUSC 1110 and MUSC 1130. Open to all university students who have completed MUSC 1010. Does not fulfill Creative Arts or Humanities credit.

Note: Music Majors and Minors only.

MUSC 2212 - Survey of Music History & Literature II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: A survey of the development of the historical and stylistic periods of European art music from ca 1750-20th century. Required for Music History credit for all Music Minors.

Pre-requisite(s): MUSC 1110 and MUSC 1130. Open to all university students who have completed MUSC 1010.

Does not fulfill Creative Arts or Humanities credit.

Note: Music Majors and Minors only.

MUSC 2321 - The Principles of Collaborative Piano I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: To learn the art of accompaniment, to become knowledgeable about repertoire and style, and to improve sight reading.

Pre-requisite(s): Music Major (Piano Performance or Pedagogy emphasis) - successful completion of MUSC 2160 (Functional Piano Skills). Music Major (all other emphases) - successful completion of MUSC 2150 (Group Piano III)

Note: Music Majors and Minors only.

MUSC 2331 - The Principles of Collaborative Piano II

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: To learn the art of accompaniment, to become knowledgeable about repertoire and style, and to improve sight reading.

Pre-requisite(s): Piano majors only.

Note: Music Majors and Minors only.

MUSC 2401 - Musical Improvisation

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Students will be presented with basic improvisation concepts in the course, including improvising rhythmically, diatonically, over functional harmony, using extra-musical inspiration, and creating free and collaborative improvisations. Through demonstration and practice, students will learn how all of these methods in totality or combination can work to create successful improvisations. Students will be judged based on their ability to demonstrate mastery over a particular concept through their own performance. Possible assignments include in-class performances and a final concert featuring student improvisations.

Pre-requisite(s): MUSC 1120.

MUSC 2540 - Instrumental Techniques for Choral Majors

Credits: (2)

Typically Taught Fall Semester: *Full Sem even years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: A course for Music Education majors with a Choral emphasis that encompasses a practical and analytical approach to the understanding of basic playing and teaching techniques of the band and orchestral

instruments.

Note: Music Majors and Minors only.

MUSC 2610 - Applied Keyboard: Piano

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Music Majors or Minors with a Keyboard Emphasis only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 2611 - Applied Keyboard: Organ

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 2673 - Private Instruction

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$890.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Music majors and minors only. For vocal or instrumental students. Two hours of instruction/week. Minimum of 18 hours/week practice required. One-half hour special assignment. By consent of instructor only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be taken for credit up to three times in any area of specialization.

MUSC 2681 - Private Instruction

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$445.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Individual private instruction for music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

Pre-requisite(s): Completion of two semesters of MUSC 1681 or MUSC 1682 with a grade of "C" or better.

May be repeated 4 times with a maximum of 4 credit hours.

MUSC 2682 - Private Instruction

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$445.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Individual private instruction for music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

Pre-requisite(s): Completion of two semesters of MUSC 1681 or MUSC 1682 with a grade of "C" or better. May be repeated 4 times with a maximum of 8 credit hours.

MUSC 2820 - Pro Tools 101

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$79.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as used in class for hands on activities and lab maintenance.

Description: This course covers basic Pro Tools principles. It provides everything you need to complete a Pro Tools project from initial set up to final mix-down. The course focuses on Pro Tools software and covers a multitude of new functions and feature enhancements. Whether your project involves recording live instruments, MIDI sequencing of software synthesizers, or audio editing or region looping, this course will give you the basic skills to succeed.

MUSC 2821 - Percussion Methods

Credits: (2)

Typically Taught Fall Semester: *Full Sem even years*

Course Fee: \$17.00

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase and maintenance of musical instruments used in the course.

Description: A practical and analytical approach to teaching and playing percussion instruments, including selection of appropriate repertoire and minor repair.

Note: Music Majors and Minors only

MUSC 2822 - Percussion Methods II

Credits: (1)

Typically Taught Spring Semester: *Full Sem odd years*

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase and maintenance of musical instruments used in the course.

Description: A continuation of MUSC 2821.

Pre-requisite(s): MUSC 2821.

Note: Music Majors and Minors only

MUSC 2823 - Pro Tools 110

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$79.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as used in class for hands on activities and lab / studio maintenance.

Description: This course provides a more detailed look at the Pro Tools system above and beyond the knowledge

you gained in the Pro Tools 101 course. It covers all the key concepts and skills needed to operate a Pro Tools system at the User level. The course along with Pro Tools 101: An Introduction to Pro Tools, provides the foundation to Pro Tools Certification and for the later 200-series of courses on Pro Tools music and post-production.

Pre-requisite(s): MUSC 2820/MUSC 4820.

MUSC 2841 - Brass Methods

Credits: (2)

Typically Taught Fall Semester: *Full Sem even years*

Course Fee: \$16.00

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase and maintenance of musical instruments used in the course.

Description: A practical and analytical approach to teaching and playing brass instruments, including selection of appropriate repertoire and minor repair.

Note: Music Majors and Minors only.

MUSC 2842 - Brass Methods II

Credits: (1)

Typically Taught Spring Semester: *Full Sem odd years*

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase and maintenance of musical instruments used in the course.

Description: A continuation of MUSC 2841.

Pre-requisite(s): MUSC 2841.

Note: Music Majors and Minors only.

MUSC 2851 - Woodwind Methods

Credits: (2)

Typically Taught Fall Semester: *Full Sem odd years*

Course Fee: \$17.00

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase and maintenance of musical instruments used in the course.

Description: A practical and analytical approach to teaching and playing woodwind instruments, including selection of appropriate repertoire and minor repair.

Note: Music Majors and Minors only.

MUSC 2852 - Woodwind Methods II

Credits: (1)

Typically Taught Spring Semester: *Full Sem even years*

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase and maintenance of musical instruments used in the course.

Description: A continuation of MUSC 2851.

Pre-requisite(s): MUSC 2851

Note: Music Majors and Minors only.

MUSC 2871 - String Methods

Credits: (2)

Typically Taught Fall Semester: *Full Sem odd years*

Course Fee: \$17.00

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase and

maintenance of musical instruments used in the course.

Description: A practical and analytical approach to teaching and playing string instruments, including selection of appropriate repertoire and minor repair.

Note: Music Majors and Minors only.

MUSC 2881 - Vocal Workshop

Credits: (2)

Course Fee: \$2.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Development of the singing voice with special attention to freedom of tones, purity of vowels, interpretation, diction, and flexibility.

Note: Music Majors and Minors only.

MUSC 2890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all students in the music area who meet the minimum cooperative work experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

May be repeated to a maximum of 6 credits.

Note: Music Majors and Minors only.

MUSC 2910 - Opera Production

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: By audition only. Preparation of operatic scenes and music. Music and staging rehearsal venue for the preparation of fully staged opera productions.

May be repeated up to 10 times.

MUSC 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Music Majors and Minors only.

MUSC 3102 - Counterpoint

Credits: (2)

Typically Taught Spring Semester: *Full Sem odd years*

Description: Eighteenth century polyphonic techniques including the five contrapuntal species, formal processes, analysis, and compositional application of concepts studied.

Pre-requisite(s): MUSC 2120 and MUSC 2140 or equivalents.

Note: Music Majors and Minors only.

MUSC 3112 - Orchestration

Credits: (2)

Typically Taught Spring Semester: *Full Sem even years*

Course Fee: \$20.00

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase and maintenance of musical instruments used in the course.

Description: An exploration of principles of arranging music for instrumental sections and instrumental combinations.

Pre-requisite(s): MUSC 2120 and MUSC 2140 or equivalents.

Note: Music Majors and Minors only.

MUSC 3122 - Choral Arranging

Credits: (2)

Typically Taught Spring Semester: *Full Sem odd years*

Course Fee: \$20.00

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase and maintenance of musical instruments used in the course.

Description: An exploration of principles of arranging music for various voice groups.

Pre-requisite(s): MUSC 2120 and MUSC 2140 or equivalent.

Note: Music Majors and Minors only.

MUSC 3202 - Winds/Percussion Literature

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: A study of a cross-section of music leading to knowledge of styles, composers, and performance practice related to the student's instrument and family of instruments.

MUSC 3205 - Music History I: Music before 1800

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: A survey of the developments in European art music, ca. 400-1800. The course emphasizes stylistic and critical analysis of representative compositions within historical and cultural contexts.

Pre-requisite(s): MUSC 1120 and MUSC 1140.

MUSC 3206 - Music History II: Music after 1800

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: A survey of the developments in European art music, ca. 1800 to the present. The course emphasizes stylistic and critical analysis of representative compositions within historical and cultural contexts.

Pre-requisite(s): MUSC 3205.

MUSC 3207 - Music History III: Music of the 20th century to the present

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: Standard DPA Technology fee.

Description: A survey of the developments in European art music from ca.1890 to the present. The course emphasizes stylistic and critical analysis of representative compositions within historical and cultural contexts.

Pre-requisite(s): MUSC 3206.

MUSC 3208 - World Music

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: An in-depth exploration of selected music outside the European/ American art and popular traditions. Attention will be given to musical elements and systems, as well as to the participation of music within culture and society.

Note: Course restricted to Music majors/minors only.

MUSC 3302 - Keyboard Literature I

Credits: (2)

Typically Taught Fall Semester: *Full Sem even years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: This course is designed to acquaint pianists with the principal keyboard composers of the Baroque and Classical periods. Piano majors and minors only.

MUSC 3312 - Keyboard Literature II

Credits: (2)

Typically Taught Spring Semester: *Full Sem odd years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: This course is designed to acquaint pianists with the principal keyboard composers of the Romantic and 20th century periods. Piano majors and minors only.

MUSC 3402 - Vocal Literature I

Credits: (2)

Typically Taught Fall Semester: *Full Sem odd years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: A study of a cross-section of vocal literature leading to knowledge of styles, composers, performance practice, and basic phonetics in commonly-used languages.

Pre-requisite(s): At least two semesters of piano and a minimum of two years of private voice instruction.

Note: Music Majors and Minors only.

MUSC 3412 - Vocal Literature II

Credits: (2)

Typically Taught Spring Semester: *Full Sem even years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: A continuation of MUSC 3402.

Pre-requisite(s): MUSC 3402.

Note: Music Majors and Minors only.

MUSC 3420 - Introduction to Immersive Audio

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A look at the history of surround sound formats and the current trend of object-based audio formats today like Dolby Atmos. Curriculum will include technical requirements for different formats, various mixing techniques and practical immersive audio mixing assignments.

MUSC 3421 - Sound Design for Film

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Sound Design for Film explores the use of Foley, dialog, and sound effects to create soundscapes for film. The course will look at both diegetic and non-diegetic sounds. The course explores using sound to reinforce the picture on screen as well as using sound as an artistic narrative device to help convey emotions.

Pre-requisite(s): MUSC 1723 and MUSC 3827.

MUSC 3502 - Violin Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3503 - Viola Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3504 - Cello Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals

ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3505 - String Bass Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3506 - Guitar Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3507 - Harp Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3510 - Trumpet Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a

masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3511 - French Horn Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3512 - Trombone Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3513 - Euphonium/Tuba Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3520 - Percussion Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire

class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3525 - ArtsBridge

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: ArtsBridge is a course that provides undergraduate students with an internship and academic credit for designing and implementing a comprehensive, needs-based, integrated arts project with community organizations or area schools. The course will offer students a clear structure and process for navigating the complexities of community engagement. ArtsBridge students will work closely with a WSU faculty mentor, community/school stakeholder, peers, and the ArtsBridge program coordinator throughout the process culminating in the development of an arts integrated project.

Pre-requisite(s): Recommendation by education supervisor in fine arts content area faculty mentor. Content methodology course(s) completed or in progress.

Note: Following faculty recommendation, please contact the ArtsBridge coordinator for an interview.

MUSC 3530 - Voice Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3540 - Flute Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3541 - Oboe Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals

ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3542 - Clarinet Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3543 - Saxophone Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3544 - Bassoon Master Class

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Masterclasses have been a staple learning methodology since 1869. Their invention is attributed to the virtuosic Hungarian pianist, Franz Liszt (1811-1886). Since then, Masterclasses have been held by professionals ranging from experienced instructors to legendary performers, for aspiring musicians all over the world. In a masterclass, individuals perform for the class and are offered instruction by the teaching artist. This allows the entire class to learn from the interaction between the instructor and the performing student. This class is no longer being offered.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3601 - Private Instruction

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$320.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and

overhead assessed by the university.

Description: Individual lessons, vocal or instrumental. For those students not pursuing a major or minor in music. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 19 times with a maximum of 20 credit hours.

MUSC 3610 - Applied Keyboard: Piano

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music Majors or Minors with a Keyboard Emphasis only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3611 - Applied Keyboard: Organ

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3620 - Applied Voice

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3630 - Applied Woodwinds: Flute

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3631 - Applied Woodwinds: Oboe

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3632 - Applied Woodwinds: Clarinet

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3633 - Applied Woodwinds: Saxophone

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3634 - Applied Woodwinds: Bassoon

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3640 - Applied Brass: Trumpet

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3641 - Applied Brass: French Horn

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3642 - Applied Brass: Trombone

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3643 - Applied Brass: Euphonium/Tuba

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3650 - Applied Strings: Violin

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3651 - Applied Strings: Viola

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors

to schedule lessons. See the Music website for a list of private instructors.
May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3652 - Applied Strings: Violoncello

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.
May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3653 - Applied Strings: String Bass

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.
May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3654 - Applied Strings: Guitar

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.
May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3655 - Applied Strings: Harp

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.
May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3660 - Applied Percussion

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 3673 - Private Instruction

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$890.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Music majors and minors only. For vocal or instrumental students. Two hours of instruction/week.

Minimum of 18 hours/week practice required. One-half hour special assignment. By consent of instructor only.

Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be taken for credit up to three times in any area of specialization.

MUSC 3681 - Private Instruction

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$445.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Individual private instruction for music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

Pre-requisite(s): Completion of two semesters of MUSC 2681 or MUSC 2682 with a grade of "C" or better.

May be repeated 4 times with a maximum of 4 credit hours.

MUSC 3682 - Private Instruction

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$445.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Individual private instruction for music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

Pre-requisite(s): Completion of two semesters of MUSC 2681 or MUSC 2682 with a grade of "C" or better.

May be repeated 4 times with a maximum of 8 credit hours.

MUSC 3701 - Music Entrepreneurship and You

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course will provide an introduction and overview of topics relevant to creating and managing a

career as a professional musician in the 21st Century. Specific topics covered include marketing, networking, finances, and other topics as they relate to music and musicians.

MUSC 3730 - Keyboard Ensemble

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Training in piano ensemble situations to develop fluency in reading. Keyboard majors and minors only. Fulfills the major ensemble requirement for music majors.

May be repeated 7 times with a maximum of 8 credit hours.

Note: Music Majors and Minors only.

MUSC 3740 - Weber State Concert Choir

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Fulfills the major ensemble requirement for music majors and minors. No audition required.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3741 - Chamber Choir

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A highly select group of approximately 24 singers performing the entire range of small choir literature. Fulfills the chamber ensemble requirement for music majors. By audition only.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3743 - Vocal Chamber Ensemble

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Training in small vocal groups such as trios, quartets, and sextets. Fulfills the chamber ensemble requirement for music majors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3744 - Musical Theatre

Credits: (1-2)

Description: Rehearsal and performance of musical theatre productions. By audition only.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3750 - Symphonic Band

Credits: (1-2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Emphasis is on the study and preparation of modern

symphonic band literature. Fulfills the major ensemble requirement for music majors and minors.
May be repeated up to 7 times.

MUSC 3751 - Wind Ensemble

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Emphasis is on study and performance of literature for selected wind and percussion ensembles of varying size. Participants may be required to participate in symphonic band. Fulfills the major ensemble requirement for music majors and minors.
May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3752 - Marching Band

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: By audition and/or consent of the director to students on flags, rifles, and band instruments. Fulfills the major ensemble requirement for music majors and minors.
May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3753 - Jazz Ensemble

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors.
May be repeated up to 10 times.

MUSC 3754 - Percussion Ensemble

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors.
May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3755 - Instrumental Chamber Ensemble

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Training in instrumental chamber ensembles such as trios, quartets, quintets, and sextets. Fulfills the chamber ensemble requirement for music majors.
May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3756 - Pep Band

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Plays at athletic functions using contemporary jazz, rock, and popular music. By audition. Does not

fulfill any ensemble requirement for music majors or minors.
May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3760 - Weber State Symphony Orchestra

Credits: (1-2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Full symphony orchestra instrumentation. Fulfills the major ensemble requirement for music majors and minors.

May be repeated up to 7 times.

MUSC 3761 - Chamber Orchestra

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3762 - Theatre Orchestra

Credits: (1-2)

Description: Membership by audition or consent of instructor. Instrumentation determined by the music production being presented. Does not fulfill any ensemble requirement for music majors or minors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3763 - Guitar Ensemble

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Membership by audition or consent of instructor. Fulfills the major ensemble requirement for music majors and minors.

May be repeated 7 times with a maximum of 8 credit hours.

MUSC 3770 - Special Topics in Sound Production/Recording

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This is a specialized course that offers in-depth studies in selected topics, current developments or recent trends in the fields of Sound Production and Recording.

MUSC 3780 - Coding Environments in Sound

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Students will be introduced to coding environments used in Sound Design, Music Production, VST Creation, and Sound Analysis.

MUSC 3801 - Jazz Improvisation I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Beginning study of jazz improvisation. Topics covered include basic jazz harmony, chord/scale relationships, and basic jazz repertoire.

MUSC 3802 - Jazz Improvisation II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Continuing study of jazz improvisation. Topics covering include common jazz patterns, complex harmony and harmonic resolution, transcription, and analysis.

MUSC 3803 - Jazz and Commercial Arranging

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Introduction to arranging jazz and commercial music. Topics include elements of arranging, instrumental considerations, voicing techniques, and compositional techniques.

Pre-requisite(s): Completion of MUSC 1110 - Music Theory I with a grade of "C" or better.

MUSC 3804 - Jazz Pedagogy

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: This class will prepare students for teaching jazz to students in secondary education. Topics include specific instrumental considerations, improvisation, and jazz ensemble rehearsal technique.

MUSC 3805 - Jazz Keyboard Skills

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Basic jazz keyboard and jazz theory. Topics include beginning to intermediate jazz harmony, tertiary and quartal voicings, harmonic substitutions and reharmonization, and well as jazz piano performance practice.

Pre-requisite(s): Completion of MUSC 1160 - Class Piano II with a grade of "C" or better.

MUSC 3806 - Jazz History

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: In depth study of the history of jazz for music majors. Students will learn about important individuals, historical events, and stylistic trends that have shaped jazz from its inception to the modern day and relate those topics to their instrument of study.

MUSC 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

MUSC 3822 - Instrumental Conducting I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Basic conducting technique and advanced techniques for conducting instrumental ensembles.

Pre-requisite(s): MUSC 1120/MUSC 1140.

Note: Music Majors and Minors only.

MUSC 3823 - Instrumental Conducting I-II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Basic conducting technique and advanced techniques for conducting instrumental ensembles.

Pre-requisite(s): MUSC 1120 and MUSC 1140.

Note: Music Majors and Minors only.

MUSC 3824 - Music for Elementary Teachers

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$23.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Methods and materials for teaching elementary school music (grades K-6) including skill development on selected elementary classroom instruments.

MUSC 3825 - Pro Tools 201 Production I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: The Pro Tools Production I (PT201) course covers the core concepts and skills needed to operate an Avid Pro Tools Ultimate system with HD-series hardware in a professional studio environment. This course builds on the Pro Tools Fundamentals I and II series of courses, providing intermediate and advanced-level Pro Tools concepts and techniques.

Pre-requisite(s): MUSC 2823 or MUSC 4823.

Co-Requisite(s): MUSC 3826 or MUSC 3827.

MUSC 3826 - Pro Tools 210M Production II Music

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: The PT210M Pro Tools Production II (Music Production) course covers techniques for working with Pro Tools systems in a professional music production environment. Concepts and skills learnt in the Pro Tools Fundamentals I (PT101), Pro Tools Fundamentals II (PT110) and Pro Tools Production I (PT201) courses are reinforced with practical, music-specific examples. Completion and successful testing will result in Avid Professional Certification.

Pre-requisite(s): MUSC 2823 or MUSC 4823.

Co-Requisite(s): MUSC 3825.

MUSC 3827 - Pro Tools 210P Production II Post Production

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: The PT210P Pro Tools Production II (Post Production) course covers techniques for working with Pro Tools in a professional post production environment. Concepts and skills learned in the Pro Tools Fundamentals I (PT101), Pro Tools Fundamentals II (PT110) and Pro Tools Production I (PT201) courses are reinforced with practical, post production-specific examples. Completion and successful testing will result in Avid Professional Certification.

Pre-requisite(s): MUSC 2823 or MUSC 4823.

Co-Requisite(s): MUSC 3825.

MUSC 3840 - Advanced Concepts in Music Theory

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Building on topics covered in Music Theory IV, this course will explore advanced harmonic and theoretical concepts of music of the 19th and 20th centuries, as well describe analytical techniques for music composed during this time period.

Pre-requisite(s): MUSC 2120 and MUSC 2140.

Note: Music Majors and Minors only.

MUSC 3842 - Producing the School Musical

Credits: (2)

Typically Taught Spring Semester: *Full Sem odd years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: A detailed study of musical theatre and the practical application of skills, techniques, and materials necessary for production in secondary schools.

Note: Music Majors and Minors only.

MUSC 3851 - Stringed Instrument Pedagogy I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: An in-depth study of pedagogical methods employed in teaching the four orchestral stringed instruments to beginning and intermediate level students.

May be repeated up to 9 credit hours.

Note: Music Majors and Minors only.

MUSC 3852 - Stringed Instrument Pedagogy II

Credits: (2)

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Continued in-depth study of pedagogical methods employed in teaching the four orchestral stringed instruments with a focus on upper intermediate and advanced level students.

Pre-requisite(s): MUSC 3851.

Note: Music Majors and Minors only.

MUSC 3872 - Choral Conducting I

Credits: (2)

Typically Taught Fall Semester: *Full Sem even years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Basic conducting technique and advanced techniques for techniques for conducting choral ensembles.

Pre-requisite(s): MUSC 1120 and MUSC 1140.

Note: Music Majors and Minors only.

MUSC 3882 - Choral Conducting II

Credits: (2)

Typically Taught Spring Semester: *Full Sem even years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Basic conducting technique and advanced techniques for techniques for conducting choral ensembles.

Pre-requisite(s): MUSC 1120 and MUSC 1140.

Note: Music Majors and Minors only.

MUSC 3924 - Music Teaching and Learning in the Elementary School

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$23.00

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase and maintenance of musical instruments used in the course.

Description: As an introduction to the role of music in the lives of children, this course provides opportunities for music majors to develop their rapport with elementary students. The course will include selecting literature and designing effective instructional strategies aligned with the Utah K-6 music core curriculum as well as the national music standards. Students will be introduced to different philosophical and pedagogical approaches as well as develop and implement age-appropriate assessment strategies. Students will develop their understanding of music's role in an interdisciplinary curriculum. A field experience with elementary-age students is required.

Pre-requisite(s): Completion of MUSC 2150 - Class Piano III with a grade of "C" or passing the piano proficiency exam.

Note: Music Majors and Minors only.

MUSC 3991 - Junior Recital

Credits: (0)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Applied instruction in preparation for and public performance of a 30 minute recital.

Pre-requisite(s): Approval of instructor.

Note: Music Majors and Minors only.

MUSC 4302 - Keyboard Pedagogy I

Credits: (2)

Typically Taught Fall Semester: *Full Sem odd years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Comprehensive study of keyboard pedagogy. Piano Majors and Minors only.

MUSC 4312 - Keyboard Pedagogy II

Credits: (2)

Typically Taught Spring Semester: *Full Sem even years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Continuation of MUSC 4302. Comprehensive study of keyboard pedagogy. Piano Majors and Minors only.

MUSC 4322 - Keyboard Pedagogy III

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Continuation of MUSC 4312.

Pre-requisite(s): MUSC 4312.

MUSC 4332 - Keyboard Pedagogy IV

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Continuation of MUSC 4322.

Pre-requisite(s): MUSC 4322.

MUSC 4402 - Vocal Pedagogy I

Credits: (2)

Typically Taught Fall Semester: *Full Sem even years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Comprehensive study of the principles, rules and procedures pertaining to the development, exercise, and practice of the art of singing and the science of teaching singing.

Pre-requisite(s): Two semesters of piano required.

Note: Music Majors and Minors only.

MUSC 4412 - Vocal Pedagogy II

Credits: (2)

Typically Taught Spring Semester: *Full Sem odd years*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Comprehensive study of the principles, rules and procedures pertaining to the development, exercise, and practice of the art of singing and the science of teaching singing.

Note: Music Majors and Minors only.

MUSC 4610 - Applied Keyboard: Piano

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music Majors or Minors with a Keyboard Emphasis only. Students are responsible for contacting

individual instructors to schedule lessons. See the Music website for a list of private instructors.
May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4611 - Applied Keyboard: Organ

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4620 - Applied Voice

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4630 - Applied Woodwinds: Flute

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4631 - Applied Woodwinds: Oboe

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4632 - Applied Woodwinds: Clarinet

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4633 - Applied Woodwinds: Saxophone

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4634 - Applied Woodwinds: Bassoon

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4640 - Applied Brass: Trumpet

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4641 - Applied Brass: French Horn

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4642 - Applied Brass: Trombone

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4643 - Applied Brass: Euphonium/Tuba

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4650 - Applied Strings: Violin

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4651 - Applied Strings: Viola

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4652 - Applied Strings: Violoncello

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4653 - Applied Strings: String Bass

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4654 - Applied Strings: Guitar

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee Purpose: Standard DPA Technology fee.

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4655 - Applied Strings: Harp

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4660 - Applied Percussion

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

May be repeated 3 times with a maximum of 4 credit hours.

MUSC 4673 - Private Instruction

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$890.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Music majors and minors only. For vocal or instrumental students. Two hours of instruction/week. Minimum of 18 hours/week practice required. One-half hour special assignment. By consent of instructor only.

Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of

private instructors.
May be taken for credit up to three times in any area of specialization.

MUSC 4681 - Private Instruction

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$445.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Individual private instruction for music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

Pre-requisite(s): Completion of two semesters of MUSC 3681 or MUSC 3682 with a grade of "C" or better. May be repeated 4 times with a maximum of 4 credit hours.

MUSC 4682 - Private Instruction

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$445.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Individual private instruction for music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

Pre-requisite(s): Completion of two semesters of MUSC 3681 or MUSC 3682 with a grade of "C" or better. May be repeated 4 times with a maximum of 8 credit hours.

MUSC 4701 - Grant Writing & Non-Profits

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Students will become familiar with the process of grant research, writing, and compliance. Theory will be applied into practice as students identify real-world organizations in need of funding, locate potential funding sources (including government, corporate, and foundation grants), write grant proposals, and submit those proposals to the funding organization.

Pre-requisite(s): Completion of MUSC 3701 with a grade of "C" or better.

MUSC 4720 - Live Sound: System Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A study of principles used for designing sound systems. Identify venue and performance requirements. Learn how to plan, document, deploy, and tune effective sound systems required for successful productions. Upon completion student will be Dante Level 1 and Level 2 certified.

Pre-requisite(s): MUSC 1721.

MUSC 4721 - Live Sound: Advanced Sound Reinforcement

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A practical guide to advanced mixing techniques for live sound reinforcement. This course will focus on both practical and novel approaches to mixing sound for live events. The course will feature hands-on application of concepts learned throughout its curriculum.

Pre-requisite(s): MUSC 4720.

MUSC 4771 - Stringed Instrument Literature I

Credits: (2)

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: A study of music for technical development, plus solo, and chamber music literature of the stringed instruments of the orchestra. This class will focus on music for beginning and intermediate students.

Note: Music Majors and Minors only.

MUSC 4772 - Stringed Instrument Literature II

Credits: (2)

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Advanced study of music for technical development, plus solo, and chamber music literature of the stringed instruments of the orchestra. This class will focus on music for upper intermediate and advanced students.

Pre-requisite(s): MUSC 4771.

MUSC 4801 - College of Arts & Humanities Leadership Lecture Series

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: This one-credit elective course will give arts and humanities' majors the opportunity to interact with successful guest lecturers whose undergraduate backgrounds are in the arts and humanities. Lecturers will clarify how the talents and skills associated with their degrees have contributed to their pursuit of successful careers and lives.

MUSC 4820 - Pro Tools 101

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: This course covers basic Pro Tools principles. It provides everything you need to complete a Pro Tools project from initial set up to final mix-down. The course focuses on Pro Tools software and covers a multitude of new functions and feature enhancements. Whether your project involves recording live instruments, MIDI sequencing of software synthesizers, or audio editing or region looping, this course will give you the basic skills to succeed.

May be taken twice for 4 credits.

MUSC 4822 - Secondary Music Methods

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase and

maintenance of musical instruments used in the course. The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Provides music teachers with an introduction into methods of instruction, organization and presentation of appropriate content and musical literature in secondary school music classes

Pre-requisite(s): Completion of MUSC 3924 and MUSC 2150 with a grade of "C" or better.

Note: Music Majors and Minors only.

MUSC 4823 - Pro Tools 110

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$79.00

Course Fee Purpose: Course fee: The assessed course fee is used for consumable and non-consumable items as used in class for hands on activities and lab / studio maintenance.

Description: This course provides a more detailed look at the Pro Tools system above and beyond the knowledge you gained in the Pro Tools 101 course. It covers all the key concepts and skills needed to operate a Pro Tools system at the User level. The course along with Pro Tools 101: An Introduction to Pro Tools, provides the foundation to Pro Tools Certification and for the later 200-series of courses on Pro Tools music and post-production.

Pre-requisite(s): MUSC 4820.

May be taken twice for 4 credits.

MUSC 4824 - Advanced Mixing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course explores advanced mixing techniques for modern recorded music production. Students will create original mixes in many genres using a variety of skills presented in this course.

Pre-requisite(s): MUSC 1821.

MUSC 4830 - Directed Readings

Credits: (1-3)

Description: To be arranged.

May be taken for a maximum of 7 hours of credit.

Note: Music Majors and Minors only

MUSC 4842 - High School Music Methods

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: This fee will be used to support instructional technology.

Description: Methods of instruction, organization and presentation of appropriate content and musical literature in high school music classes. Emphasis is placed on the administration of the school music program.

Pre-requisite(s): Piano proficiency and MUSC 4822.

Note: Music Majors and Minors only

MUSC 4851 - Practicum/Internship

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Work-based learning programs to give students valuable, hands-on high-impact educational opportunities, engagement with the sound production community, and mentorship.

MUSC 4860 INT - Internship in Music

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Practical synthesis and application of knowledge and skills gained in pedagogy and methods courses. Students plan and implement lessons, document progress, and evaluate their teaching assignments in group or private settings.

May be repeated for a maximum of 12 credits.

Note: Music Majors and Minors only.

MUSC 4890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A continuation of MUSC 2890. Open to all students.

May be repeated to a maximum of 6 credits.

Note: Music Majors and Minors only.

MUSC 4900 - Senior Project--BA in Music

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will serve as a capstone project for the BA in Music. It will be taken during a student's final semester, and shall demonstrate the student's ability to synthesize the various components of her musical education. In conjunction with the general syllabus (attached), this individualized course will be governed by a contract (also attached). Depending upon the student's chosen track within the BA, examples of projects might include a major composition, a research paper, an analysis paper, a lecture-recital, etc.

Pre-requisite(s): Instructor approval.

MUSC 4901 - BAS Capstone Project

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Under instructor guidance and mentorship, students will submit a Capstone project based on the culmination of coursework and accumulated experience. This may include, but is not limited to, producing and/or engineering a multitrack recording session with live musicians, creating the soundtrack for a video, or a scholarly research project based on any relevant topic from the sound production and recording program. Capstones must be substantial in scope and demonstrate mastery of its focus.

MUSC 4910 - Opera Production

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Preparation of operatic scenes and music. Music and staging rehearsal venue for the preparation of

fully staged opera productions. By audition only.
May be repeated up to 10 times for credit hours.

MUSC 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Fall Semester: *Full Sem*

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Music Majors and Minors only.

MUSC 4991 - Senior Recital

Credits: (0)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Private instruction in preparation for and public performance of a one hour recital.

Note: Music Majors and Minors only.

MUSC 4992 - Senior Project

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Music education majors have the option of completing a senior project in lieu of the senior recital and should register for MUSC 4992 during the semester in which they plan to complete the project. Requires submission of a project proposal and approval by a faculty committee.

Pre-requisite(s): MUSC 4830.

Note: Music Majors and Minors only.

MUSC 4995 INT - Capstone Project

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: The fee for this course is used to support classroom technology and the purchase of a software site license.

Description: Under instructor guidance and mentorship, the student will submit a Capstone proposal based on the culmination of coursework and garnered experience. This may include, but is not limited to, producing and/or engineering a multitrack recording session with live musicians, creating the soundtrack for a video, or a scholarly presentation based on any relevant topic from the sound and recording BOK. Capstone completion required for minor.

Pre-requisite(s): Acceptance in the Sound Production/Recording program.

MUSC 6681 - Private Instruction

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual private instruction for music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

Pre-requisite(s): Bachelor's degree in Music.

May be repeated 4 times with a maximum of 4 credit hours.

MUSC 6682 - Private Instruction

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual private instruction for music majors and minors only. Students are responsible for contacting individual instructors to schedule lessons. See the Music website for a list of private instructors.

Pre-requisite(s): Bachelor's Degree in Music.

May be repeated 4 times with a maximum of 8 credit hours.

NAVS 1010 - Introduction to Naval Science

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: A general introduction to the USN and USMC that emphasizes organizational structure, warfare components and assigned roles/missions of USN/USMC; covers all aspects of Naval Service from its relative position within DoD to the specific warfare communities/career paths; and includes basic elements of leadership and USN and USMC Core Values. The course will provide students with initial exposure to many elements of Naval culture and provides conceptual framework/working vocabulary for student to use on summer cruise.

Note: Cohort Code.

NAVS 1020 - Seapower and Maritime Affairs

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The NROTC Seapower and Maritime Affairs course is intended to be a study of the U.S. Navy and the influence of sea power upon history that incorporates both a historical and political perspective to explore the major events, attitudes, personalities, and circumstances that have imbued the U.S. Navy with its proud history and rich tradition. This course necessarily deals with issues of national imperative in peacetime as well as in war; varying maritime philosophies that were interpreted into Naval strategies and doctrines; and budgetary concerns which shaped force realities and the pursuit of American diplomatic objectives. It concludes with a discussion of the Navy's strategic and structural changes at the end of the Cold War and its new focus, mission, and strategy in the post September 11, 2001 world.

Note: Cohort Code.

NAVS 2000 - Leadership and Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The course introduces the student to many of the fundamental concepts of leading Sailors and Marines, which will be further expanded during the continuum of leadership development throughout the NROTC program. It introduces those elements of leadership vital to the effectiveness of Navy/Marine Corps officers by reviewing the theories and parameters of leadership and management within and outside of the Naval Service while additionally addressing values development, interpersonal skills, management skills, and application theory. Practical applications are explored through the use of experiential exercises, readings, case studies, and laboratory discussions.

Note: Cohort Code.

NAVS 2020 - Naval Ship Systems II: Naval Engineering

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Students learn detailed ship design, hydrodynamic forces, stability, propulsion, electrical theory and distribution, hydraulic theory and ship control, and damage control. The course includes basic concepts of theory/design of steam, gas turbine, diesel, and nuclear propulsion. Case studies on leadership/ethical issues in the engineering arena are also covered.

Note: Cohort Code.

NAVS 2110 - Evolution of Warfare

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to provide a very basic understanding of the art of warfare and its evolving nature from the beginning of recorded history to the present day. The intent is to define war, introduce the student to the concepts of conducting war, and show how technology and the human element of conflict have combined to evolve the way war is conducted from ancient times to now.

Note: Cohort Code.

NAVS 3010 - Navigation

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: In-depth study of the theory, principles, procedures, and application of plotting, piloting, and electronic navigation, as well as an introduction to maneuvering boards. Students learn piloting techniques, the use of charts, the use of visual and electronic aids, and the theory of operation of both magnetic and gyrocompasses. Students develop practical skills in plotting and electronic navigation. Other topics include tides, currents, effects of wind/weather, voyage planning, and an application and introduction to the international/inland rules of navigation. The course is supplemented with a review/analysis of case studies involving moral/ethical/leadership issues pertaining to the concepts listed above.

Note: Cohort Code.

NAVS 3020 - Naval Operations and Navigation II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A continued study of relative motion, formation tactics, and ship employment. Introductions to Naval operations and operations analysis, ship behavior and characteristics in maneuvering, applied aspects of ship handling, afloat communications, Naval command and control, Naval warfare areas, and joint warfare are also included. The course is supplemented with a review/analysis of case studies involving moral/ethical/leadership issues pertaining to the concepts listed above.

Note: Cohort Code.

NAVS 3110 - Fundamentals of Maneuver Warfare

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course prepares future military officers and other leaders for service by studying modern tactical principles, current military developments, and other aspects of warfare and their interactions with and influences on maneuver warfare doctrine. There is a specific focus on the United States Marine Corps as the premier maneuver warfighting organization. Study also includes historical influences on tactical, operational, and strategic levels of maneuver warfare practices in the current and future operating environments. The course will also examine

amphibious operations.

Note: Cohort Code.

NAVS 3210 - Marine Corps Bulldog Preparation

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Course prepares Marine Option Midshipmen (MO), Marine Enlisted Commissioning Program (MECEP) candidates, Platoon Leader's Class (PLC), and Officer Candidate Class (OCC) students to attend Marine Corps Officer Candidate School. The course exposes candidates to the theory and principles of military tactics, Marine Corps leadership and decision making, and the vigorous physical fitness requirements necessary to successfully complete Marine Corps Officer Candidate School. NOTE: This is an extremely strenuous physical fitness course, including an extensive outdoor component, which requires students to achieve superior levels of fitness at a military mandated standard.

Pre-requisite/Co-requisite: NROTC Student or be able to pass the Marine Corps Physical Fitness Test, possess satisfactory athletics physical, and possess evidence of health and accident insurance.

Note: Cohort Code.

NAVS 4000 - Naval Ship Systems I: Weapons

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course outlines the theory and employment of weapons systems. Students explore the processes of detection, evaluation, threat analysis, weapon selection, delivery, guidance, and explosives. Fire control systems and major weapons types are discussed, including capabilities and limitations. The physical aspects of radar and underwater sound are described. Facets of command, control, communications, computers, and intelligence are explored as a means of weapons system integration. The tactical and strategic significance of command and control warfare and information warfare is discussed. This course is supplemented with review/ analysis of case studies involving the moral and ethical responsibilities of leaders in the employment of weapons.

Note: Cohort Code.

NAVS 4020 - Leadership and Ethics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The course completes the final preparations of ensigns and second Lieutenants for service in the Navy and Marine Corps. The course integrates an intellectual exploration of Western moral traditions and ethical philosophy with a variety of topics, such as military leadership, core values, and professional ethics; the UCMJ and Navy regulations; and discussions relating to the roles of enlisted members, junior and senior officers, command relationships, and the conduct of warfare. The course provides midshipmen with a foundation of moral traditions, combined with a discussion of actual current and historical events in the United States Navy and Marine Corps, to prepare them for the role and responsibilities of leadership in the Naval Service of the 21st century.

Note: Cohort Code.

NEUR 2010 - Science and Professionalism of Neuroscience

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to allow students the opportunity to explore the scientific nature of the

field of neuroscience, and explore career opportunities and valuable skills within the field. Topics will include general scientific communication, ways to digest and disseminate scientific research, exploration of scientific and critical thinking, careers within neuroscience, and marketable skills. Students will gain experience working with scientific journals, and synthesizing relevant information to reach logical and valid conclusions, and prepare materials to highlight their individual skills and strengths when pursuing opportunities following graduation.

NEUR 2950 - Introduction to Neuroscience

Credits: (3)

Course Fee: \$15.00

Course Fee Purpose: Course fees are used to assist with the purchase of lab supplies and equipment needed to facilitate instruction of neuroscience principles and techniques.

Description: Introduction to the interdisciplinary field of neuroscience, which examines the function and dysfunction of the human and animal nervous system. The course spans the major areas of neuroscience including cellular/molecular factors, neuron physiology, brain structure and function, and medical/clinical applications. The topics addressed are critical to multiple fields of study (e.g. health sciences, psychology, and zoology) and provides the skills necessary for students to succeed in upper-division courses related to the brain and behavior.

Pre-requisite(s): PSY 2710 or CHEM 1010 or CHEM 1110 or CHEM 1130 or CHEM 1200 or CHEM 1210 or HTHS 2110 or ZOOL 1020 or ZOOL 1610 or ZOOL 2420 or ZOOL 1370 or ZOOL 2420.

NEUR 2955 - Neuroscience Lab

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Course fees for this course are used to purchase the consumable materials used in the lab activities. They also support the relicensing of BioPac software and the maintenance and replacement of the lab computers.

Description: This lab course is designed to provide students with hands-on experience collecting and analyzing data using neuroscience methodologies. Topics will include comparative neuroanatomy, cellular and molecular neuroscience, and psychophysiology. Students will gain experience working with vertebrate and invertebrate, human and non-human subjects. Students will engage in data collection, analysis and presentation.

Suggested Requisite(s): NEUR 2950.

NEUR 3750 - Cognitive and Behavioral Neuroscience

Credits: (3)

Description: This course challenges students to apply knowledge of nervous system structure and function to higher order cognitive functions and motor abilities including attention, memory, emotions, language and symbolic functions, reasoning, decision making, problem solving, voluntary movement, and consciousness.

Pre-requisite(s): NEUR 2950 or NEUR 2050 or PSY 2710 or instructor approval.

NEUR 3850 - Clinical Neuroscience

Credits: (3)

Description: This is an advanced undergraduate course primarily for Neuroscience minors, but open to all students. Students will apply a knowledge of neuroanatomy, neurophysiology, cognition, and behavior to discuss and solve in-depth clinical case studies in the classroom setting. The course will consist of instructor-led and student-led activities to explore a range of nervous system disorders.

Pre-requisite(s): NEUR 2950 or NEUR 2050 or consent of instructor.

NEUR 3950 - Cellular and Molecular Neuroscience

Credits: (3)

Description: Students will explore the cellular and molecular basis for nerve cell function.

Pre-requisite(s): NEUR 2950.

NEUR 3998 - EEG in Epilepsy**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: This course is part of the Bachelor of Integrated Studies in Electroneurodiagnostics (END), a partnership between Weber State University and the END program at the University of Utah. Students will complete lecture and lab hours primarily at the University of Utah. In addition, five meetings during the spring semester, probably at the University of Utah, will be required and there is a required research paper.

NEUR 3999 - EEG in Ped Patients & Neonates**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: This course is part of the Bachelor of Integrated Studies in Electroneurodiagnostics (END), a partnership between Weber State University and the END program at the University of Utah. Students will complete lecture and lab hours primarily at the University of Utah. In addition, five meetings during the spring semester, probably at the University of Utah, will be required and there is a required research paper.

NEUR 4050 - Neuro Ethics**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Neuro Ethics is an interdisciplinary field concerned with the ethical and societal consequences of neuroscience research and neuroscience-based technologies and their implications for questions of human nature, the legal system, and free will. We will explore all sides of these ethical quandaries and focus on being able to critically evaluate them rather than land on an agreement of "right or wrong".

Pre-requisite(s): NEUR 2950, NEUR 2955, at least 12 credits of NEUR 3750, NEUR 3850, NEUR 3950, NEUR 4444, NEUR 4800, NEUR 4830, NEUR 4900, NEUR 4949.

NEUR 4444 - Human Neuroanatomy**Credits: (3)**

Description: An advanced course in human neuroanatomy. Students will learn the major structures of the human brain and spinal cord as well as the pathways that connect them.

Pre-requisite(s): NEUR 2950.

NEUR 4800 CRE - Projects and Research**Credits: (1-3)**

Description: Supervised participation in projects and/or primary research with a faculty mentor in various areas of neuroscience. Limited to advanced students upon consent of neuroscience faculty mentor and the Neuroscience Program director. A paper written in APA style and an oral report are required at the end of the semester.

Pre-requisite(s): NEUR 2950 or NEUR 2050 (Introduction to Neuroscience), PSY 3600 (Statistics) or equivalent, and faculty mentor permission.

Students may enroll in this course twice for a maximum of 6 credit hours.

NEUR 4810 - Experimental Course

Credits: (1-6)**Experimental**

Typically Taught Spring Semester: *Full Sem odd years*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

NEUR 4830 - Directed Readings**Credits: (1-3)**

Description: Independent readings or secondary research on advanced neuroscience special topics under the direction of a faculty mentor. For each hour of credit in a readings project the student is required to read an appropriate number of primary research journal articles and book chapters. A paper written in APA style and oral report are required at the end of the term.

Pre-requisite(s): NEUR 2950 or NEUR 2050 (Introduction to Neuroscience), PSY 3600 (Statistics) or equivalent, and faculty mentor permission.

Students may enroll in this course twice for a maximum of 6 credit hours.

NEUR 4900 - Topics in Neuroscience**Credits: (1-3)****Variable Title**

Description: This course offers an in-depth exploration of selected topics and issues in the discipline. The prerequisite may be waived or replaced by an equivalent at the discretion of the instructor in consultation with the Neuroscience Program Director.

Pre-requisite(s): NEUR 2950 or NEUR 2050 or consent of instructor.

The course may be taken up to three times for a maximum of six credit hours.

Note: This course is taught as needed.

NEUR 4910 - Senior Thesis Proposal**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is semester one of a two-semester sequence to complete a senior thesis project. In the proposal semester, students will work with a faculty mentor to come up with a research question, complete a literature review to inform that question, generate specific hypotheses and design a research project to address these hypotheses. The student will write up the Introduction and Methods section of a research paper and defend the proposed research study in front of a committee of faculty.

Pre-requisite(s): NEUR 2950 and NEUR 2955 and PSY 3600 or PSY 3615.

Pre-requisite/Co-requisite: PSY 3610 or PSY 3616.

NEUR 4911 - Senior Thesis Defense**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This is semester two of a two-semester sequence to complete a senior thesis project. In the defense semester, students will work with a faculty mentor to conduct their proposed research project from semester one. Students will be responsible for collecting, analyzing, and interpreting their data with the help of their faculty mentor. Students will also write a final research paper that includes a literature review, methods, results, and discussion. This

final paper will be defended in front of the student's thesis committee.

Pre-requisite(s): NEUR 4910.

NEUR 4949 - The Neuroscience of Sex, Romance, and Gender

Credits: (3)

Description: This course will examine three human imperatives (sex, romance, and gender) from a neuroscience perspective. The neuroscience basis for each of these aspects of human behavior will be examined through directed readings and in-class discussions.

Pre-requisite(s): PSY 1010

NRSG 2100 - Pharmacology for Nurses I

Credits: (1.5)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course incorporates basic pharmacological and nonpharmacological interventions used by the nurse to promote health across the lifespan. Course content includes principles of safe medication administration and pharmacotherapeutics with a focus on prototype medications. This course provides a foundation of pharmacology knowledge for the nurse.

Pre-requisite(s): Admission to the Nursing Program.

Co-Requisite(s): NRSG 2200 and NRSG 2251.

NRSG 2200 - Nursing Foundations

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students are socialized into the profession of nursing, taught scope of practice, rules and ethics. Building nursing care on a health/wellness continuum is introduced. Students begin the nursing process through assessment of health and wellness in individuals, families and populations throughout the lifespan, and in diverse cultures and environments. 3 lecture hours per week.

Pre-requisite(s): Admission to the Nursing Program.

Co-Requisite(s): NRSG 2100.

NRSG 2251 INT/CEL - Foundations of Nursing Lab and Clinical

Credits: (4.5)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$370.00

Course Fee Purpose: Course fees are used for expenses connected with a course that goes beyond the standard expectation of university support. These funds are used for expendable items, non-expendable items, technology, and lab support.

Description: This course will include a combination of lab, simulation, and clinical experiences. Students will focus on identifying and implementing foundational nursing skills. Students will have the opportunity to practice in a controlled environment, where they will pass off required skills and simulate clinical experiences. Students will also apply learned skills in clinical facilities. In order to pass the course, students must pass all three components of the course (lab, clinical, and simulation). This course focuses on application of concepts related to nursing care of patients in multiple environments and across the lifespan in various settings.

Pre-requisite(s): Admission into the nursing program.

Co-Requisite(s): NRSG 2200 and NRSG 2100.

NRSG 2283 - Directed Readings and Projects

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Pre-requisite(s): Instructor approval.

(Maximum of 3 semester hours per year).

NRSG 2300 - Patient-Centered Nursing Care I

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Focused theory with emphasis on nursing care across the lifespan for patients experiencing changes in health status. Focus will be on identifying chronic diseases and developing a nursing strategy to promote wellness and quality of life for the patient. Clinical will focus on application of theory related to nursing care of patients in multiple environments and across the life-span. 3 lecture hours per week.

Pre-requisite(s): NRSG 2100, NRSG 2200.

NRSG 2351 INT/CEL - Patient-Centered Nursing Care Experience I

Credits: (4.5)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$408.00

Course Fee Purpose: Course fees are used for expenses connected with a course that go beyond the standard expectation of university support. These funds are used for expendable items, non-expendable items, and lab support.

Description: This course will include a combination of clinical, simulation, and laboratory experiences. Students will build on previous skills and knowledge and focus on demonstrating and examining safe and efficient patient care. Students will have the opportunity to practice in a controlled environment, where they will pass off required skills and simulate clinical experiences. Students will also apply learned skills in clinical facilities. In order to pass the course, students must pass all three components of the course (lab, clinical, and simulation). This course focuses on application of concepts related to nursing care of patients in multiple environments and across the lifespan in various settings.

Pre-requisite(s): Admission to Nursing Program; NRSG 2100, NRSG 2200, and NRSG 2251.

Co-Requisite(s): NRSG 2300 and NRSG 2700.

NRSG 2500 - Patient-Centered Nursing Care II

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Focused theory with emphasis on nursing care across the lifespan for patients experiencing changes in health care status. Focus will be on caring for patients in the acute care setting with a goal of restoring optimal health and wellness.

NRSG 2551 INT/CEL - Patient-Centered Nursing Care Experience II

Credits: (4.5)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$406.00

Course Fee Purpose: Course fees are used for expenses connected with a course that go beyond the normal expectation of university support. These funds are used for expendable items, non-expendable items, and lab support.

Description: This course will include a combination of clinical, simulation, and laboratory experiences. Students will build on previous skills and knowledge and focus on developing and critiquing safe and efficient patient care. Students will have the opportunity to practice in a controlled environment, where they will pass off required skills and simulate clinical experiences. Students will also apply learned skills in clinical facilities. In order to pass the course, students must pass all three components of the course (lab, clinical, and simulation). This course focuses on application of concepts related to nursing care of patients in multiple environments and across the lifespan in various settings.

NRSG 2700 - Pharmacology for Nurses II

Credits: (1.5)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course builds on basic pharmacological principles from NRSG 2100 to promote health across the lifespan with an emphasis on patient safety. Prototype drugs are used to explore a variety of pharmacologic and therapeutic medication classes to promote patient health and well-being.

Pre-requisite(s): NRSG 2100, NRSG 2200, and NRSG 2251.

Co-Requisite(s): NRSG 2300 and NRSG 2351.

NRSG 3100 - Pharmacology for Nurses III

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course explores advanced pharmacological treatments used by the nurse to promote health across the lifespan. Course content has emphasis on the administration of intravenous medication in the provision of acute medical care.

Co-Requisite(s): NRSG 2500, NRSG 2551.

NRSG 3200 - Complex Patient Centered Nursing Care

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Theory focuses on nursing care of patients with complex changes in health status requiring extensive multifaceted resources.

Three hours of lecture per week.

Pre-requisite(s): NRSG 2500 and NRSG 3100.

Co-Requisite(s): NRSG 3300 and NRSG 3350.

NRSG 3300 - Entry Into Nursing Professional Practice

Credits: (3.5)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Entry into Nursing Professional Practice focuses on synthesis of nursing knowledge, skills, and attitudes necessary for transition to professional nursing practice. Students use advanced testing strategies and comprehensive content review to prepare for successfully completing the NCLEX-RN® licensing examination. In addition, a cumulative pharmacology review will be included in the course.

Pre-requisite(s): NRSG 2500 and NRSG 3100.

Co-Requisite(s): NRSG 3200 and NRSG 3350.

NRSG 3350 INT/CEL - Entry Into Nursing Professional Practice Capstone

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Clinical preceptorship focuses on synthesis of nursing knowledge, skills, and conduct necessary for entrance into registered nursing practice.

9 clinical hours per week.

Pre-requisite(s): NRSG 2500 and NRSG 3100.

Co-Requisite(s): NRSG 3200 and NRSG 3300.

NRSG 3400 - Mental Health: The Complex Role

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: Advanced theories and concepts of nursing practice are explored across the lifespan for those experiencing alterations in mental health.

NRSG 3440 - Resiliency in your Profession

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The healthcare profession can be a highly rewarding career, but it can also be riddled with stress. This course will explore contributing factors that may cause stress among healthcare professionals. Burnout can be a direct result of stress in the workplace. The student will examine the causes of burnout, and more importantly, explore tools to prevent and treat burnout.

NRSG 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

NRSG 4000 - Culture and Health Care

Credits: (2)

Description: This course is an exploration of culture, health care issues and experiences at the local, regional, national, or international levels. The learner will study and compare the health care of a selected country/community from the cultural, political and educational perspective.

Credit hours (2), 2 lecture hours per week.

Pre-requisite(s): Admission to Weber State University; recommended for nursing students, Licensed Nurses, and other healthcare providers.

May be repeated up to 99 times.

NRSG 4001 - Clinical Experience Related to Culture and Health Care of Nurses**Credits: (1-3)**

Description: This course is a Study Abroad Experience for Health Care Workers to explore the relationship between culture, health care and nursing issues at local, regional, national, and/or international levels. Information gained during NRSG 4000 will assist the student to put into practice the concepts learned.

Credit hours (1-3). Lab hours depend on the country visited.

Pre-requisite/Co-requisite: Co-requisite or prerequisite: NRSG 4000 related to area being visited.

May be repeated up to 99 times.

NRSG 4010 - Interdisciplinary Health Care Teams**Credits: (3)**

Description: This course provides an interdisciplinary experience with the team concept as a priority. The students learn the role of the health care team members, each with their different skills and objectives. The course teaches students to practice an interdisciplinary approach as they research, interact and learn in the interdisciplinary environment of a health care setting.

Cross-listed with DENT 4010 & HTHS 4010.

May be repeated once up to 6 credit hours.

NRSG 4022 - Nursing Care of the Trauma Patient**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will cover the systematic and standardized approach for assessing and managing patients who have sustained traumatic injuries. Students will be able to identify assessment findings that may vary in special populations such as pediatrics, geriatric, bariatrics and pregnancy. Students will be able to identify roles and responsibilities of each member of the trauma team and coordinate care to improve the patients' outcomes.

This course will collaborate with other disciplines such as PARA 2020 to exchange case studies, allowing nursing and students from other disciplines the opportunity to share how they would approach and provide for the traumatically injured client. The exchange between these two classes will give students from both disciplines insights into the challenges, strengths, and limitations of their counterparts.

NRSG 4045 - ELNEC: End-of-Life Nursing Education Consortium**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed from the nationally recognized guidelines of the End-of-Life Nursing Education Consortium (ELNEC) project. These guidelines are revised regularly to reflect current advances in the field.

The purpose of the ELNEC project is to support the knowledge and skills of nurses in providing palliative care to patients who are experiencing serious illness or end of life. ELNEC content focuses on nursing care at the end of life; pain management; symptom management; ethical/legal issues; cultural considerations in end-of-life care; communication; loss, grief, bereavement; and preparation for and care at time of death.

Pre-requisite(s): Admission to a nursing program or current registered nurse.

NRSG 4050 - Nursing Assessment Across the Life Span

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides the theory requisite for the systematic examination and analysis of subjective and objective health assessment data obtained during the health assessment process. The health status of a client will be determined through the process of differential analysis of both the anecdotal evidence provided by the client and empirical evidence gathered during the physical examination. With this evidence, students will learn to apply the scientific process of formulating and testing hypothetical diagnoses. The overall purpose will be focused upon developing strategies and skills to assess the health care needs of people across the life span. Students are challenged to identify normal assessment findings and critically analyze variations from normal.

NRSG 4060 - Oncology Nursing

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course provides learning opportunities for nurses who work in various areas of health care with minimal opportunities to care for patients with cancer. The learning activities are based on current evidence, clinical experts, and patient values-evidenced-based practice. Throughout the course, an emphasis is placed on the collaborative interprofessional team tasked with managing the care of the patients regarding cancer diagnosis, cancer treatments, unintentional consequences stemming from treatment, and emotional aspects involved in caring for patients with cancer.

NRSG 4070 - Disaster Nursing

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Terrorism, war and natural disasters present new challenges to nurses and requires they be trained to care for resultant victims. Learning emphasizes crisis management, specific patient/health issues and unique nursing interventions. (Hybrid)

NRSG 4080 - Adult Critical Care

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Advanced theories and concepts of nursing practice are explored in relation to adults experiencing life threatening alterations in health. (Hybrid)

NRSG 4090 - Nursing: High Risk OB/Pediatric Patient

Credits: (3)**Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem, Full Sem Online***Typically Taught Spring Semester:** *Full Sem, Full Sem Online*

Description: At risk pediatric and obstetric populations require multiple interventions from knowledgeable caregivers. In this course, students will learn theory and concepts associated with caring for these high-risk populations. By the end of this course students will have an increased understanding of nursing care and application of evidence-based care for improved outcomes. (Hybrid).

NRSG 4100 - Care Coordination and Interdisciplinary Collaboration for Safe Patient Outcomes**Credits: (3)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem, Online***Typically Taught Spring Semester:** *Full Sem, Online*

Description: Nursing 4100 is designed to assist students in learning theory and concepts related to nursing care of patients with chronic conditions, including illness implications and education for patients and families. Topics will include areas such as genetic conditions, caregiver stress and grieving, as well as advocacy for vulnerable populations. The course will incorporate application of advanced skills and knowledge to address coordination of complex care issues and healthcare resources inherent in caring for patients and families experiencing chronic conditions.

NRSG 4200 SUS - Scholarship for Evidence-Based Practice**Credits: (3)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem, Online***Typically Taught Spring Semester:** *Full Sem, Online*

Description: Nursing 4200 focuses on a basic understanding of how multiple sources of evidence are developed and integrated into an evidence-based nursing environment. These sources include the formal research process, quality improvement data, clinical judgment, inter-professional perspectives, and patient preference. This course will include the application of advanced knowledge and skills required for translating reliable evidence into evidence-based practice and clinical judgments. The course will also support the establishment of a research-base for the student's personal nursing practice, as well as influence the continual improvement of healthcare quality and safety.

NRSG 4300 - Healthcare Policy and Decision Making**Credits: (3)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem, Online***Typically Taught Spring Semester:** *Full Sem, Online*

Description: Nursing 4300 will explore healthcare policies, including financial and regulatory policies, which directly and indirectly influence nursing practice. These policies shape responses to organizational, local, national, and global issues in healthcare. Students will apply advanced skills and knowledge to identify, analyze, and problem-solve variables affecting nursing decisions and healthcare policy encountered in nursing practice. Topics that provide an overview of legal and ethical principles and theories will be presented, emphasizing the role of ethics and healthcare policy in nursing.

NRSG 4400 SUS/CEL - Population Health in Nursing**Credits: (4)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem, Online***Typically Taught Spring Semester:** *Full Sem, Online*

Description: Nursing 4400 explores nursing in diverse populations in a local and global context emphasizing disease prevention, health promotion and cultural competency for the improvement of health status throughout the lifespan. Focus will include disparities in health and health care services, and the impact of behavior and lifestyle choices. Course projects will incorporate application of advanced skills and knowledge related to health needs and health promotion at the individual and community level. Students will examine frameworks of community and public health, assess and analyze prevalent population-based health issues, and explore population-based interventions.

NRSG 4450 - Providing Identity-Affirming Care

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course explores how aspects of identity such as age, disability status, spiritual orientation, race/ethnicity, sexual orientation, gender identity and expression, culture, and ancestry shape how we interact with one another, and provide care. An understanding of terminology, history, cultural contexts, and social justice surrounding identity and intersectionality will prepare health and helping professionals as they emerge into an increasingly diverse society.

NRSG 4500 - Nursing Management and Leadership

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Nursing 4500 is designed to facilitate student learning and application of advanced skills and knowledge related to nursing leadership and nursing management. In accordance with this, students will explore and examine personal and professional characteristics of nurse leaders and nurse managers which will prepare them to lead through evidence-based principles. Students will also gain experience in communication and collaboration with community partners and interdisciplinary teams, which will prepare them to assist in the advancement of the profession of nursing through empowerment, change, and anticipation of nursing's future.

NRSG 4600 - Communication, Collaboration, and Information Management in Healthcare

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Nursing 4600 will incorporate application of advanced skills and knowledge related to information management, patient care technology, and effective interpersonal communication modalities. These skills are critical in preparing nurses to deliver quality patient care in a variety of healthcare settings. Students will examine information management tools used to monitor: outcomes of care processes, patient care technologies essential to ensuring high quality, safe patient care, and communication and collaboration skills necessary to providing optimal patient-centered care.

NRSG 4700 - Forensic Nursing

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course explores nursing in the field of forensics in both criminal and civil contexts. The different roles and responsibilities of forensic nurses will be explored and best-practices for evidence collection and

preservation will be reviewed. Holistic care of victims and families will be emphasized. Students will review victimology, evaluate prevalent population-based health issues, and explore forensic nursing interventions.

NRSG 4830 - Directed Theoretical Readings

Credits: (1-3)

Description: Involves a contract with faculty to include reading and writing of materials relevant to baccalaureate level nursing. Subject emphasis arranged with faculty.

May be repeated once up to 6 credit hours.

NRSG 4840 - Honors Seminar in Nursing

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Completion of this course is required for students enrolled in the Annie Taylor Dee School of Nursing Honors Program and working toward earning Departmental Honors in Nursing. Enrollment in this course requires program approval. This course facilitates nursing honors students in the development, implementation, evaluation, and presentation of their capstone honors project.

NRSG 4850 - Study Abroad

Credits: (1-6)

Variable Title

Description: The purpose of this course is to provide opportunities for students in health professions to experience a study abroad program that is designed to explore healthcare, culture, and clinical experience.

May be repeated 5 times up to 6 credit hours.

NRSG 6010 - Fundamentals of Occupational Health Nursing

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is an introduction to Occupational Health Nursing. NRSG 6010 describes the fundamentals of the profession and duties of nurses working in Occupational Health. The course explores environmental, sociopolitical and legal factors influencing Occupational Health. NRSG 6010 provides a foundation for NRSG 6020 and prepares learners for taking the ABOHN Occupational Health Certification Exam.

NRSG 6020 - Occupational Health Nursing Role Development

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is an introduction to Occupational Health Nursing and builds upon NRSG 6010. NRSG 6020 the role and competencies of an Occupational Health Nurse (OHN) and prepares learners to take the ABOHN Occupational Health Certification Exam.

Pre-requisite(s): Undetermined at this time. This will be a 15-credit certificate program of which this course is one of the five requisite courses. It will be done as a partnership (WSU 6 credits) with the University of Utah (9 credits).

NRSG 6110 - Translating Research and Evidence into Practice

Credits: (3)**Typically Taught Summer Semester:** *2nd Blk Online*

Description: This course has been designed to expand on students' education and background regarding establishing an individual evidence-based practice to lead change at the organizational level. Students will critically appraise, compare, and evaluate published quantitative and qualitative research reports to develop, implement, and maintain an evidence-based innovation and/or practice within the professional settings of the nurse administrator and nurse educator.

Pre-requisite(s): Must be officially accepted into Weber State University's MSN program to register for this course. May be repeated up to three times.

NRSG 6120 - Research and Statistics**Credits: (3)****Typically Taught Summer Semester:** *1st Blk Online (MSN), Full Sem Online (DNP)***Typically Taught Fall Semester:** *Full Sem Online (DNP)***Typically Taught Spring Semester:** *Full Sem Online (DNP)*

Description: This course focuses on the development of the knowledge and skill required to evaluate numerical data in support of an evidence-based environment for nursing administration and nursing education. Skills related to utilization of parametric and non-parametric methods of statistical analysis of quantitative data will be emphasized.

Pre-requisite(s): The student must be officially accepted into Weber State University's MSN or DNP program to register for this class.

NRSG 6130 - Theoretical Foundations of Nursing Practice**Credits: (3)****Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem Online***Typically Taught Spring Semester:** *Full Sem Online*

Description: This course introduces the student to processes associated with the development and application of both nursing and non-nursing theory. These processes include the varied yet interdependent activities of theory analysis, description, critical reflection, and utilization of theory. In addition, the student will explore the utilization of both nursing and non-nursing theory in his or her practice of nursing.

Pre-requisite(s): The student must be officially accepted into the MSN program to register for this class.

NRSG 6140 SUS/CEL - Collaborative Approaches in Population Health**Credits: (3)****Typically Taught Summer Semester:** *2nd Blk, Online*

Description: This course examines the principles of ecological, global, and social determinants of health to design, deliver, and evaluate culturally relevant clinical prevention and health promotion interventions and strategies for individuals, families, communities, and aggregate populations. Ethical approaches to equitable, efficient, effective, and sustainable population-based health policies are also examined.

NRSG 6141 - Advanced Nursing Theory**Credits: (3)**

Description: This course is intended to introduce the student to the multiple patterns of knowing within nursing and the processes associated with the development of nursing knowledge and theory. These processes include the varied yet interdependent activities of critical reflection, validation, confirmation, and utilization of nursing knowledge. In addition, the student will explore the utilization of nursing theory and knowledge to his or her own experiences and everyday nursing practice.

Co-Requisite(s): NRSG 6110 and NRSG 6180.

NRSG 6150 - Advanced Pathophysiology, Pharmacology and Assessment for the Nurse Educator

Credits: (3)

Typically Taught Spring Semester: *1st Blk, Online*

Description: This course prepares the graduate with advanced knowledge and skills in the three areas of pathophysiology, pharmacology, and health assessment. Students will build upon previous knowledge in these three areas by participating in case-based learning and integrating advanced principles with educational practices.

Pre-requisite(s): Must be officially accepted into Weber State University's MSN or Post-Master of Science in Nursing Certificate program to register for this course.

NRSG 6160 - Evidence-Based Practice

Credits: (3)

Description: This course provides students the knowledge and skill required to develop and implement evidence-based processes within the professional settings of the nurse administrator and the nurse educator.

Pre-requisite(s): NRSG 6110, NRSG 6141, NRSG 6180.

Co-Requisite(s): NRSG 6120.

NRSG 6170 - Teaching Strategies

Credits: (3)

Typically Taught Fall Semester: *2nd Blk-Online*

Description: This course prepares the student to apply teaching and learning theories within both the traditional and non-traditional classroom setting and clinical practice settings. Teaching strategies designed to support student learning across varied settings and modalities will be emphasized.

Pre-requisite(s): The student must be officially accepted into the MSN or Post-Master of Science in Nursing Certificate program to register for this course.

NRSG 6180 - Improving Patient Care and Nursing Practice through Information Systems

Credits: (2)

Typically Taught Fall Semester: *1st Blk Online*

Description: This course provides students the knowledge and skill required to effectively apply the principles of information technology within the healthcare setting. Course content includes the utilization of information technology to analyze healthcare data for the improvement of nursing decision-making and to support quality in nursing administration and nursing education settings.

Pre-requisite(s): Must be officially accepted into Weber State University's MSN program to register for this course.

NRSG 6190 - Professional Foundations for Graduate Nursing Students

Credits: (1)

Typically Taught Summer Semester: *1st Blk Online (MSN)*

Typically Taught Fall Semester: *1st Blk Online (DNP)*

Description: This foundational course provides incoming graduate students with nursing communication proficiencies required for course work and scholarly projects. In this course, students will develop the knowledge and skills required for graduate scholarly projects, scientific community dissemination, and professional workplace collaboration.

Pre-requisite(s): The student must be officially accepted into Weber State University's MSN or DNP program to register for this class.

NRSG 6205 - Transitions to Advanced Practice

Credits: (1)**Typically Taught Fall Semester:** *Full Sem***Description:** This course is designed to present a foundation for understanding nursing theory and the relationship of theory and research to evidence based practice and conceptual models of advanced practice nursing.**Pre-requisite(s):** Admission to an MSN Family Nurse Practitioner Program.**NRSG 6210 - Advanced Pathophysiology I****Credits: (2)****Typically Taught Summer Semester:** *Full Sem-Online***Typically Taught Fall Semester:** *Full Sem-Online***Typically Taught Spring Semester:** *Full Sem-Online***Description:** This foundational pathophysiology course introduces nurse practitioner (NP) students to the pathophysiological processes underlying various diseases and non-disease states. Students explore how alterations in normal physiology can result in clinical issues and diseases encountered in NP practice. The course emphasizes cell dysfunction and dysregulation, which manifest as systemic symptoms and associated diseases. Topics include etiology, modifiable risk factors, environmental exposures, physiological mutations, and mechanisms - both specific and nonspecific - to optimize cell, tissue, organ, and system function. Students will identify, analyze, and evaluate evidence related to disease pathology affecting specific body systems across the lifespan, providing a foundation for patient management.**NRSG 6211 - Advanced Pathophysiology II****Credits: (2)****Typically Taught Summer Semester:** *Full Sem, Full Sem - Online***Typically Taught Fall Semester:** *Full Sem, Full Sem - Online***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online***Description:** Building on *NRSG 6210 - Advanced Pathophysiology II*, this course deepens nurse practitioner (NP) students' understanding of pathophysiological processes in both disease and non-disease processes, with an emphasis on clinical application in NP-patient care. Students examine advanced topics in cell dysfunction and regulatory imbalances, exploring how these alterations manifest as complex systemic symptoms and diseases. The course covers a range of topics, including etiology, modifiable risk factors, environmental exposures, physiological mutations, and mechanisms to maintain optimal function at the cell, tissue, organ, and system levels. Students continue to develop skills in identifying, analyzing, and evaluating evidence on disease pathology across the lifespan, preparing them for clinical decision-making and patient management.**NRSG 6212 - Advanced Psychopathophysiology****Credits: (2)****Typically Taught Fall Semester:** *Full Sem***Description:** This course is designed to prepare Psychiatric-Mental Health Nurse Practitioners for advanced practice by providing a solid foundation in the biological underpinnings of psychiatric disorders. Students will develop the skills necessary to critically analyze and apply this knowledge in their clinical roles as advanced practice nurses in the field of psychiatric-mental health. This course delves into the advanced study of psychopathophysiology, focusing on the complex interplay between biological, psychological, and social factors that contribute to mental health disorders. Students will explore the latest research and evidence related to the etiology, pathophysiology, and clinical manifestations of psychiatric disorders. The course integrates advanced concepts in neurobiology, genetics, and psychopharmacology to provide a comprehensive understanding of the physiological basis of mental health conditions. Emphasis is placed on critical thinking, diagnostic reasoning, and the application of advanced concepts in psychiatric nursing practice.**NRSG 6215 - Advanced Pharmacology I**

Credits: (2)**Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This foundational core course overviews pharmacokinetics and pharmacodynamics for nurse practitioners and provides the foundation for safe efficacious patient-centered medication management in a clinical setting. Course content includes information on pharmacology principles, terminology, drugs that affect the autonomic nervous system (ANS), special populations, clinical guidelines, and evidenced-based pharmaceutical interventions for infectious disease, endocrine function, and pain or comfort. Ethical and legal parameters for prescriptive practice are reviewed related to specific medication choice, dosing, drug interactions and side effects, and patient monitoring, education, and evaluation for effectiveness across the lifespan. Advanced Pharmacology I adheres to accreditation criteria for graduate nursing prescriptive principles and nurse practitioner practice.

NRSG 6216 - Advanced Pharmacology II**Credits: (2)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This foundational core course is a continuation of NRSG 6215 - Advanced Pharmacology I. It continues to overview efficacious patient-centered medication management in a clinical setting. Course content includes information on evidenced-based pharmaceutical interventions for central nervous system pathology, mental and behavioral disorders, cardiovascular and renal system disease, gastrointestinal illness, and respiratory, ENT, dermatology, and immunity syndromes. Prescriptive practice principles medication choice, dosing, drug interactions and side effects, and patient monitoring, education, and evaluation for effectiveness across the lifespan are considered and analyzed. Advanced Pharmacology II adheres to accreditation criteria for graduate nursing prescriptive principles and nurse practitioner practice.

NRSG 6217 - Advanced Psychopharmacology**Credits: (2)****Typically Taught Spring Semester:** *Full Sem*

Description: This graduate-level course in Advanced Psychopharmacology for Psychiatric Mental Health Nurse Practitioners (PMHNPs) is designed to provide an in-depth exploration of the principles, theories, and practical applications of psychopharmacology in the context of psychiatric nursing practice. Building upon foundational knowledge acquired in basic psychopharmacology courses, this advanced course will empower students with the expertise needed to critically analyze, prescribe, and manage psychotropic medications for various populations across the lifespan.

NRSG 6220 - Advanced Health Assessment**Credits: (2)****Typically Taught Fall Semester:** *Full Sem***Course Fee:** \$537.00

Course Fee Purpose: Course fees are used for the purchase of assessment kits, ophthalmoscopes, otoscopes, tuning forks, reflex hammers, task trainers, lab supplies, teaching technology, maintenance and supplies of nurse practitioner exam rooms, and standardized patients.

Description: This course allows students to transition into the role of the nurse practitioner through the practice of clinically relevant activities such as comprehensive holistic health history, use of motivational interviewing, a systematic physical assessment, and critical reasoning to determine appropriate differential diagnoses. Lab student learning activities and select standardized patient encounters are used to present and practice physical assessment for nurse practitioner (NP) patient-centered care. Students focus weekly on a body system and incorporate advanced health assessment for patients across the lifespan.

NRSG 6221 - Diagnostic Reasoning

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$44.00

Course Fee Purpose: Course fees are used for the purchase of assessment kits, ophthalmoscopes, otoscopes, tuning forks, reflex hammers, task trainers, lab supplies, teaching technology, and maintenance and supplies of nurse practitioner exam rooms.

Description: This lab course for nurse practitioner students teaches the advanced practice nurse to utilize principles of diagnostic reasoning to assess and manage patients with acute and chronic health conditions across the lifespan commonly seen in primary care settings.

NRSG 6222 - Mental Health Assessment, Diagnostic Reasoning& Treatment I

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed for Psychiatric Mental Health Nurse Practitioner students seeking a comprehensive understanding of the foundational concepts and skills involved in mental health assessment, diagnostic reasoning, and treatment planning. Emphasizing evidence-based practice and a holistic approach, students will delve into the theoretical frameworks, assessment tools, and therapeutic interventions essential for providing high-quality mental health care. The course integrates didactic instruction, case studies, and practical application exercises to develop the critical thinking and clinical reasoning skills necessary for advanced psychiatric nursing practice. This course serves as a foundational building block for subsequent courses in the psychiatric mental health nurse practitioner program, providing students with the knowledge and skills needed to excel in advanced psychiatric nursing practice.

NRSG 6223 - Mental Health Assessment, Diagnostic Reasoning& Treatment II

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: This advanced graduate-level course is designed for Psychiatric Mental Health Nurse Practitioner students to deepen their understanding and proficiency in mental health assessment, diagnostic reasoning, and treatment planning. Building upon the foundational knowledge gained in the NRSG 6222 Mental Health Assessment, Diagnostic Reasoning & Treatment I course, this second installment focuses on refining clinical skills, evidence-based practice, and critical thinking in the context of psychiatric nursing. Emphasis is placed on comprehensive mental health assessment, differential diagnosis, and the development of advanced treatment plans for individuals across the lifespan.

NRSG 6225 - FNP Clinical Skills

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$287.00

Course Fee Purpose: Course fees are used for the purchase of task trainers, lab supplies, teaching technology, maintenance and supplies of nurse practitioner exam rooms, casting equipment, toenail removal kits, joint injections, ultrasound machine, suturing kits, dermatology biopsy kits and supplies, corneal abrasion kits, and cow eyeballs.

Description: This clinical skill course provides opportunities for the nurse practitioner (NP) students to learn and practice a variety of essential clinical care skills. Students attend clinical skill lab weekly for instruction from interprofessional peers and nurse practitioner faculty. NP students acquire clinical skill performance, gather diagnostic and objective data for conditions requiring procedures, management strategies, patient education, and ICD-10 & CPT billing and coding instruction for common clinical issues.

NRSG 6230 - FNP Patient Care Lab: Women's Health

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$242.00

Course Fee Purpose: Course fees are used for the purchase of task trainers, lab supplies, teaching technology, and maintenance and supplies of nurse practitioner exam rooms.

Description: This laboratory skill course focuses on conditions that affect women's health across the lifespan and provides opportunities for Family Nurse Practitioner (FNP) students to learn about and practice essential primary care skills. The FNP student will receive instruction from interprofessional peers and nurse practitioner faculty on diagnosis, treatment, and follow-up for various conditions. This lab experience includes procedural skills, management strategies, patient education, charting, and billing codes for common healthcare conditions in women's health.

NRSG 6231 - FNP Patient Care Lab: Pediatrics

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$51.00

Course Fee Purpose: Course fees are used for the purchase of task trainers, lab supplies, teaching technology, and maintenance and supplies of nurse practitioner exam rooms.

Description: This laboratory skill course focuses on conditions that affect children across the lifespan and provides opportunities for Family Nurse Practitioner (FNP) students to learn about and practice essential primary care skills. The FNP student will receive instruction from interprofessional peers and nurse practitioner faculty on diagnosis, treatment, and follow-up for various conditions in the pediatric population. This lab experience includes procedural skills, management strategies, patient education, charting, and billing codes for common healthcare conditions.

NRSG 6235 - FNP Patient Care I: Adult

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The course is designed to provide advanced theoretical knowledge and emphasis on adult healthcare for the nurse practitioner student. The course prepares students to manage prevalent healthcare concerns encountered across the lifespan of male and female adults. Nurse practitioner students include significant others, family, and available community resources for patient health promotion and illness management, assessment, diagnosis, intervention, healthcare plans, follow-up, and evaluation of adults in a variety of settings.

NRSG 6240 - FNP Patient Care II: Older Adult

Credits: (2)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Description: The course provides advanced theoretical knowledge and emphasizes nurse practitioner primary care of older adults. Students learn the management of common older adult healthcare problems in the community and a variety of healthcare settings. The course focuses on the various health issues for older adults, including health promotion, functional ability, chronic disease management, polypharmacy, palliative intervention, and end-of-life care.

NRSG 6241 - Advanced Practice Primary Care Clinical II

Credits: (1)**Typically Taught Summer Semester:** *Full Sem*

Description: This is the clinical companion course to MSN 6240 Advanced Practice Nursing: Older Adult Health. This clinical course is designed for the nurse practitioner student to deliver high quality healthcare with a focus on adults or older adults. The course prepares students to apply acquired skills, magnify diagnostic reasoning through psychomotor, affective and cognitive domains. This course requires students to diagnose and determine best practice to treat illness and prevent disease as a primary care FNP provider.

Co-Requisite(s): NRSB 6240 - FNP Patient Care II: Older Adult.

NRSB 6245 - FNP Patient Care III: Pediatrics**Credits: (2)****Typically Taught Fall Semester:** *Full Sem-Online***Typically Taught Spring Semester:** *Full Sem-Online*

Description: This course provides advanced theoretical knowledge with a focus on pediatric healthcare for nurse practitioner students, covering care from newborns to adolescents. It prepares students to address common healthcare issues encountered across the pediatric lifespan. Nurse practitioner students learn to incorporate family, significant others, and community resources into patient care for health promotion, illness management, assessment, diagnosis, intervention, care planning, follow-up, and evaluation of children in various healthcare settings.

NRSB 6250 - FNP Patient Care IV: Women's Health**Credits: (2)****Typically Taught Summer Semester:** *Full Sem-Online***Typically Taught Fall Semester:** *Full Sem-Online*

Description: The course is designed to provide advanced theoretical knowledge and emphasis on unique health care needs of women. The course prepares students to manage prevalent health care concerns of women, including; maturation, sexuality, family planning, contraception, perinatal care (preconception through pregnancy), and menopause. Concepts will focus on strategies for health promotion and disease prevention through the lifespan of a woman, as well as management of selected issues related to fertility, pregnancy, and aging.

NRSB 6251 - Advanced Practice Primary Care Clinical IV**Credits: (1)****Typically Taught Fall Semester:** *Full Sem*

Description: This is the clinical companion course to MSN 6250 Advanced Practice Nursing: Women's Health. This clinical course is designed for the nurse practitioner student to deliver high quality healthcare with a focus on women's health. The course prepares students to apply acquired skills, magnify diagnostic reasoning through psychomotor, affective and cognitive domains. This course requires students to diagnose and determine best practice to treat illness and prevent disease as a primary care FNP provider.

Co-Requisite(s): NRSB 6250 - FNP Patient Care IV: Women's Health.

NRSB 6255 - Leadership and Accountability in Advanced Nursing**Credits: (2)****Typically Taught Summer Semester:** *1st Blk Online*

Description: The purpose of this course is to provide graduate nursing students with an overview of personal, organizational and systems leadership. At the conclusion of this course, students will be able to apply leadership skills and ethical decision making as it relates to healthcare policy, legal regulation, quality improvement and patient safety.

Pre-requisite(s): Must be officially accepted into the MSN program to register for this class.

NRSG 6256 - Transition to Advanced Practice II

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to complement NRSG 6260 Advanced Practice Nursing Clinical Practicum in preparing the family practice nursing student for the certification examination and the advanced practice role. The course allow students to investigate a variety of topics that impact advanced practice nursing, issues for special populations, leadership competencies, impact of policies on healthcare, and principles of independent or NP managed practices.

Pre-requisite(s): NRSG 6205 - Transitions to Advanced Practice.

Co-Requisite(s): NRSG 6260 - Nurse Practitioner Immersion.

NRSG 6260 - Nurse Practitioner Immersion

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: This is the final clinical course of the FNP Program. This course is designed for the nurse practitioner student to evaluate individual and system effectiveness in delivery of quality healthcare to patients across the lifespan. The course evaluates the student's ability to apply acquired skills, magnify diagnostic reasoning through psychomotor, affective and cognitive domains. This course also evaluates the student's ability to diagnose and determine best practice to treat illness and prevent disease.

Pre-requisite(s): NRSG 6241, NRSG 6251.

NRSG 6270 - Mental Health for Primary Care

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem*

Description: Family nurse practitioners (FNPs) identify physiological and mental health concerns to promote optimal health. Evidenced-based mental/behavioral health assessment, diagnosis, and interventions across the lifespan ensure intuitive and analytical clinical diagnostic reasoning for intentional healthcare recommendations. Advanced practice concepts, theories, current research, mental/behavioral healthcare diagnosis principles, and pharmacotherapeutic decision-making for FNPs are explored in this course.

NRSG 6271 - Psychotherapeutic Modalities

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This graduate-level course is designed to equip Psychiatric Mental Health Nurse Practitioners (PMHNPs) with a comprehensive understanding of psychotherapeutic modalities and their application in mental health care. Through a combination of theoretical foundations, evidence-based practices, and practical skills development, students will gain the knowledge and competence necessary to provide effective psychotherapeutic interventions in their role as advanced practice psychiatric nurses.

NRSG 6272 - Substance Abuse& Addiction Disorder Therapy& Management

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: This graduate-level course is designed to provide Psychiatric Mental Health Nurse Practitioners (PMHNPs) with advanced knowledge and skills in the assessment, diagnosis, and evidence-based treatment of substance abuse and addiction disorders. The course will explore the complex interplay of biological, psychological,

and social factors contributing to addiction and will emphasize a holistic and patient-centered approach to therapy and management. Through a combination of theoretical discussions, case studies, and practical applications, students will gain the competencies needed to address the unique challenges posed by substance abuse within the context of psychiatric mental health care.

NRSG 6300 - Quality Improvement, Patient Safety and Risk Issues in Patient Care Delivery

Credits: (3)

Typically Taught Fall Semester: *2nd Blk- Online*

Description: This course focuses upon the nurse administrator's responsibility to develop and maintain a culture of safety, reduce and prevent harm to patients, and reduce institutional risk and liability issues through the utilization of healthcare outcomes measurement and application of sound principles and practices associated with quality improvement.

Pre-requisite(s): The student must be officially accepted into Weber State University's MSN or Post-Master of Science in Nursing Certificate program to register for this course.

NRSG 6324 - Financial Issues in Nursing Administration

Credits: (2)

Typically Taught Fall Semester: *2nd Blk Online*

Description: This course provides a conceptual foundation for the nurse administrator's accountability to provide fiscal resource planning, forecasting and resource allocation, strategic planning that addresses future trends, oversight of all nursing related operating aspects, and the achievement of the financial goals of the healthcare organization.

Pre-requisite(s): Must be officially accepted into Weber State University's MSN or Post-Master of Science in Nursing Certificate program to register for this course.

NRSG 6340 - Compliance with Legal and Regulatory Systems in Patient Care Delivery

Credits: (3)

Description: This course focuses upon the nurse administrator's responsibility to develop and maintain a healthcare environment that fulfills the compliance standards and criteria established by both state and national legal and regulatory systems.

Pre-requisite(s): NRSG 6110, NRSG 6120, NRSG 6141, NRSG 6160, NRSG 6180,

Co-Requisite(s): NRSG 6324, NRSG 6360.

NRSG 6360 - Scope and Practice of Nursing Administration

Credits: (2)

Typically Taught Spring Semester: *2nd Blk Online*

Description: This course addresses the nurse administrator's responsibility for the overall management of patient care delivery services and the representation of nursing services at the highest level of the organization across a wide variety of settings.

Pre-requisite(s): Must be officially accepted into Weber State University's MSN Program to register for this course.

NRSG 6380 - Retaining and Developing a Competent Workforce in Nursing

Credits: (2)

Typically Taught Spring Semester: *1st Blk Online*

Description: This course addresses the overall operational management and administration functions related to staffing, staff development, and managerial issues including coaching, discipline and employee support. Processes related to labor relations within healthcare is addressed.

Pre-requisite(s): Must be officially accepted into Weber State University's MSN or Post-Master of Science in Nursing Certificate program to register for this course.

NRSG 6400 INT - Nurse Leadership & Management Residency

Credits: (2)

Typically Taught Spring Semester: *Full Sem-Online*

Description: This practicum is designed to prepare the student for a career in nursing administration and leadership. During the MSN Leadership& Management Residency, students will participate in focused participative learning activities with advanced prepared nurse leaders at the executive, director, or manager level. The student, faculty, and assigned nurse administrator residency preceptor will collaboratively design the residency experience.

Pre-requisite(s): The student must be officially accepted into the MSN or Post-Master of Science in Nursing Certificate program to register for this course.

NRSG 6500 - Theoretical Foundations in Nursing Education

Credits: (3)

Description: This course focuses upon the knowledge and skills required to utilize established teaching and learning theories developed to enhance the nursing educational process. The practical utility of these teaching and learning theories in diverse nursing education learning environments will be emphasized.

Pre-requisite(s): NRSG 6110, NRSG 6141, NRSG 6180.

NRSG 6520 - Curriculum Development for Nursing Educators

Credits: (3)

Typically Taught Fall Semester: *1st Blk Online*

Description: This course focuses on the concepts and organizing frameworks for curriculum design, course development and desired outcomes, standards of nursing education and practice, continuing education, and health care educational programs. Issues related to program accreditation and related social and legal issues will be examined.

Pre-requisite(s): The student must be officially accepted into Weber State University's MSN or Post-Master of Science in Nursing Certificate program to register for this course.

NRSG 6540 - Measurement of Competence and Outcomes in Nursing Education

Credits: (3)

Typically Taught Fall Semester: *2nd Blk Online*

Description: This course focuses upon established theories of measurement and evaluation coupled with strategies for implementing evaluation of student learning, program outcomes, and faculty performance targets. Accurate interpretation of evaluation data to support an evidence-based response to student and program evaluation results will be emphasized.

Pre-requisite(s): The student must be officially accepted into Weber State University's MSN or Post-Master of Science in Nursing Certificate program to register for this course.

NRSG 6560 - Socialization in the Role of Nursing Educator

Credits: (2)

Typically Taught Spring Semester: *2nd Blk Online*

Description: This course prepares the student to function proficiently in the nurse educator role within a variety of learning environments and social settings. The development of professional and personal adaptive strategies will be emphasized.

Pre-requisite(s): Must be officially accepted into Weber State University's MSN program to register for this course.

NRSG 6580 - Clinical Nursing Instruction in Higher Education and Community Settings

Credits: (3)

Description: This course prepares the student to apply teaching and learning theories within the practice laboratory and clinical settings. The clinical application component of this course will provide the student the opportunity to participate, with supervision, in a practice laboratory and/or clinical instruction environment.

Pre-requisite(s): NRSG 6110, NRSG 6120, NRSG 6141, NRSG 6160, NRSG 6180, NRSG 6520, NRSG 6540, NRSG 6560.

Co-Requisite(s): NRSG 6600, NRSG 6700.

NRSG 6600 - Nursing Instruction in Higher Education and Community Settings

Credits: (3)

Description: This course prepares the student to apply teaching and learning theories within both the traditional and non-traditional classroom setting. Teaching strategies designed to support student learning across varied settings and modalities will be emphasized.

Pre-requisite(s): NRSG 6110, NRSG 6120, NRSG 6141, NRSG 6160, NRSG 6180, NRSG 6500, NRSG 6520, NRSG 6540, NRSG 6560.

Co-Requisite(s): NRSG 6580, NRSG 6700.

NRSG 6700 INT - Nurse Educator Residency

Credits: (2)

Typically Taught Spring Semester: *Full Sem - Online*

Description: This practicum is designed to prepare the student for a career in nursing education and leadership. During the MSN Educator Residency, students will participate in focused participative learning activities with advanced prepared nurse educators at an academic and/or healthcare service educational setting. The student, faculty, and assigned nurse educator residency preceptor will collaboratively design the residency experience.

Pre-requisite(s): The student must be officially accepted into the MSN or Post-Master of Science in Nursing Certificate program to register for this course.

NRSG 6710 - Advanced Health Assessment for the Nurse Educator

Credits: (2)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course lays the groundwork for students to perform comprehensive and holistic health histories, review of systems, and physical examinations for patients. The overall purpose will be focused upon developing strategies and skills to assess the health care needs of people across the life span. Students are challenged to identify normal assessment findings and critically analyze variations from normal and apply that knowledge for health education.

Pre-requisite(s): The student must be officially accepted into the MSN program and have completed the first semester of study prior to registering for NRSG 6710.

NRSG 6720 - Advanced Pharmacology for the Nurse Educator

Credits: (2)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course overviews pharmacokinetics and pharmacodynamics for optimum individual client management. Advanced practice nursing students are prepared to safely monitor medication regimens for patients

across the lifespan based on clinically relevant ethical and legal parameters and consideration of evidenced based practice guidelines and protocols for effective pharmacology management and education.

Pre-requisite(s): The student must be officially accepted into the MSN program and have completed the first semester of study prior to registering for NRSG 6720.

NRSG 6730 - Advanced Pathophysiology for the Nurse Educator

Credits: (2)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course is a core graduate level course. This course is designed to teach the master level nursing student frequently seen alterations in physiology. The course will focus on modifiable risk factors, exposures, physiological mutations, and presenting signs and symptoms. Students will utilize evidence-based practice and research to identify, analyze and evaluate disease pathology across the lifespan.

Pre-requisite/Co-requisite: The student must be officially accepted into the MSN program and have completed the first semester of study prior to registering for MSN 6730.

NRSG 6801 - Integrating Scholarship into Practice

Credits: (2)

Typically Taught Fall Semester: *Full Sem-Online*

Description: The NRSG 6801 course is designed as a foundational course to prepare graduates to be information literate and to practice from an evidence-based approach in their direct and indirect advanced nursing roles. In addition, students will begin the compilation of a scholarly paper through the identification of a problem in practice that reflects a framework, interprofessional collaboration, research, and current standards of practice.

Pre-requisite(s): The student must be officially accepted into Weber State University's MSN program to register for this course and complete and pass NRSG 6110 and NRSG 6120.

NRSG 6802 - Integrating Scholarship into Practice

Credits: (2)

Typically Taught Spring Semester: *Full Sem-Online*

Description: The NRSG 6802 course is designed for graduates to prepare and present a scholarly project through identification of a problem in practice and that reflects a framework, interprofessional collaboration, research, and current standards of practice.

Pre-requisite(s): The student must be officially accepted into Weber State University's MSN program to register for this course and complete NRSG 6110 and pass NRSG 6801.

NRSG 6850 - MSN Project Development and Implementation Extension Course

Credits: (1)

Description: For students who have completed all course requirements for MSN, but have not completed the MSN project requirement. Students must register for a minimum of 1 credit of NRSG 6850 to remain enrolled in the MSN program.

Pre-requisite(s): Faculty approval.

May be repeated two (2) times with a maximum of 2 credit hours.

NRSG 6860 INT - Independent Study Graduate Programs

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: Students must have prior approval of the independent study option from the Program Director or Department Chair. This is an independent study course designed for graduate students to apply specific knowledge and skills related to high-impact educational experiences (HIEE) under the supervision of a faculty member. HIEE includes experiences for graduate students and may include leadership and or community immersion experiences such as graduate project extensions, DNP practicum hours, study abroad, or similar activities. For practicum and study abroad, this course offers 60-180 HIEE hours with one credit= of 60 clock hours. May be repeated for a maximum of nine credit hours.

NRSG 6920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. May be repeated for a total maximum of 6 credit hours.

NRSG 7002 - Transition to APRN Practice

Credits: (2)

Typically Taught Fall Semester: *Full Sem, Full Sem-Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: The course provides students with a foundation for understanding the process and phases of transition to the role of the nurse practitioner, the requirements for credentialing as an Advanced Practice Registered Nurse (APRN), participation in professional organizations, and regulatory compliance. An understanding of issues related to ethical and legal role expansion implications, negotiating contracts, billing and reimbursement, and general leadership competencies are presented.

NRSG 7003 - Telehealth for Advanced Practice Nurses

Credits: (0.5)

Typically Taught Fall Semester: *1st Block Online*

Description: Telehealth for Advanced Practice Nurses explores the ongoing development of telehealth technology since the COVID-19 pandemic and the need to provide video and/or telephone visits with patients. In light of sweeping policy changes, it is essential that nurse practitioners are cognizant of this powerful tool to promote continuity of care and offer convenient, routine care across a broad range of patient scenarios.

NRSG 7004 - Complementary and Alternative Therapies for Advanced Practice Nursing

Credits: (1)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Complementary and Alternative Therapies for Advanced Practice Nursing evaluates the major components of complementary and alternative healthcare models and evidence-based recommendations related to complementary healthcare. This course will introduce you to alternative approaches to allopathic (Western) medical therapies. Nurse practitioners are in an ideal position to reduce harm from and maximize the benefits of complementary and alternative therapies. This course focuses on a holistic and person-centered approach to health care and treatment based on the whole person.

NRSG 7010 - Scholarly and Ethical Foundations for Advanced Practice Nursing

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course examines the scientific, philosophical, and ethical underpinnings of advanced nursing practice, including the relationships among theory, research, and practice. Students critically appraise types of evidence in nursing and/or other healthcare disciplines to begin the initial literature review for the DNP Project.

Pre-requisite(s): Student must be accepted to the DNP program.

NRSG 7020 - Biostatistics/Epidemiology**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on the basic tools needed for the collection, analysis, and interpretation of research, in particular findings and recommendations for individuals and population health and health policy. Epidemiological principles, models, and approaches/strategies related to health and illness in at-risk populations are examined. General principle of research design and hypothesis testing are reviewed and research and non-research studies examined for human health and disease treatment.

Pre-requisite(s): Student must be admitted to the DNP program.

NRSG 7030 - Information Technology to Support Evidence-Based Practice**Credits: (2)**

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course examines principles of nursing informatics and how they are integrated in health care systems. Advanced informatics skills of database design, knowledge management, clinical decision support, and project management to guide the DNP student in recommending, evaluating, and implementing patient care technologies. This course offers 15 course practicum hours 1:4 credit to clock hours. (0.25 credit = 15 clock hours).

Pre-requisite(s): Student must be admitted to the Post Master's DNP or BSN to DNP-FNP program.

NRSG 7040 - Systems Approach and QI**Credits: (3)**

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course focuses on the DNP student critically appraising the evidence of quality improvement (QI) measures, strategies, and outcomes in health care systems. The DNP student designs and evaluates care delivery approaches within the current organizational, political, cultural, and economic context to ensure accountability for quality of health care and patient safety in various organizations.

NRSG 7050 - Advanced Population Health**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course explores upstream approaches to foster optimal physical, psychological, and social determinants of health at each level of the socioecological model. Students evaluate how to ethically engage in initiatives that promote empowerment for individuals, populations, and communities, with consideration and respect for various lived experiences and perspectives.

Pre-requisite(s): Student must be admitted to the DNP program.

NRSG 7060 - DNP Organizational Leadership

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem*

Description: This course examines theories and strategies to enhance the DNP student's leadership skills. Students are prepared to effectively lead change, facilitate interdisciplinary collaboration, and transform practice to impact the quality of health care and outcomes within complex healthcare systems.

Pre-requisite(s): Student must be admitted to the Post Master's DNP or BSN to DNP-FNP program.

NRSG 7070 - Healthcare Policy & Professionalism

Credits: (2)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: In this course, learners will incorporate principles of professionalism to engage with decision-makers in respectful and meaningful ways. Learners will then examine the policy-making process to identify opportunities that advanced practice nurses can employ to influence the development of strong healthcare policies. Finally, students will use their knowledge to analyze healthcare policies and identify strategies that could be used to advocate for individuals and the profession of nursing to ensure healthcare systems that are safe, fair, and ethical. Upon completion of this course, the student achieves course practicum hours.

Pre-requisite(s): Student must be admitted to the DNP program.

NRSG 7801 - DNP Project I

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Description: The DNP project courses produce a tangible and deliverable academic product created from a practice immersion experience, which is reviewed and evaluated by an academic committee. The final product shows evidence of the student's competence in critical thinking by translating evidence into practice and evaluating the evidence in the practice environment to improve healthcare outcomes. This course is the first of three courses (NRSG 7801 to NRSG 7803) and reflects a synthesis of the student's growth in knowledge and expertise throughout the program. NRSG 7801 focuses on project planning with the proposal presentation and IRB approval. The combined practicum hours within the project courses total 270-project practicum hours.

NRSG 7802 - DNP Project II

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Description: The DNP project courses produce a tangible and deliverable academic product created from a practice immersion experience, which is reviewed and evaluated by an academic committee. The final product shows evidence of the student's competence in critical thinking by translating evidence into practice and evaluating the evidence in the practice environment to improve healthcare outcomes. This course is the second of three courses (NRSG 7801 to NRSG 7803) and reflects a synthesis of the student's growth in knowledge and expertise throughout the program. NRSG 7802 focuses on project implementation and evaluation. The combined practicum hours within the project courses total 270-project practicum hours.

NRSG 7803 - DNP Project III

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: The DNP project courses produce a tangible and deliverable academic product created from a practice immersion experience, which is reviewed and evaluated by an academic committee. The final product shows evidence of the student's competence in critical thinking by translating evidence into practice and evaluating the evidence in the practice environment to improve healthcare outcomes. This course is the third of three courses (NRSG 7801 to NRSG 7803) and reflects a synthesis of the student's growth in knowledge and expertise throughout the program. NRSG 7803 focuses on project completion and dissemination with the final poster presentation.

NRSG 7804 - DNP Project IV

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The DNP project courses produce a tangible and deliverable academic product created from a practice immersion experience, which is reviewed and evaluated by an academic committee. The final product shows evidence of the student's competence in critical thinking by translating evidence into practice and evaluating the evidence in the practice environment aimed toward improving healthcare outcomes. This course is the fourth of six courses (NRSG 7801 to NRSG 7806) and reflects a synthesis of the student's growth in knowledge and expertise throughout the program. NRSG 7804 focuses on the implementation of the project. This course may contain 30 to 120 DNP practicum hours

NRSG 7805 - DNP Project V

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: The DNP project courses produce a tangible and deliverable academic product created from a practice immersion experience, which is reviewed and evaluated by an academic committee. The final product shows evidence of the student's competence in critical thinking by translating evidence into practice and evaluating the evidence in the practice environment aimed toward improving healthcare outcomes. This course is the fifth of five courses (NRSG 7801 to NRSG 7805) and reflects a synthesis of the student's growth in knowledge and expertise throughout the program. NRSG 7805 focuses on project results, discussion, conclusions, recommendations, project evaluation, and dissemination. Project practicum hours follow a 1:4 credit-to-clock hours ratio, which is variable per project course, at 0.5-1 credit-to-clock hours. For example, a 1 credit hour project course offers 0.5 credit-to-clock hours (1:4) for 30 practicum hours. A 2-credit hour project course offers 1 credit-to-clock hour (1:4) for 60 practicum hours. The combined practicum hours within the project courses total 240-project practicum hours.

Pre-requisite(s): NRSG 7801 and NRSG 7802 and NRSG 7803 and NRSG 7804.

NRSG 7806 - DNP Project VI

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: The DNP project courses produce a tangible and deliverable academic product created from a practice immersion experience, which is reviewed and evaluated by an academic committee. The final product shows evidence of the student's competence in critical thinking by translating evidence into practice and evaluating the evidence in the practice environment aimed toward improving healthcare outcomes. This course is an extension course for those students who do not complete their projects or who do not complete their required DNP Practicum hours in the allotted program of study. This course reflects a synthesis of the student's growth in knowledge and expertise throughout the program. NRSG 7806 focuses on project completion and practicum hours completion. Project practicum hours follow a 1:4 credit-to-clock hours ratio, which is variable per project course, at 0.5-1 credit-to-clock hours. For example, a 1 credit hour project course offers 0.5 credit-to-clock hours (1:4) for 30 practicum hours. A 2-

credit hour project course offers 1 credit-to-clock hour (1:4) for 60 practicum hours. The combined practicum hours within the project courses total 240-project practicum hours.

Pre-requisite(s): NRSG 7801 and NRSG 7802 and NRSG 7803 and NRSG 7804 and NRSG 7805 must be completed with a B- or higher and requires program director approval.

NRSG 7900 INT - DNP Practicum

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This practicum is for DNP nursing students to build on concepts and skills derived from DNP courses and focuses on developing advanced skills in integration and synthesis of practice and knowledge.

Pre-requisite(s): Students must be admitted to the DNP program.

May be repeated up for a maximum of 8 credit hours.

NRSG 7902 - FNP Clinical I

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to prepare the nurse practitioner student to deliver high quality primary care to patients of all ages, under the direction of a clinical preceptor. Students will enter the clinical setting and apply evidence-based practice and clinical reasoning principles to both diagnosing and treatment of patients across the lifespan. This course will also improve the student's ability to collect patient histories, perform physical examination, order and analyze diagnostic tests, determine differential diagnoses, plan intervention, prescribe medication, and document patient encounters. Emphasis is place on the student leaning to apply health promotion principals in order to prevent disease and mange individualized patient healthcare outcomes.

NRSG 7903 - FNP Clinical II

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to prepare the nurse practitioner student to deliver high-quality primary care to patients of all ages, under the direction of a clinical preceptor. Students will enter the clinical setting and apply evidence-based practice and clinical reasoning principles to both diagnosing and treatment of patients across the lifespan. This course will also improve the student's ability to collect patient histories, perform physical examinations, order and analyze diagnostic tests, determine differential diagnoses, plan intervention, prescribe medication, and document patient encounters. Emphasis is placed on the student learning to apply health promotion principles in order to prevent disease and manage individualized patient healthcare outcomes.

NRSG 7904 INT - FNP Clinical III

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to prepare the nurse practitioner student to deliver high-quality primary care to patients of all ages, under the direction of a clinical preceptor. Students will enter the clinical setting and apply evidence-based practice and clinical reasoning principles to both diagnosing and treatment of patients across the

lifespan. This course will also improve the student's ability to collect patient histories, perform physical examinations, order and analyze diagnostic tests, determine differential diagnoses, plan intervention, prescribe medication, and document patient encounters. Emphasis is placed on the student learning to apply health promotion principles in order to prevent disease and manage individualized patient healthcare outcomes.

NRSG 7905 - FNP Clinical IV

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to prepare the nurse practitioner student to deliver high-quality primary care to patients of all ages, under the direction of a clinical preceptor. Students will enter the clinical setting and apply evidence-based practice and clinical reasoning principles to both diagnosis and treatment of patients across the lifespan. This course will also improve the student's ability to collect patient histories, perform physical examinations, order and analyze diagnostic tests, determine differential diagnoses, plan intervention, prescribe medication, and document patient encounters. Emphasis is placed on the student learning to apply health promotion principles in order to prevent disease and manage individualized patient healthcare outcomes.

NRSG 7912 - PMHNP Clinical I

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This is the first of four clinical courses for Psychiatric Mental Health Nurse Practitioners (PMHNP) students to deliver high-quality healthcare to patients of all ages with a focus on psychiatric and mental healthcare. Students apply evidence-based practice clinical reasoning principles for assessment, diagnosis, and treatment interventions for a variety of psychiatric and mental health conditions. Students practice history taking, perform assessments, order and analyze diagnostic tests, determine differential diagnoses, plan interventions, and prescribe medications. Students apply health promotion principles for prevention and manage individualized healthcare outcomes through psychomotor, affective, and cognitive domains.

NRSG 7913 - PMHNP Clinical II

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: This is the second of four clinical courses for Psychiatric Mental Health Nurse Practitioners (PMHNP) students to deliver high-quality healthcare to patients of all ages with a focus on psychiatric and mental healthcare. Students apply evidence-based practice clinical reasoning principles for assessment, diagnosis, and treatment interventions for a variety of psychiatric and mental health conditions. Students practice history taking, perform assessments, order and analyze diagnostic tests, determine differential diagnoses, plan interventions, and prescribe medications. Students apply health promotion principles for prevention and manage individualized healthcare outcomes through psychomotor, affective, and cognitive domains.

NRSG 7914 - PMHNP Clinical III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This is the third of four clinical courses for Psychiatric Mental Health Nurse Practitioners (PMHNP) students to deliver high-quality healthcare to patients of all ages with a focus on psychiatric and mental healthcare. Students apply evidence-based practice clinical reasoning principles for assessment, diagnosis, and treatment interventions for a variety of psychiatric and mental health conditions. Students practice history taking, perform assessments, order and analyze diagnostic tests, determine differential diagnoses, plan interventions, and prescribe medications. Students apply health promotion principles for prevention and manage individualized healthcare outcomes through psychomotor, affective, and cognitive domains.

NRSG 7915 - PMHNP Clinical IV

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This is the final course of four clinical courses for Psychiatric Mental Health Nurse Practitioners (PMHNP) students to deliver high-quality healthcare to patients of all ages with a focus on psychiatric and mental healthcare. Students apply evidence-based practice clinical reasoning principles for assessment, diagnosis, and treatment interventions for a variety of psychiatric and mental health conditions. Students practice history taking, perform assessments, order and analyze diagnostic tests, determine differential diagnoses, plan interventions, and prescribe medications. Students apply health promotion principles for prevention and manage individualized healthcare outcomes through psychomotor, affective, and cognitive domains.

NUCM 4103 - Radiopharmaceuticals and Dosages

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Radiopharmacology, characterization of radiopharmaceuticals used in performing examinations and calculation of dosages.

NUCM 4203 - Scanning and Imaging Procedures I

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Organ concentration, excretion and absorption, measurements and imaging.

NUCM 4213 - Scanning and Imaging Procedures II

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Organ concentration, excretion and absorption, measurements and imaging.

NUCM 4223 - Nuclear Cardiology

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Pathology, indications for examination and procedures in nuclear cardiology.

NUCM 4303 - Radionuclide Physics & Instrumentation

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Production and properties of radionuclides, decay schemes, radiation measurements and special characteristics of radiopharmaceuticals.

NUCM 4333 SI - Quality Assurance

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Nuclear Medicine departmental policies and procedures.

NUCM 4861 INT - Clinical Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A minimum of 24 hours per week in an active Nuclear Medicine department.

NUCM 4862 INT - Clinical Education

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A minimum of 24 hours per week in an active Nuclear Medicine department.

NUCM 4863 INT - Clinical Education

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: A minimum of 24 hours per week in an active Nuclear Medicine department.

NUCM 4912 - Comprehensive Review

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Description: Review of learned material.

NUCM 4991 - Seminar

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: New technology, procedures and equipment.

NUTR 1020 LS SUS - Science and Application of Human Nutrition

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk Hybrid, Online*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk Hybrid, Online*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk Hybrid, Online*

Course Fee: \$15.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. The course fee expenditure for this specific course covers the health assessment and body composition measurements in the Nutrition Biochemistry lab.

Description: Human nutrition is the platform to study the nature and integration of science across disciplines and in society through applied problem solving and data analysis. Nutritional balance and good health are explored in context of the levels of organization, metabolism and homeostasis, genetics and evolution, and ecological interactions.

Note: *This course is taught Web enhanced.*

NUTR 1120 - Nutrition for the Athlete

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The course will address nutrition, eating behavior, and lifestyle issues of the athlete in the typical collegiate athletic environment. Topics in nutrition for the performance athlete, meal planning for the collegiate athlete, menu evaluation, personal diet analysis, and common fad diets aimed at the performance athlete are included.

NUTR 1240 SUS - Nutrition and Sustainable Cooking

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 2nd Blk Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. The course fee expenditure for this specific course covers the purchase of expendable food and food service items and acquisition and replacement of nonexpendable kitchen items.

Description: Sustainable ways to acquire, prepare and consume food to support a healthier individual, population, and environment are explored. Food science principles will be emphasized in the laboratory experience.

NUTR 2020 - Nutrition in the Life Cycle

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: This course examines the nutritional needs of humans along with food and nutrition education and programs through the life cycle stages from pre-conception through older adulthood. Students assess normal nutrition and various conditions and interventions across the lifespan through applied case studies.

Pre-requisite(s): NUTR 1020.

NUTR 2220 - Human Lactation & Infant Nutrition

Credits: (2)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online, 1st Blk Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online, 1st Blk Online*

Description: The course focuses on human lactation, maternal health and nutrition during lactation, and infant nutrition and health assessment. Historical and current issues, case studies, and counseling techniques will be discussed in context of family, community, and cultural norms.

Pre-requisite(s): NUTR 1020.

NUTR 2320 - Food Values, Diet Design and Health

Credits: (3)

Typically Taught Summer Semester: *1st Blk or 2nd Blk Online*

Typically Taught Fall Semester: *Full Sem, Online, 1st Blk, 2nd Blk Hybrid, or Online*

Typically Taught Spring Semester: *Full Sem, Online, 1st Blk, 2nd Blk Hybrid, or Online*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. The course fee expenditure for this specific course covers the use of the InBody 770 scanner to determine basal metabolic rate.

Description: The relationships between dietary components and the development of chronic diseases provides the foundation for designing diets that support life-long "good health". Topics in nutrigenomics, food allergy and food

technology are introduced.

Pre-requisite(s): NUTR 1020 or HLTH 1020.

This course is taught Web enhanced.

NUTR 2420 - Childhood and Adolescent Nutrition

Credits: (2)

Typically Taught Summer Semester: *1st Blk or 2nd Blk Online*

Typically Taught Fall Semester: *1st Blk, 2nd Blk Hybrid, or Online*

Typically Taught Spring Semester: *1st Blk, 2nd Blk Hybrid, or Online*

Description: The effects of nutrition and diet on child growth, health and behavior are explored from toddler through adolescence. The processes of growth and puberty provide the foundations for understanding nutritional support. Common nutritionally-related problems such as obesity, anemia, and eating disorders are also addressed.

Pre-requisite(s): NUTR 1020 or HLTH 1020.

NUTR 3020 - Sports Nutrition

Credits: (3)

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk, Hybrid, Online*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk, Hybrid, Online*

Description: The nutritional support necessary to achieve optimum athletic performance will be discussed in the context of diet and metabolism. In addition, the use of ergogenic aids will be addressed with reference to athletic performance.

Pre-requisite(s): NUTR 1020 or HLTH 1020 and NUTR 2320.

May be repeated up to two times.

NUTR 3040 - Nutrition Assessment

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$30.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. The course fee expenditure for this specific course covers the purchase of consumable lab reagent items and acquisition and replacement of non-consumable Nutrition Biochemistry laboratory equipment.

Description: This course covers foundational assessment methods used to determine population and individual nutritional status. Students will learn the scientific foundation on nutrition assessment and how to apply this knowledge in medical, community and research settings.

Pre-requisite(s): NUTR 1020 and NUTR 2320.

NUTR 3070 - Advanced Food Science

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Course Fee: \$45.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. The course fee expenditure for this specific course covers the purchase of expendable food and food service items and acquisition and replacement of nonexpendable kitchen items.

Description: The advanced study of the physical, biological, and chemical make-up of food. Effects of food

preparation, storage and processing on nutrient content, taste and shelf-life.

Pre-requisite(s): (CHEM 1110 or CHEM 1210) and NUTR 1020.

NUTR 3220 - Foundations in Diet Therapy

Credits: (3)

Typically Taught Summer Semester: *1st Blk Online, 2nd Blk Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: The nutrition care process, practice and methods of nutrition support are studied for the management of nutritionally-related medical conditions by body system in which diet is crucial for control of the disease or condition.

Pre-requisite(s): (NUTR 1020 or HLTH 1020) and NUTR 2320.

Suggested Requisite(s): ZOOL 2420 or HTHS 2110/HTHS 2111 are recommended.

NUTR 3320 - Health and Nutrition in the Older Adult

Credits: (3)

Typically Taught Summer Semester: *2nd Blk or 2nd Blk Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: The developmental process of late adulthood with focus on the physiological age-related changes provides the foundation for understanding physical, mental, and social health and well-being in the older adult. Nutrition and exercise assessments and prescriptions, clinical services, community and social support services, complementary and alternative medicine, and other topics are explored in the context of promoting healthy aging.

Pre-requisite(s): NUTR 1020 or HLTH 1020.

NUTR 3420 GLB - Multicultural Health & Nutrition

Credits: (3)

Typically Taught Summer Semester: *3rd Blk or 2nd Blk Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem*

Description: The application and understanding of social, religious, economic and aesthetic qualities of foods provides the knowledge for the explorations of the food patterns of various cultures. The understanding of world food problems as they pertain to the health will also be discussed.

Pre-requisite(s): NUTR 1020 or HLTH 1020 and NUTR 2320.

This course is taught Web enhanced.

NUTR 4320 - Current Issues in Nutrition

Credits: (2)

Typically Taught Fall Semester: *Full Sem, Online, 1st Blk, 2nd Blk Hybrid, or Online*

Typically Taught Spring Semester: *Full Sem, Online, 1st Blk, 2nd Blk Hybrid, or Online*

Description: Technology-aided literature review of the nutritional and medical sciences provides the information for presentation to peers in both written and oral forms.

Pre-requisite(s): NUTR 1020 or HLTH 1020 and NUTR 2320 or consent of instructor.

NUTR 4420 - Nutrition and Fitness

Credits: (3)

Typically Taught Fall Semester: *1st Blk or 2nd Blk Hybrid*

Typically Taught Spring Semester: *1st Blk or 2nd Blk Online*

Description: Principles of sports nutrition and fitness are applied to achieve a healthy body weight. Consideration of exercise and dietary practices along with fitness evaluation, dietary analysis and body composition testing are utilized to create a plan to improve physiological health.

Pre-requisite(s): NUTR 1020 or HLTH 1020 and NUTR 2320.

This course is taught Web enhanced.

NUTR 4440 - Advanced Human Nutrition

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: The advanced study of human nutrition with focus on the metabolism of vitamins, minerals, and energy-producing nutrients. The structure, properties, and functions of the nutrients and their regulatory roles in metabolism, body composition and weight, fluid balance, health, and disease states are covered with clinical examples and across the lifespan.

Pre-requisite(s): NUTR 1020 and NUTR 2320.

Co-Requisite(s): CHEM 3070.

NUTR 4520 CRE - Directed Undergraduate Nutrition Research

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will provide undergraduate students an opportunity to engage in research processes and participate in ongoing nutrition research projects.

Pre-requisite(s): NUTR 4320 or NUTR 1020 or HLTH 1020 and Permission of Instructor.

May be repeated 3 times up to 6 credit hours.

NUTR 4830 CRE - Directed Readings

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem Online, 1st Blk Online or 2nd Blk Online*

Typically Taught Fall Semester: *Full Sem Online, 1st Blk Online or 2nd Blk Online*

Typically Taught Spring Semester: *Full Sem Online, 1st Blk Online or 2nd Blk Online*

Description: Independent and directed readings or secondary research on advanced special topics under the direction of a faculty mentor.

Pre-requisite(s): NUTR 2320 and consent of faculty supervisor prior to registration.

May be repeated for up to 3 credit hours.

NUTR 4860 INT - Field Experience

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Work experience, which applies prior academic learning in a supervised setting.

Pre-requisite(s): NUTR 1240 and consent of faculty supervisor prior to registration.

May be repeated up to 2 credit hours.

NUTR 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Description: Consult the semester class schedule for the current offering under this number. The specific title with the credit authorized will appear in the semester schedule and on the student transcript.
May be repeated for a total maximum of 6 credit hours.

NUTR 4990 - Senior Seminar**Credits: (1)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem Online*

Description: This is a capstone course for Nutrition seniors only. The experiences in the Nutrition major will be summarized and students will be prepared for graduate study or future employment.

Pre-requisite(s): NUTR 3420.

NUTR 6320 - Current Issues in Nutrition**Credits: (2)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Technology-aided literature review of the nutritional and medical sciences provides the information for presentation to peers in both written and oral forms.

Pre-requisite(s): NUTR 1020 or HLTH 1020 and NUTR 2320 or consent of instructor.

NUTR 6420 - Nutrition and Fitness**Credits: (3)**

Typically Taught Fall Semester: *1st Blk or 2nd Blk Hybrid*

Typically Taught Spring Semester: *1st Blk or 2nd Blk Online*

Description: Principles of sports nutrition and fitness are applied to achieve a healthy body weight. Consideration of exercise and dietary practices along with fitness evaluation, dietary analysis and body composition testing are utilized to create a plan to improve physiological health.

Pre-requisite(s): Consent of instructor.

This course is taught Web enhanced.

NUTR 6520 - Directed Graduate Nutrition Research**Credits: (1-4)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will provide graduate students an opportunity to engage in research processes and participate in ongoing nutrition research projects.

Pre-requisite(s): NUTR 4320 or NUTR 1020 or HLTH 1020 and Permission of Instructor. Graduate students taking this class as 6520 must have completed a statistical methods course.

May be repeated 3 times up to 4 credit hours.

OCRE 1000 - Foundations for Success in Outdoor and Community Recreation Education**Credits: (1)**

Typically Taught Summer Semester: *1st Blk-Online, 2nd Blk-Online*

Typically Taught Fall Semester: *1st Blk-Online, 2nd Blk-Online*

Typically Taught Spring Semester: *1st Blk-Online, 2nd Blk-Online*

Description: This one-credit course provides students with the tools and insights needed to thrive in the Health, Physical Education, and Recreation (HPER) program. Students will explore Health, Physical Education, and Outdoor

Community and Recreation Education (OCRE) as dynamic, innovative fields of study. The course also introduces essential academic resources, strategies for success, and pathways to personal and professional growth within the program and campus community.

OCRE 2000 - Risk, Resilience and Rock Climbing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include climbing shoes, harnesses, helmets, climbing rope, and climbing holds.

Description: This course will explore the intersections of rock climbing, interpersonal and intrapersonal growth, and women and gender studies. We will ignite conversations about safety, trust, risk taking, transcending fear, resiliency, and healthy community building. These conversations will be embodied through practical kinesthetic climbing skills. We will also look at power and privilege in the climbing world and ways in which we can expand the field to be more inclusive, intersectional, and accessible to people from a variety of backgrounds. We will look at climbers who are changing the field, as well as engage media that tackle these and further topics.

OCRE 2050 - Recreation, Parks, and Wellness

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Content, nature, extent and significance of recreation and leisure; their role in our lives, relevant service delivery agencies/organizations/businesses, leadership functions and styles, and an introduction to team-building/adventure programming activities.

OCRE 2300 - Wilderness Medicine

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$290.00

Course Fee Purpose: Syllabus Statement in Regard to Course Fees

Course Fee: This course has a fee attached. Course fees are established to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements and best practices. The course fees in this course will be used to support nationally recognized certification for students in both wilderness first responder (WFR) and cardiopulmonary resuscitation (CPR). Each student is individually tested and assessed for proficiency to earn the wilderness first responder certification. All students are tested as part of this course. The typical fee range for WFR courses is between \$700 and \$800. Courses are typically 8-10 days in duration, and fees often do not include lodging or meals.

Description: This course provides training and certification in wilderness medical care with a focus on emergency response in remote settings in the backcountry. The course is designed for professionals who intend to work in a position of leadership in an outdoor setting, or for individuals who want a high level of wilderness medical training for extended personal backcountry trips or expeditions. Participants will learn systems for patient assessment, extended care (including CPR), and rescue/evacuation in remote settings. Emphasis will be placed on the acquisition and application of knowledge and skills necessary for responsible practice in the field of outdoor recreation. Upon successful completion of the course (including a written and practical exam), students will have the opportunity to earn an internationally recognized professional certification such as Wilderness First Responder (WFR) or Outdoor Emergency Care (OEC).

OCRE 2500 - Introduction to Outdoor Adventure Recreation

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$225.00

Course Fee Purpose: Course Fee: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements and best practices.

Description: Introduction to Outdoor Adventure Recreation is focused on engaging and introducing students to discover, explore, and practice a variety of outdoor adventure and recreation activities. This includes, but is not limited to, group development, outdoor living, backpacking, flat- and whitewater paddling, mountain biking, rock climbing, caving, and winter-based pursuits. Emphasis is placed on activity-specific technical skill development, equipment management, risk management, environmental ethics, and basic instructional and facilitation strategies. Field Sessions are required.

OCRE 2550 - Leadership and Safety Management for Outdoor Pursuits

Credits: (4)

Typically Taught Summer Semester: *2nd Blk*

Course Fee: \$225.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include food, safety equipment, first aid supplies, and other incidentals, and licensing fees.

Description: This course introduces students to many of the skills needed to be a safe and effective outdoor leader. The course is intended for individuals wishing to pursue employment as outdoor leaders in various outdoor adventure activities. Topics will include trip preparation, planning, logistics, planning for and managing risks in outdoor pursuits, group dynamics, leadership styles, emergency response, and environmental considerations. The majority of class time will be spent in the field as part of a multi-day expedition.

Pre-requisite(s): OCRE 2500.

Suggested Requisite(s): OCRE 2300, GEOG 1002.

OCRE 2610 - Introduction to Outdoor Living Skills I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: The course fees in this course will be used to support learning experiences in the field, including a multi-day/night backcountry trip. Associated course fees will provide for equipment, travel and permits/entrance fees.

Description: This course will provide students with an overview of backcountry skills. Students will learn about backcountry travel and camping skills, equipment use, and hazard identification. One lecture and 3 hour field trip are required each week.

OCRE 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

OCRE 2860 - Outdoor Leadership Practicum

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of *Outdoor Leadership Practicum* is to provide students with the opportunity to apply the requisite knowledge and skills to organize and lead outdoor activities. Under the supervision of OCRE faculty, students will gain experience designing and leading outdoor activities in a volunteer or work setting for a minimum of 40 supervised hours. Emphasis will be placed on client/participant assessment, curriculum design and delivery, safety, and environmental impact. Approval for practicum experiences is coordinated and assigned by OCRE faculty.

Pre-requisite/Co-requisite: OCRE 2300, 2500, 4 credits of REC courses or permission of the instructor.

This course may be repeated for up to 4 credit hours.

OCRE 2890 INT - Cooperative Work Experience

Credits: (1-9)

Typically Taught Spring Semester: *Full Sem*

Description: Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department. Open to all students in Recreation who meet the minimum Cooperative Work Experience requirements of the department.

May be repeated 8 times up to 9 credit hours.

OCRE 3100 - Recreation Leadership and Group Facilitation

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: The course fees in this course will be used to purchase resources and materials to support the facilitation of group development activities on an individual and small-group level.

Description: Customer/client-based leisure services, role delineation, settings, theories of leadership and group dynamics. Skills: apply various experiential techniques for different populations that recreational professionals may encounter.

OCRE 3230 - Wilderness Nutrition & Backcountry Cooking

Credits: (4)

Typically Taught Spring Semester: *1st Blk*

Course Fee: \$141.00

Course Fee Purpose: The course fees in this course will be used to purchase resources and materials to support lab equipment and field experiences

Description: For outdoor professionals and those who spend extensive time in the outdoors, wilderness nutrition and backcountry cooking are critical components to providing safe, healthy, and enjoyable outdoor recreation experiences. Concepts of nutritional balance, energy needs, menu planning, and cooking are explored and applied within the context of a backcountry setting. Multiple field experiences are required.

Pre-requisite(s): HLTH 1030 or NUTR 1020.

OCRE 3300 - Inclusive and Adaptive Recreation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Students will explore and apply concepts of leisure and recreation experiences and the related social impacts across a wide variety of populations including: ethnicity, race, ability, gender, age, religion and nationality.

OCRE 3320 - Adventure Programming

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: In this course, students will gain a theoretical and applied understanding of adventure programming within the field of Community and Outdoor Recreation. Students will have the opportunity to explore program planning and preparation, and activity implementation through individual and collaborative learning experiences. Upon completion of this course, students will have a Program Plan that reflects the theoretical and logistical elements that comprise programs in Community and Outdoor Recreation. This course also requires an adventure program implementation field experience.

Pre-requisite/Co-requisite: OCRE 3100 (formerly REC 3810).

OCRE 3400 - Outdoor Equipment Production and Retailing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Students will learn about key outdoor gear manufacturers, materials used in equipment, and practices retail operation use in the sales of outdoor apparel and equipment. Students will apply course information to analyze, critique, and create an outdoor gear concept. In class exercises, site visits, field trips, and assignments will challenge students to engage in critical thinking and complex quantitative and communication skills.

Pre-requisite(s): OCRE 2500 or permission from the instructor.

OCRE 3450 - Adventure Travel and Sustainable Tourism

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: Course Fee: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements and best practices.

Description: This course will provide an overview of history, development, organization, impacts and trends within adventure travel and tourism industries. Students will learn about development and evolution of adventure travel and sustainable tourism; socio-cultural, economic, and environmental dimensions within adventure travel and sustainable tourism; positive and negative impacts of tourism; and principles and practices conducive to sustainable tourism. Students will gain experience in critically analyzing and evaluating adventure travel and sustainable tourism industries.

OCRE 3500 - Community Recreation and Park Planning

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course will focus on principles and methods of recreation and park design and planning. The student should expect to learn how to: assess community recreation facilities, parks, open spaces, recreation trends, industry standards, create planning goals and objectives, and make planning recommendations. Classification of recreation areas according to primary function, location and clientele will also be explored.

Pre-requisite(s): OCRE 3320.

OCRE 3520 - Risk Management and Legal Issues in Recreation Services

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Risk Management and Legal Issues is focused on the examination of general legal concepts, federal

and state legislation, and legal liabilities as these relate to and impact programming with the fields of community and outdoor recreation. Emphasis is placed on the process of identifying and managing potential risks in recreation, education, developmental, and social service settings, as well as organizational structures. The course content is interdisciplinary in nature, and is grounded in the tenets of experiential education.

Pre-requisite/Co-requisite: OCRE 3320.

OCRE 3600 - Administration and Management of Outdoor and Community Recreations Services

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course provides an examination of administration and management skills tied to outdoor recreation agencies/businesses/organizations. Emphasis will be placed on site visits, services delivery, environmental impacts, legal issues, human resources and administration and management skills. Outdoor activities (backpacking/hiking/camping/ropes course leadership, and use of technology in leisure research and programming) will be explored in the context of program management and administration. Field trips are required.

Pre-requisite/Co-requisite: OCRE 3320.

OCRE 3700 - Recreation and Sports Facilities and Events Management

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: The course fees in this course will be used for two primary purposes. The first is for entrance fees during site visits to local recreation and sport facilities. The second is to purchase access to resources that will support learning outcomes, specifically published articles related to facility design and operations, which will be reviewed and analyzed.

Description: Studies the principles, guidelines, and fundamental practices involved in indoor and outdoor facilities planning, construction, use and management, as well as publicity and management of events for recreation and sports. Integrates tenets of the law and risk management as they relate to recreational and athletic facilities and events.

Pre-requisite(s): ESS 2200 or OCRE 2050.

OCRE 3810 CRE - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

OCRE 3900 - Commercial Outdoor Recreation and Tourism

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course will cover outdoor and adventure recreation business development. Particular emphasis will be on analyzing the types of commercial and private recreation enterprises, trends and directions, regulations, financial requirements and procedures for planning and organizing commercial recreation services.

Pre-requisite/Co-requisite: OCRE 3320.

OCRE 4000 - Recreation Programming for Youth Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course will review and apply theories of youth development to recreation-based settings. Topics addressed include: youth development theories, political, social, and cultural issues relevant to youth development, types of youth serving organizations, youth professional roles and responsibilities; quality youth programming, logic modeling, program evaluation, and theory-driven program design.

Pre-requisite(s): OCRE 3100 or permission from the instructor.

OCRE 4020 - Nature Interpretation

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: The course fees in this course will be used to support authentic learning experiences in the field, including an overnight trip. Associated course fees will provide for equipment, travel and permits/entrance fees.

Description: Nature Interpretation is focused on providing the student with an in-depth investigation of the fundamental principles and concepts of nature interpretation. This includes, but is not limited to historical development of the field, principles of exhibit design, interpretative program designs and techniques, common field techniques, and current trends used by outdoor leaders. In addition, an overview of employment opportunities in the field will be explored. This course emphasizes experiential learning theories and their application to natural history interpretation and environmental education program design. The course content is interdisciplinary in nature, and is grounded in the tenets of experiential education and learning (per the work of John Dewey).

Pre-requisite(s): OCRE 2050 and OCRE 3100 (formerly 3810).

OCRE 4205 - Research and Program Evaluation in Parks& Recreation Services

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of this course is to give students basic knowledge in research and evaluation within the contexts of park, recreation and tourism studies. Specific focus is placed on integrating basic research, program evaluation, and statistical analysis in an applied manner within the field. Topics include program interventions, program evaluations, and survey research. In this course-based research experience (CRE) students will be mentored by their instructor to individually or as part of a group develop and carry out a research project as a major part of class (Office of Undergraduate Research, 2023).

Pre-requisite(s): OCRE 3320.

OCRE 4300 - Trends and Ethical Issues in Recreation Services

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Current Trends and Ethical Issues in Recreation examines major ethical theories and their relation to the development of personal and professional ethics in practitioners working in the field of community and outdoor recreation. The differences between ethics and morality will be analyzed, and selected codes of ethics will be presented for review and discussion. The application of ethical decision making and problem solving in recreation settings will be explored.

Pre-requisite(s): OCRE 3600.

OCRE 4500 - Grant and Proposal Writing for Recreation Professionals

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Grant and Proposal Writing for Recreation Professionals is focused on providing the student with an in-depth investigation of grant writing and management. The course will provide students with an opportunity for primary and authentic experience in researching and writing grants. Students will explore the process of identifying prospective funders, developing relationships with funders, comprehending the basics of writing grants, submitting

proposals, working in collaborative partnerships, and preparing for follow up and evaluation. Students will apply course learning to write and prepare actual grant proposals. The course content is interdisciplinary in nature, and is grounded in the tenets of experiential education and learning.

Pre-requisite(s): OCRE 2050 or permission from the instructor.

OCRE 4550 - Outdoor Education Philosophies & Principles

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$52.00

Course Fee Purpose: The course fees in this course will be used to support field experiences in the field. Associated course fees will provide for equipment, travel and permits/entrance fees.

Description: Provides basic concepts of outdoor education, and direct, firsthand experience with learning resources beyond the classroom.

Pre-requisite(s): OCRE 2500.

OCRE 4800 - Individual Projects

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A comprehensive study of a significant problem in the field of recreation. Hours to be arranged. For seniors only.

May be repeated 2 times up to 3 credit hours.

OCRE 4890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem, 1st Block, 2nd Block*

Typically Taught Fall Semester: *Full Sem, 1st Block, 2nd Block*

Typically Taught Spring Semester: *Full Sem, 1st Block, 2nd Block*

Description: A continuation of OCRE 2890.

May be repeated 5 times up to 6 credit hours.

OCRE 4930 - Outdoor Education Workshop

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: The course fees in this course will be used to cover equipment rental to support activities taking place in field-based settings. Associated course fees will cover the use of 3-4 different types of outdoor equipment used for 3-4 different day trips.

Description: A broad inter-disciplinary approach to the methodology of outdoor education teaching techniques; experiential learning-course taught almost totally outdoors.

OCRE 6930 - Outdoor Education Workshop

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: The course fees in this course will be used to cover equipment rental to support activities taking place in field-based settings. Associated course fees will cover the use of 3-4 different types of outdoor

equipment used for 3-4 different day trips.

Description: A broad interdisciplinary approach to the methodology of outdoor education teaching techniques; experiential learning-course taught almost totally outdoors.

OEHS 3520 - Introduction to Occupational Safety and Health

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is an introductory course in to the field of Occupational Safety and Health (OSH).The course reviews the antecedents of modern industrial safety going back to ancient origins, the industrial revolution to the current day. The course includes a series of important topics in injury prevention including prevention of fires, falls, accidents, chemical injuries and other workplace problems. The goal is to teach broad principles and to enable students to recognize when they and others may be in danger regardless of their industry or profession.

OEHS 3530 - Workplace Hazard Recognition

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The course will provide an overview of general hazards common to most workplaces with focus on manual material handling, slips trips and falls, machine guarding and other exposures. Exposures common to most industries will be covered. Generally accepted mitigation methodologies will be reviewed both from a regulatory and best practice standpoint. The students will be able to recognize inadequately mitigated hazards In their workplaces.

OEHS 3540 - Ergonomics and Human Factors

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course will acquaint students with the basic concepts of work design and human capabilities as developed over the last century. Material handling exposures will be reviewed in depth. Industries with special challenges, such as healthcare, will be discussed. Students will gain an understanding of the concepts of basic risk factors such as force, posture and repetition. Students will learn to use peer reviewed exposure assessment tools in a variety of settings and case studies. The frequency, costs and challenges in mitigation and treatment will be reviewed.

OEHS 3550 - Workplace Health Exposures

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Occupational Health starts by requiring an understanding of the types of chemical, physical, and biological stressors that may be encountered in the work environment. With this knowledge, professionals can anticipate and recognize these potential health hazards. Recognition relies on applying a variety of related concepts including chemical/physical properties; quantities used; exposure potential; routes of entry; and toxicology. Once potential health hazards are identified, knowledge is needed in the types of tools available to evaluate actual worker exposure. Then, how to use the technical resources available to assess relative risk of exposures. There are various sampling instruments and sampling strategies to obtain information on the potential exposure. Following the characterization of exposure, the use of existing standards and best practices allow for risk assessment and prioritization. The final part of the challenge is understanding the various types of controls available to reduce the exposure of workers to significant hazards and thus reduce the risk of injury and disease: administrative programs, engineering fixes, and personal protective equipment are all tools. Therefore, the systematic and programmed-based process of anticipation, recognition, evaluation, and control of workplace health hazards are the basis for this course.

Pre-requisite(s): OEHS 3520.

OEHS 3560 - Managing Occupational Safety & Health Programs

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course will review the development and management of workplace safety and health programs. Existing regulatory requirements and national consensus standards such as the ANSI Z-10 will be covered. Effective program elements and performance metrics will be reviewed. Special attention will be given to the prevention of fatalities and serious injuries in the workplace.

OEHS 3570 - Risk Assessment and Management

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: This semester course will review the fundamentals of risk, risk assessment and risk management. This will include the history of risk concepts, assessment approaches and risk management tools. Case studies will include examples of catastrophic failures in risk assessment and management where human safety is concerned. Risk management tools will be reviewed and students will gain practice by applying assessment and management tools to real world industrial settings. Changing societal attitudes and expectations of risk will also be reviewed.

OEHS 3580 - Occupational and Environmental Health and Safety Internship

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This internship course provides students with practical experience in occupational environmental health and safety settings. Students will apply theoretical knowledge gained in the classroom to real-world workplace environments. The internship experience will encompass various aspects of safety and health, including hazard identification, risk assessment, safety program development, and regulatory compliance. Through hands-on experiences, students will develop skills in workplace inspections, incident investigations, and communication with stakeholders.

Pre-requisite(s): OEHS 3520, OEHS 3530, OEHS 3550, Approval from internship coordinator.

OEHS 6370 - Occupational Epidemiology

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Investigates concepts, methods, and practice of occupational epidemiology. Prepares students to design, execute, and evaluate occupational epidemiological research as well as evaluate and interpret published occupational safety and health epidemiological literature. Will cover various study designs, biases, confounders, and causation to address the prevention of workplace injuries and illnesses.

Suggested Requisite(s): College Algebra.

OEHS 6703 - Clinical and Behavioral Aspects of Occupational Injuries and Disease (OID)

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is a didactic course to teach common diseases encountered in occupational medicine (as well as general medical practice). The course includes a significant amount of instructional time on musculoskeletal disorders and respiratory conditions. Evidence-based treatment regimens for common conditions will be discussed.

OEHS 6750 - Fundamentals of Industrial Hygiene

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The course will provide an introduction to technical information as well as discussion and insight into the roles, responsibilities, and requirements for practicing occupational health and safety professionals. The course focuses on the principles of anticipation, recognition, evaluation, and control of hazards in occupational environments.

Suggested Requisite(s): College Algebra, College Chemistry, Biology.

OEHS 6752 - Introduction to Industrial and Environmental Toxicology and Physiology

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The course is intended to provide public health and safety professionals a basic understanding of toxicological principles and information about the toxicity of a variety of chemicals likely to be encountered in the workplace and/or the environment.

Pre-requisite(s): OEHS 6750.

OEHS 6760 - Management and Administration of Occupational Environmental and Safety Programs

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is structured to enable students to develop the management capabilities needed to design, implement, and evaluate Occupational and Environmental Health and Safety and other Public Health programs. The course is designed to enable participants to develop the management knowledge and skills needed to design, implement, and evaluate occupational and environmental health and safety (OEHS) as well as public health (PH), Aerospace Medicine (AsM) and other health or safety programs. Instruction also includes discussion of pertinent management theories and application of theories in designing, implementing, and evaluating health and safety programs. The program emphasizes the unique management capabilities that those responsible for OEHS, PH, AsM and other health and safety programs must possess.

OTA 1010 - Introduction to Occupational Therapy

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Description: Students will learn the history, philosophical base and values, preparation and certification, and practice areas and settings of occupational therapy. Terminology of the profession, common diagnoses and conditions commonly treated in occupational therapy, models of practice, and occupational therapy domain and process are discussed. Evidence-based practice, ethics, legal issues, and professional behaviors are discussed while career options in occupational therapy are explored. One live job shadow of a local clinician is required and the student is responsible to arrange for this experience on their own. Students will also participate in additional virtual job shadow experiences.

OTA 3000 - Foundations of Theory and Practice in Occupational Therapy

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance,

consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include subscriptions to electronic course preparation and clinical practice scenarios and applications.

Description: This course is designed to provide an in-depth exploration of the core principles, theories, and practices that underpin the field of Occupational Therapy (OT). The course is designed for students new to the field and offers a comprehensive overview of the foundational concepts necessary for effective and ethical practice in OT. Students will learn historical perspectives that influenced the development of occupational therapy, including key milestones and influential individuals. Students will examine the major OT theories and models, such as the Biopsychosocial Model, Occupational Adaptation, and the Model of Human Occupation. This course includes the application of occupational therapy practice models and approaches, the occupational therapy process, as well as ethics, cultural competency and professional development.

OTA 3100 - Occupational Therapy and Physical Dysfunction Lecture

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include subscriptions to electronic course preparation and clinical practice scenarios and applications.

Description: This course addresses the complexities of adult physical disabilities and their impact on daily living. Through a blend of theoretical knowledge and practical application, this course will equip students with the skills necessary to support individuals with a variety of physical challenges. In this course, students will gain a foundational understanding of common adult physical disabilities, including stroke, spinal cord injuries, traumatic brain injuries, arthritis, and neuromuscular disorders. Students will learn about the underlying pathophysiology and how these conditions affect motor skills, sensory perception, and overall function. Students will develop an understanding of the importance of a client-centered approach and therapeutic use of self, incorporating clients' goals, preferences, and life contexts into therapy plans.

Co-Requisite(s): OTA 3105.

OTA 3105 - Occupational Therapy and Physical Dysfunction Lab

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include subscriptions to electronic course preparation and clinical practice scenarios and applications. Fees are also applied to splinting materials, maintaining regularly used adaptive equipment, and lab supplies such as meal preparation lab and cleaning supplies.

Description: This course addresses functional practice skills needed to address physical dysfunction using occupational therapy. Through practical lab experiences and interactive learning, students will gain a comprehensive understanding of techniques and strategies used to assist individuals with physical impairments in participating in meaningful occupations. Students will explore a variety of therapeutic interventions aimed at improving motor skills, strength, coordination, cognition, visual skills, and overall functional independence. The course emphasizes the application of theoretical knowledge to real-world scenarios and clinical settings.

Co-Requisite(s): OTA 3100.

OTA 3200 - Essential Components of Function and Movement for the Occupational Therapy Practitioner

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include subscriptions to virtual and digital anatomy learning platforms, anatomy models, and cleaning supplies for learning areas and equipment.

Description: This course provides a comprehensive understanding of functional anatomy and kinesiology essential for occupational therapy assistants (OTAs). It explores the structure and function of the human body, emphasizing the musculoskeletal and neuromuscular systems and their relevance to movement and function. Students will study anatomical terminology, body systems, and the biomechanical principles that underpin normal and abnormal movement patterns. The course integrates theoretical knowledge with practical applications, enabling students to analyze and evaluate human movement and function in the context of occupational therapy practice. Emphasis is placed on applying this knowledge to assess and address functional limitations, develop intervention strategies, and enhance client outcomes.

OTA 3300 - Adult Physical Dysfunction Practicum-Fieldwork 1

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include subscriptions to electronic course preparation and clinical practice scenarios and applications.

Description: This course provides an immersive, on-site fieldwork experience for students pursuing a career as an Occupational Therapy Assistant (OTA). It focuses on the practical application of skills and knowledge acquired in the classroom to clients with physical dysfunctions. This course is a one-hour/week hybrid course that involves both synchronous and asynchronous virtual learning experiences. This course prepares students for on-site fieldwork experiences and future field work II experiences by requiring academic and practical competency-based assignments. The on-site fieldwork experience will be arranged and take place at clinical facility sites in the community under the direction of the fieldwork coordinator. Students will be exposed to conditions and skills that are common in treatment facilities that address physical disabilities. Students will engage in inquiry-based learning to develop professional behaviors, clinical observation, and documentation skills.

OTA 3400 - Pediatric and Adolescent Occupational Therapy Practice Lecture

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an in-depth exploration of occupational therapy principles and practices specific to pediatric and adolescent populations. Emphasizing developmental milestones, therapeutic techniques, and evidence-based interventions, students will learn to support children and adolescents in achieving meaningful participation in daily activities and occupations. Students will learn physical and psychosocial conditions that are often supported through occupational therapy. This course will emphasize the study of typical and atypical childhood and adolescent development in relation to activity and occupational performance. Through lectures, case studies, group discussions, presentations, and hands-on experiences, students will develop the competencies needed to effectively contribute to assessment and intervention planning, as well as provide evidence-based treatments in diverse populations, addressing physical, cognitive, and psychosocial needs.

Co-Requisite(s): OTA 3405.

OTA 3405 - Pediatric/Adolescent Occupational Therapy Skills Lab

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include fees for expendable supplies such as assessment forms, splinting and orthotic supplies, and cleaning and organization tools for clinic spaces.

Description: This is a dynamic, hands-on course to provide an immersive experience in pediatric occupational therapy. With a focus on assessment and intervention strategies essential for working with children and adolescents of varying ages and abilities. Students will engage in practical applications of handling and positioning, oral motor and feeding interventions, assistive devices and equipment, pediatric assessment administration, pediatric treatment techniques, community resources, and developing creative intervention strategies for a wide range of ages, conditions and abilities. Students will participate in a community-based occupational therapy clinic as part of this course.

Co-Requisite(s): OTA 3400.

OTA 3500 - Pediatric Occupational Therapy Practicum/Fieldwork 1

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an immersive, on-site fieldwork experience for students pursuing a career as an Occupational Therapy Assistant (OTA). It focuses on the practical application of skills and knowledge acquired in the classroom to pediatric clients that could include developmental, physical, psychosocial and learning challenges. This course is a one-hour/week hybrid course that involves both synchronous and asynchronous virtual learning experiences. This course prepares students for on-site fieldwork experiences and future field work II experiences by requiring academic and practical competency-based assignments. The on-site fieldwork experience will be arranged and take place at a clinical or school-based facility site in the community under the direction of the fieldwork coordinator. Students will be exposed to conditions and skills that are common in treatment settings that work with pediatric and adolescent clients. Students will engage in inquiry-based learning to develop professional behaviors, clinical observation, and documentation skills.

Pre-requisite/Co-requisite: OTA 3400 and OTA 3405.

OTA 3600 - Research Methods in Occupational Therapy

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces occupational therapy assistant students to fundamental research methods applicable to the field. Focusing on both qualitative and quantitative approaches, the curriculum emphasizes the role of research in evidence-based practice. Through application-based learning, students will gain an understanding of how scholarly activities and literature contribute to the on-going development and support of the profession. Students will explore how to critically analyze research studies, understand ethical considerations, and apply research findings to enhance client care. Through practical exercises, discussions, and projects, students will develop essential skills for utilizing, implementing, and contributing to the evidence-based practice of occupational therapy.

OTA 3700 - Patient Interaction and Professional Issues I

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an in-depth exploration of professional issues and interpersonal dynamics important for success as an Occupational Therapy Assistant (OTA). Students will examine ethical standards, legal regulations, and professional responsibilities within the occupational therapy framework. Emphasis will be placed on effective communication strategies, cultural competency, and building therapeutic relationships with patients and their families. Through interactive discussions, role-playing scenarios, and case studies, students will enhance their

skills in time management, organization, work-place responsibilities, and written and verbal communication. Coursework will also address patient interaction, conflict resolution, and collaboration within interdisciplinary teams. This course prepares OTAs to navigate the complexities of the healthcare environment while fostering positive, patient-centered care.

OTA 3800 - Leadership and Management in Occupational Therapy

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course addresses essential leadership and management principles specific for occupational therapy assistants. Students will explore strategies for effective team collaboration, ethical decision-making, and quality improvement in clinical settings. Discussions will include leadership theories, their application in health care and the development of an individual leadership plan consistent with personal and professional goals. The curriculum emphasizes communication skills, resource management, intra and inter-professional collaboration, and the development of leadership qualities necessary for enhancing patient care and workplace dynamics. Through case studies and practical applications, participants will cultivate the skills needed to thrive in supervisory roles and contribute to the growth of occupational therapy practice settings.

OTA 4000 - Psychosocial Issues and Occupational Therapy Practice Lecture

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include subscriptions to electronic course preparation, virtual learning courses, clinical practice scenarios, and applications.

Description: This course provides study and exploration of psychosocial issues relevant to occupational therapy practice, focusing on the interplay between mental health, social factors, and occupational performance. Students will study psychological dysfunction across the lifespan and apply occupational therapy models of practice/frames of references to treatment planning and intervention.

Co-Requisite(s): OTA 4005.

OTA 4005 - Psychosocial Issues and Occupational Therapy Practice Lab

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include expendable supplies such as assessment forms, materials needed for participation in activities of daily living tasks including meal preparation, home maintenance, and leisure activities as therapeutic modalities. Fees may also be used for expendable cleaning supplies and organization tools for clinic spaces.

Description: This lab provides applied learning of psychosocial issues relevant to occupational therapy practice, emphasizing the integration of mental health, social factors, physical participation, and occupational performance. Students will engage in practical experiences that build upon theoretical knowledge, focusing on psychological dysfunction across the lifespan. Students will learn and practice a variety of treatment modalities commonly used in psychosocial treatment settings. This course will include the opportunity to work directly with community clients, allowing for real-world collaboration, treatment planning, intervention, and documentation skills.

Co-Requisite(s): OTA 4000.

OTA 4100 - Geriatric Practice in Occupational Therapy

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include subscriptions to electronic course preparation and clinical practice scenarios and applications.

Description: This course provides an in-depth exploration of occupational therapy (OT) principles and practices tailored specifically for geriatric populations. Students will learn about the typical aging process, as well as common conditions and skill deficits associated with older adults. This course will explore physical, cognitive and psychosocial dysfunction as it relates to the aging population and the role that occupational therapy plays in disease and dysfunction prevention, health promotion, and rehabilitation.

OTA 4200 - Geriatric-Psychosocial Practicum-Fieldwork 1

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include expendable materials used by the Academic Fieldwork Coordinator to write and send communication and to organize, file and store fieldwork materials. Other examples of course fee expenditures for this specific course include subscriptions to electronic course preparation and clinical practice scenarios and applications.

Description: This course provides an immersive, on-site fieldwork experience for students pursuing a career as an Occupational Therapy Assistant (OTA). It focuses on the practical application of skills and knowledge acquired in the classroom to clients considered in the geriatric population group and/or clients with psychosocial intervention needs. This course is a hybrid course that involves both synchronous and asynchronous virtual learning experiences. This course prepares students for on-site fieldwork experiences and future fieldwork II experiences by requiring academic and practical competency-based assignments. The on-site fieldwork experience will be arranged and take place at clinical facility sites in the community under the direction of the fieldwork coordinator. Students will be exposed to conditions and skills that are common in treatment facilities and community sites that address the needs of older adults and/or clients with psychosocial intervention needs. Students will engage in inquiry-based learning to develop professional behaviors, clinical observation, and documentation skills.

OTA 4300 - Patient Interaction and Professional Issues II

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include subscriptions to electronic course preparation and clinical practice scenarios and applications.

Description: Students will deepen their understanding of professional behaviors and communication strategies essential for success in Fieldwork II placements. Building on the foundational concepts from Patient Interaction and Professional Issues I, this course emphasizes the application of professional skills, written and verbal communication, health-care regulations, and professional standards in real-world settings. Students will apply and integrate workplace professionalism, advocating for the profession of occupational therapy, creative and evidence-based

planning, preparing for interviews, and client-centered community practice.

Pre-requisite/Co-requisite: OTA 3700.

OTA 4500 - Fieldwork IIA

Credits: (6)

Typically Taught Spring Semester: *1st Blk-Online*

Description: Students will engage in a full-time (40-hours a week), eight-week clinical fieldwork experience in an occupational therapy practice setting, coordinated by OTA faculty and supervised by a course instructor. This immersive fieldwork allows students to apply classroom knowledge to real-world practice, focusing on the skills necessary for entry-level performance as an occupational therapy assistant. Through direct client interactions, students will gain hands-on experience with contributing to assessments, interventions, documentation, and communication in a professional setting. This course emphasizes developing clinical reasoning, ethical decision-making, and competence in delivering client-centered care, preparing students for transition into professional roles.

OTA 4600 - Fieldwork IIB

Credits: (6)

Typically Taught Spring Semester: *2nd Blk-Online*

Description: Students will engage in a full-time (40-hours a week), eight-week clinical fieldwork experience in an occupational therapy practice setting, coordinated by OTA faculty and supervised by a course instructor. This immersive fieldwork allows students to apply classroom knowledge to real-world practice, focusing on the skills necessary for entry-level performance as an occupational therapy assistant. Through direct client interactions, students will gain hands-on experience with contributing to assessments, interventions, documentation, and communication in a professional setting. This course emphasizes developing clinical reasoning, ethical decision-making, and competence in delivering client-centered care, preparing students for transition into professional roles.

OTA 4800 - Baccalaureate Project I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is designed to assist students in the development of their Occupational Therapy Assistant Baccalaureate Project. This project is a capstone-type course designed to provide students with the opportunity to develop advanced knowledge and expertise in one or more key areas of occupational therapy, including clinical skills, administration, advocacy, education, and leadership. Through this project, students will demonstrate their ability to apply knowledge and skills developed during their studies to a real-world, practical project.

OTA 4801 - Baccalaureate Project II

Credits: (3)

Typically Taught Spring Semester: *Full Sem-Online*

Description: Building on the foundation established in Baccalaureate Project I, this online course guides students through the full development, implementation, documentation, and dissemination of their baccalaureate project. Throughout the course, students will apply advanced critical thinking and project management skills to refine their project proposals, carry out evidence-based interventions or initiatives, and analyze outcomes. By the end of the course, students will complete a comprehensive write-up of their work and share their findings through professional presentations, reports, or publications. This course emphasizes real-world application, professional communication, and the impact of occupational therapy within diverse practice settings.

Pre-requisite(s): OTA 4800.

PAR 1000 INT - Emergency Medical Technician

Credits: (4)**Typically Taught Summer Semester:** *1st Blk***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This course teaches the student to recognize and instruct the response to emergency calls to provide efficient and immediate care to the critically ill and injured, and deliver transport needs for the patient to the appropriate medical facility. The student will be able to determine the nature and extent of illness or injury and establish priority for required emergency care. Theory will include the emergency medical care to the adult, infant and child, medical, and trauma patients. This course meets all of the requirements of the National EMS Education Standards. Successful evaluation of professionalism, interpersonal relationships, skills, and knowledge must be completed for recommendation of certification. (Must be taken with PAR 1001.)

PAR 1001 - Emergency Medical Technician Lab**Credits: (2)****Typically Taught Summer Semester:** *1st Blk***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem, 2nd Blk***Course Fee:** \$100.00

Course Fee Purpose: These include the following items assigned to each student at the beginning of the lab: a Polo shirt, a stethoscope, a BP cuff, roller gauze, triangular bandages, a pen light, and tape.

Description: At the completion of this course the student will be able to demonstrate competency managing emergencies, utilizing all Basic Support equipment and skills in accordance with all behavioral objectives in the current National EMS Education Standards. In addition to the lab, this course requires that the student have patient interactions in a clinical setting. Based on assessment finding, renders emergency medical care to the adult, infant and child, medical, and trauma patients. Successful evaluation of professionalism, interpersonal relationships, skills, and knowledge must be completed for recommendation of certification. (Must be taken with PAR 1000).

PAR 1005 INT - EMT-Basic Field Experience - I**Credits: (3)****Typically Taught Summer Semester:** *Full Sem*

Description: Minimum of 120 hours of supervised EMT-Basic patient care experience provided through assigned day shifts on the ambulance and/or pre-hospital setting. A preceptor evaluates basic life support knowledge, skills and affective abilities.

Pre-requisite(s): PAR 1000/PAR 1001 and HTHS 1101, HTHS 2110/HTHS 2111 and 70% minimum on EMT-B assessment exam. Department permission required.

PAR 2000 - Introduction to Paramedic Practice**Credits: (4)****Typically Taught Summer Semester:** *1st Blk***Typically Taught Fall Semester:** *1st Blk***Typically Taught Spring Semester:** *1st Blk*

Description: Introduces the paramedic student to basic pathophysiology, pharmacology, research methods, airway management, plus patient interaction and assessment skills. Includes professional and wellness considerations for the individual practitioner and patient. Basic knowledge of medical incident command, rescue awareness, hazardous materials incidents, and crime scene awareness is included. Meets all national EMS Education Standards. Prospective students must be EMT certified, accomplish Dumke College of Health Professions advising, complete the department application process, and then be accepted to the program prior to registration.

PAR 2020 - Traumatic Emergencies

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Description: Prepares the student to recognize, assess and provide paramedic interventions related to bodily traumatic injuries. Current PHTLS/BTLS/ABLS principles are utilized.

Pre-requisite(s): PAR 2000 and PAR 3010.

PAR 2030 - Special Populations in Paramedic Practice

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Description: Prepares the student to recognize, assess and provide paramedic interventions related to the special challenges posed by neonate, pediatric, obstetric, geriatrics, and psychiatric patients. Acute interventions for the chronically ill and home care patient are discussed. Current AHA, PEPP, and national EMS Education Standards are utilized.

Pre-requisite(s): PAR 2000 and PAR 3010.

PAR 2040 - Paramedic Skills and Simulation Lab

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$500.00

Course Fee Purpose: PAR 2040 requires a skill lab fee of \$500 per student. This fee covers skill lab expenses not included within the standard tuition rates. These expenses include both disposable and non-disposable items that will be required for the successful completion of your psychomotor portfolio. Additionally, due to our accreditation body's student to instructor ratio requirements, experienced state certified EMS instructors will be utilized to assist your professors with skill lab rotations. These required fees will also supplement the compensation for these instructors as needed.

Description: Skills application using the theory of paramedic practice. This course will complete the National Registry Paramedic Psychomotor Competency Portfolio. Students must pass all skills before advancing into clinical and field internship rotations.

Pre-requisite(s): PAR 2000.

(\$225 lab fee)

PAR 2100 - Capstone Course in Paramedic Practice

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Pathophysiology and advanced concepts applied to recognition of Advanced Life Support patient problems and treatment modalities. Student research and presentation projects are designed to meet professional goals and experiences. All paramedic terminal competencies will be re-verified prior to a recommendation to certify. Student must pass the physician oral examination to be recommended for certification testing.

Pre-requisite(s): PAR 2000, PAR 3010, PAR 2020, PAR 2030, PAR 2040.

PAR 2110 INT - Paramedic Clinical Experience

Credits: (3)**Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$38.00

Course Fee Purpose: PAR 2110 requires an additional student fee of \$40 per student. This fee covers the costs of clinical scheduling software not included within the standard tuition rates. The hospital systems at which each student will perform clinical rotations, mandates that the scheduling be managed through this software. The specific software and its use is dictated by the hospital systems and is not optional.

Description: Clinical rotations in various medical settings provide the student with the opportunity to perform skills and apply knowledge of paramedic practice. Includes, but is not limited to, areas in the operating room, emergency department, labor/delivery, psychiatric, pediatric, burn and cardiac cath units.

Pre-requisite(s): PAR 2000, PAR 3010, PAR 2020, PAR 2030, PAR 2040.

PAR 2120 INT - Paramedic Field Internship**Credits: (9)****Typically Taught Summer Semester:** *2nd Blk***Typically Taught Fall Semester:** *2nd Blk***Typically Taught Spring Semester:** *2nd Blk*

Description: Rotations with various paramedic Fire/EMS agencies providing rescue vehicle response to advance the skills and performance of paramedic practice. Successful evaluation of professionalism, interpersonal relationships and problem solving under stress, must be completed for recommendation to test for certification/licensure. Student will nominally complete 480 hours of ride time and successfully complete 50 ALS Team Leads.

Pre-requisite(s): PAR 2000, PAR 2020, PAR 2030, PAR 2040, PAR 2110, PAR 3010.

PAR 3010 - Cardiac and Medical Emergencies**Credits: (6)****Typically Taught Summer Semester:** *2nd Blk***Typically Taught Fall Semester:** *2nd Blk***Typically Taught Spring Semester:** *2nd Blk*

Description: Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment and/or disposition plan for a patient with a cardiac or medical complaint. This course prepares the paramedic student to recognize, assess, develop and implement paramedic interventions related to cardiac and other medical emergencies. Topical areas include the cardiac, circulatory, digestive, endocrine, HEENT, hematologic, respiratory, and urinary systems. Concepts of infectious diseases, toxicology, anaphylaxis, environmental exposure, and shock will also be presented. Current AHA Guidelines and the 2010 National EMS Standards will be fully utilized.

Pre-requisite(s): PAR 2000.

May be repeated once for credit.

PAR 3110 - Critical Care Transport Course**Credits: (6)****Typically Taught Summer Semester:** *1st Blk*

Description: This course will prepare experienced paramedics and registered nurses to become part of a highly functioning critical care transport team, often transporting high risk patients. Topics covered include; 1) History and role of critical care transport; 2) General principles of critical care transport, 3) Patient care principles 4) Trauma emergencies; 5) Medical emergencies; 6) Environmental emergencies 7) Special populations, and 8) Medical, legal and patient care issues in critical care transport. While the course is primarily oriented to ground transportation, the content presented will allow a student take the National Flight Nurse/Paramedic exam.

Pre-requisite(s): Paramedic or registered nurse (2-3 years experience nominal) or department approval.

May be repeated up to two times.

PAR 3130 - Mobile Integrated Healthcare

Credits: (2)

Typically Taught Spring Semester: *1st Blk, Online*

Description: Mobile Integrated Healthcare (MIH) is the provision of healthcare using patient-centered, mobile resources in the out-of-hospital environment. This course is intended to provide the Emergency Healthcare Services student the tools needed to perform an organizational readiness assessment leading to the development of a community MIH program. The history of MIH, potential stakeholders, types of MIH programs along with data collection, QA/QI, and reimbursement will be explored. As the course capstone, each student will submit a MIH implementation plan that could be utilized in their current EMS response area. (This course does not have a clinical component nor leads to any potential state licensure.)

Pre-requisite(s): Allied Health or Nursing background suggested or departmental approval.

PAR 4110 - Emergency Medical Services Management Topics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The principles of management and process that contribute to the effectiveness of day-to-day operations within an EMS organization. Topics include human resource management, communications systems, deployment strategies, and risk management. Additional topics include an emphasis on demand analysis, staffing, medical direction, reimbursement, capital investment, and cost control.

May be repeated up to two times.

PAR 4120 - Emergency Medical Service Teaching Topics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Using the USDOT/NHTSA National Guidelines for Educating EMS Instructors, this course will prepare emergency medical service instructors for classroom and skill lab teaching. Topics discussed include; 1) instructor roles and responsibilities; 2) the student; 3) foundations of education; 4) delivering the message; 5) evaluation and 6) course administration. Students will demonstrate EMS teaching in both a class room and skill lab environment.

Pre-requisite(s): EMT-Basic certification.

May be repeated up to two times.

PAR 4130 - Capstone Seminar in Emergency Medicine Research

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Online*

Description: This course is designed to offer students the basic principles and methods of empirical inquiry in emergency healthcare. The course will provide an understanding of emergency medicine research through serious exploration of its language, ethics, and methods. The course examines the processes of quantitative, qualitative, and mixed methods approaches to experimental and observed analysis. Students will develop the skills to begin to critically review literature relevant to emergency medicine research and determine why evidence-based practices are important for the development and progression of the emergency healthcare discipline.

Pre-requisite(s): Must be enrolled in Bachelor of Science in Emergency Healthcare Services or by departmental approval.

PDD 1010 - Introduction to Engineering & Technical Design (Solidworks)

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: An introductory course to explore engineering and technical design solutions using critical thinking in Science, Technology, Engineering and Mathematics (STEM). Learning modules include; The Engineering Design Process & Professions, Sketching & Documentation, Design Measuring, Introduction to CAD & Geometric Constraints, Design Visualization, Orthographic Projection & Multi-View Drawings, Fasteners, Assembly Drawings, Dimensioning, Tolerancing, Final Team Design Projects, and Final Review & Assessment.

Pre-requisite(s): MATH 1010 or placement.

PDD 1020 - Introduction to 2D CAD Software

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An introductory course to explore engineering and technical design solutions using critical thinking in Science, Technology, Engineering and Mathematics. Topics include Engineering Design Processes & Professions, Sketching and Documentation, Design Measuring, Introduction to 2 D CAD Software, Design Visualization, Orthographic Projection and Multi-View Drawings, Fasteners, Assembly Drawings, Dimensioning, and Tolerancing.

PDD 1030 - Introduction to Product Design and Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Fees for this course are designed to cover equipment maintenance and replacement, computer usage, software, consumable materials and supplies, and instructional resources.

Description: This is an introductory course for students interested in majoring in Product Design and Development. Students will be exposed to Product Design and Development through several laboratory experiences that introduce them to concepts needed for future classes. Students will gain a clear understanding of degree requirements and possible career paths.

Pre-requisite(s): PDD 1010.

PDD 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: The use of CAD to create industrial level production working drawings. Includes the latest ASME Y14.5 standards for Geometric Dimensioning & Tolerancing. Topics of discussion will include: dimensions, fits, tolerances, surface finishes, symbols for welding, piping, machined elements/processes and sheet metal flat patterns.

Pre-requisite(s): PDD 1010.

PDD 1810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hrs.

PDD 2460 - Product Design Fundamentals Using 3D CAD

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: Product Design is the creative process of applying scientific and mathematical principles, experience, and judgment to the development of the solution of a technical product or system to meet a specific need. Turning ideas into design will incorporate problem identification, market research and brainstorming possible solutions, develop detailed part and assembly drawings, implementation, and evaluation. Sketching, gears/cams/shafts, advanced GD&T, tolerance build-up, tolerances for assemblies, introduction to rapid prototyping, and CNC design for manufacturing concepts will be presented. Advanced 3-D modeling software applications will include: library of parts, assembly constraints, motion constraints, drive constraints, and adaptive design.

Three lectures per week.

Pre-requisite(s): PDD 1160.

PDD 2650 - Product Design & Development

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: Uses CAD to lay out advanced production drawings and design. Uses the Machinery's Handbook, ANSI standards, geometric dimensioning and tolerances and manufacturer's reference materials. Supports the design and drafting required for senior project.

Pre-requisite(s): PDD 1030 and PDD 2460.

PDD 2830 - Directed Readings

Credits: (1-3)

Typically Taught Spring Semester: *Full Sem*

Description: Directed readings in Design Engineering Technology including product design and development and architectural areas. Must have department approval.

Can be taken for 1-3 credit hours twice for a maximum of 6 credits.

PDD 2890 INT - Cooperative Work Experience

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all advanced students in Design Engineering Technology. Department approval required before registration. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

Can be taken for 1-3 credit hours twice for a maximum of 6 credits.

PDD 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Spring Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

PDD 3100 - Tool Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: Tool design principals used for work piece control in manufacturing and production. Topics include responsibilities of a tool designer, the design process, economics of design, tooling materials, and tool drawings and specifications. Other topics will include jigs, fixtures, gages, dies and tooling required by specialized manufacturing processes.

Pre-requisite(s): PHYS 2010, MFET 1210, PDD 2460, and MATH 1080 (or MATH 1050 and MATH 1060).

PDD 3210 - Machines and Mechanisms

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.

Description: Uses 3D parametric design software to produce design solutions for open-ended design projects, focusing on the relationship between "make" and "buy" parts. Gives students the opportunity to become familiar with engineering functions and manufacturing processes as related to mechanical design. Introduces the iterative process required to optimize design solutions. Studies elements inherent to the design of components fabricated from traditional engineering materials using practical manufacturing methods. Examines the characteristics of mechanical components and the integration of said components to specific machine designs. Uses select information from manufacturer's data for components integral to the comprehensive design of complete machines. Covers concepts such as position, velocity, and acceleration. Also covers mechanism design including weldments, prime movers, gear pumps, belt and chain drives, hydraulic motors, bearing applications, braking systems, tanks, and sheet metal layout. Supports the design requirements for senior projects.

Pre-requisite(s): MFET 1210, MFET 2150, and PDD 2460.

PDD 3300 - Applied Kinematic Analysis

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: Graphical representation of the motion of bodies without reference to the forces that cause the motion. Devices will be modeled and the limits of movement of components defined so that overall machine design can be animated and analyzed.

Pre-requisite(s): MFET 2300 or MFET 2310 and MFET 2320.

PDD 3400 - Rendering Basics (Photoshop/3ds Max)

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course introduces students to the basic tools and concepts used in Adobe Photoshop and 3ds Max. Photoshop instruction includes using layers, image editing using selection tools, filtering, and touching up a 3D render. 3ds Max instruction includes importing models, adding materials, lighting a scene, and creating a basic animation.

PDD 3460 - Parametric Design Graphics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support.

Description: An advanced design graphics course using state-of-the-art parametric modeling software. Topics include: parametric modeling fundamentals, constructive solid geometry concepts, model history, parent/child relationships, parametric constraints & relations, datum features, symmetrical features, 3D construction tools, advanced modeling tools, and assembly modeling.

Pre-requisite(s): PDD 1010.

PDD 3470 - Introduction to CATIA V5

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: Use of parametric 3D modeling software to prepare engineering documentation and model analysis for the automotive and aerospace manufacturing industries. Students will complete a series of laboratory assignments and term projects in an open lab environment.

Pre-requisite(s): PDD 1010, PDD 1160, and PDD 2460 or MFET 2870 or instructor's approval.

PDD 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Individual courses offered on an experimental basis, identified by specific name and description. The specific title will appear on student's transcript along with the authorized credit.

May be repeated for a total maximum of 6 credit hours.

PDD 4200 - Advanced Mechanical Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Course Fees:

Fees for this course are designed to cover equipment maintenance and replacement, computer usage, software, consumable materials and supplies, and instructional resources.

Description: Uses 3D CAD (3-dimensional computer-aided design) software to create production designs and drawings for heavy industrial applications. Uses the American Institute of Steel Construction (AISC) Manual and the Structural Aluminum Design Handbook in conjunction with metal supplier's product engineering data to design and analyze mechanical systems using traditional and Finite Element Analysis (FEA) Methods in quantifying component mechanics of material integrity. Preparation of fabrication drawings for said systems will also be covered in the course.

Pre-requisite(s): MFET 2320.

PDD 4400 - Animation Basics (3ds Max)

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course is a continuation of DET 3400. An in-depth look into 3ds Max focusing more on photorealism and animation. Students will learn how to take models created in other programs learned throughout the DET program into 3ds Max and bring them to life. Video editing is covered to allow students to create

professional animations and videos.

Pre-requisite(s): PDD 3400.

PDD 4470 - Advanced CATIA V5

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: An advanced 3D CAD course featuring 3-D parametric modeling using commercially available software. Studies in parametric design and design intent, applying surfaces, rendering, and creating animated presentations for the automotive and aerospace industries.

Pre-requisite(s): PDD 3470.

PDD 4500 - Hydraulic and Pneumatic Applications

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Software licensing, lab computers and support

Description: Examines the components of hydraulic and pneumatic systems, including a detailed study of each type of system and the integration of all components required for machine design. The symbols used to document hydraulic and pneumatic systems and the selection of components from vendor catalogs will be included in the detailing of complete machines.

Pre-requisite(s): PDD 3210.

PDD 4600 - Senior Project I (Design)

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A Capstone project spanning two consecutive semesters. This semester concentrates on documenting the design solution. The project includes application of skills, knowledge, techniques and concepts to design and manufacture or construct a project. Emphasis placed on integrated project management including preparation of drawings, creation of presentations, project organization, control, and documentation. Prerequisite: Senior Project Application form, senior standing, approval of the department, and Associates Degree in DET or equivalent. (A student must apply for senior project one semester before the start of the senior project.)

Co-Requisite(s): MFET 4610. Cross-listed with MFET 4610L.

PDD 4610 - Senior Project II (Build)

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A Capstone project spanning two consecutive semesters. This semester concentrates on manufacturing or building the design solution. The project includes application of skills, knowledge, techniques and concepts to design and manufacture or construct a project. Emphasis placed on integrated project management including preparation of drawings, creation of presentations, project organization, control, and documentation.

Pre-requisite(s): PDD 4600. Cross-listed with: MFET 4620L.

PDD 4830 - Directed Readings

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed readings in Product Design and Development. Must have department approval.

Can be taken for 1-3 credit hours twice for a maximum of 6 credits.

PDD 4890 INT - Cooperative Work Experience

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all advanced students in Product Design and Development. Department approval required before registration. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

Can be taken for 1-3 credit hours twice for a maximum of 6 credits.

PDD 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Summer Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

PE 1010 - Aerobics, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, and other Aerobics equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources.

Description: A physical activity course that engages students in aerobic exercises to improve cardiovascular and respiratory functioning.

PE 1011 - Aerobics, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, and other Aerobics equipment/training aides, and technology based teaching

and learning aides, including but not limited to apps and other digitally based resources.

Description: A physical activity course that engages students in aerobic exercises to improve cardiovascular and respiratory functioning.

PE 1012 - Aerobics, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, and other Aerobics equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources.

Description: A physical activity course that engages students in aerobic exercises to improve cardiovascular and respiratory functioning.

PE 1035 - Zumba, Level I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing toning sticks, chain tassels, Zumba belts, wipe away sleeves/sweatbands, and other Zumba equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources.

Description: A physical activity course that introduces students to Zumba; an activity that fuses cardiovascular fitness, upbeat world rhythms, and easy-to-follow choreography for a total-body workout.

PE 1036 - Zumba, Level II

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing toning sticks, chain tassels, Zumba belts, wipe away sleeves/sweatbands, and other Zumba equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources.

Description: A physical activity course that introduces students to Zumba; an activity that fuses cardiovascular fitness, upbeat world rhythms, and easy-to-follow choreography for a total-body workout.

PE 1037 - Zumba, Level III

Credits: (1)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing toning sticks, chain tassels, Zumba belts, wipe away sleeves/sweatbands, and other Zumba equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources.

Description: A physical activity course that introduces students to Zumba; an activity that fuses cardiovascular fitness, upbeat world rhythms, and easy-to-follow choreography for a total-body workout.

PE 1040 - Walking for Fitness, Level I**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing yoga bands for stretching, foam rollers, compasses, wrist weights, ankle weights, HR monitors, and other Walking equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources.

Description: A physical activity course that engages students in walking to improve physical fitness.

PE 1041 - Walking for Fitness, Level II**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing yoga bands for stretching, foam rollers, compasses, wrist weights, ankle weights, HR monitors, and other Walking equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources.

Description: A physical activity course that engages students in walking to improve physical fitness.

PE 1042 - Walking for Fitness, Level III**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing yoga bands for stretching, foam rollers, compasses, wrist weights, ankle weights, HR

monitors, and other Walking equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources.

Description: A physical activity course that engages students in walking to improve physical fitness.

PE 1043 - Jogging, Level I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heart rate monitors, heart rate straps, exercise balls, foam rollers, jump ropes, box jumps, and other jogging equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students in jogging to improve physical fitness and health. Topics in the biomechanics of running efficiently and safely, heart rate, energy expenditure, body composition, and diet may be taught.

PE 1044 - Jogging, Level II

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heart rate monitors, heart rate straps, exercise balls, foam rollers, jump ropes, box jumps, and other jogging equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students in jogging to improve physical fitness and health. Topics in the biomechanics of running efficiently and safely, heart rate, energy expenditure, body composition, and diet may be taught.

PE 1045 - Jogging, Level III

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heart rate monitors, heart rate straps, exercise balls, foam rollers, jump ropes, box jumps, and other jogging equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students in jogging to improve physical fitness and health. Topics in the biomechanics of running efficiently and safely, heart rate, energy expenditure, body composition, and diet may be taught.

PE 1055 - Pilates

Credits: (1)**Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing Pilates machine, table, chair, rings, exercise balls, mats, bolsters, and other Pilates equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that introduces students to Pilates training; a mind-body exercise program designed to tone the body, stabilize the core, improve balance, and increase flexibility.

PE 1057 - Hatha Yoga, Level I**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing yoga blocks, mat straps, bolsters, bricks, belts, grip towels, yoga blankets, eye pillows, ropes, swings, meditation equipment, mat cleaning materials, and other Hatha Yoga equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A beginner physical activity course that allows students to learn and experience the physical benefits and body awareness associated with practicing yoga.

PE 1058 - Hatha Yoga, Level II**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing yoga blocks, mat straps, bolsters, bricks, belts, grip towels, yoga blankets, eye pillows, ropes, swings, meditation equipment, mat cleaning materials, and other Hatha Yoga equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and experience the physical benefits and body awareness associated with practicing yoga. This Level II course allows students to build on skills developed in Level I.

PE 1068 - Kettlebell Conditioning**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in

this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, Kettlebells and other Kettlebell training equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A vigorous introductory physical conditioning course primarily utilizing kettlebells. Exercises designed to enhance strength, power, endurance, and agility will be emphasized.

PE 1070 - Cross Training For Fitness, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$7.50

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, and other Crosstraining equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students in cross training activities to improve overall levels of physical fitness.

PE 1071 - Cross Training For Fitness, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$7.50

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, and other Crosstraining equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students in cross training activities to improve overall levels of physical fitness.

PE 1072 - Cross Training For Fitness, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$7.50

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, and other Crosstraining equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students in cross training activities to improve overall levels of physical fitness.

PE 1077 - Weightlifting, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A vigorous physical conditioning course intended to assist students in skill development specific to Olympic weightlifting. The snatch and clean-and-jerk, will be emphasized as will assistance exercises to increase strength.

PE 1078 - Weightlifting, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A vigorous physical conditioning course intended to assist students in skill development specific to Olympic weightlifting. The snatch and clean-and-jerk, will be emphasized as will assistance exercises to increase strength.

PE 1079 - Weightlifting, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A vigorous physical conditioning course intended to assist students in skill development specific to Olympic weightlifting. The snatch and clean-and-jerk, will be emphasized as will assistance exercises to increase strength.

PE 1080 - Strength Training, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$7.50

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, dumbbells, and other strength training equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students in neuromuscular conditioning. Course subject matter will include neuromuscular conditioning, developing strength training programs, and learning and practicing proper lifting techniques.

PE 1081 - Strength Training, Level II

Credits: (1)**Typically Taught Summer Semester:** *Full Sem, Online***Typically Taught Fall Semester:** *Full Sem, Online***Typically Taught Spring Semester:** *Full Sem, Online***Course Fee:** \$7.50

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, dumbbells, and other strength training equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students in neuromuscular conditioning. Course subject matter will include neuromuscular conditioning, developing strength training programs, and learning and practicing proper lifting techniques.

PE 1082 - Strength Training, Level III**Credits: (1)****Typically Taught Summer Semester:** *Full Sem, Online***Typically Taught Fall Semester:** *Full Sem, Online***Typically Taught Spring Semester:** *Full Sem, Online***Course Fee:** \$7.50

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, dumbbells, and other strength training equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students in neuromuscular conditioning. Course subject matter will include neuromuscular conditioning, developing strength training programs, and learning and practicing proper lifting techniques.

PE 1098 - Fitness for Life**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, and other fitness equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources.

Description: A physical activity course that teaches students the importance of engaging in lifetime fitness. Strategies for maintaining and enhancing cardiovascular fitness, muscular strength, flexibility, and body composition will be taught.

PE 1100 - Tennis, Level I**Credits: (1)****Typically Taught Fall Semester:** *1st Blk***Course Fee:** \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing dampeners, backboards, string savers, hoppers, rackets, tennis balls, wrist trainers, ball retrievers and launchers, and other Tennis equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play tennis.

PE 1101 - Tennis, Level II

Credits: (1)

Typically Taught Fall Semester: *2nd Blk*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing dampeners, backboards, string savers, hoppers, rackets, tennis balls, wrist trainers, ball retrievers and launchers, and other Tennis equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play tennis.

PE 1102 - Tennis, Level III

Credits: (1)

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing dampeners, backboards, string savers, hoppers, rackets, tennis balls, wrist trainers, ball retrievers and launchers, and other Tennis equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play tennis.

PE 1105 - Badminton, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing racquets, shuttlecocks (feathered and plastic), cones, hula-hoops (targets), and other Badminton equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play badminton.

PE 1106 - Badminton, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing racquets, shuttlecocks (feathered and plastic), cones, hula-hoops (targets), and other Badminton equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play badminton.

PE 1110 - Racquetball, Level I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing racquets, protective glasses/gear, targets, balls, and other Racquetball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play racquetball.

PE 1111 - Racquetball, Level II

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing racquets, protective glasses/gear, targets, balls, and other Racquetball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play racquetball.

PE 1112 - Racquetball, Level III

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing racquets, protective glasses/gear, targets, balls, and other Racquetball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play racquetball.

PE 1115 - Pickleball, Level 1

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing pickleballs, rackets, ball storage containers, retrievers, mobile whiteboards, and other Pickleball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to study, practice, and develop skill and competency at a proficient level, and to be able to successfully participate and play a game of pickleball.
May be repeated twice.

PE 1116 - Pickleball, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing pickleballs, rackets, ball storage containers, retrievers, mobile whiteboards, and other Pickleball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to study, practice, and develop skill and competency at a proficient level, and to be able to successfully participate and play a game of pickleball.
May be repeated twice.

PE 1117 - Pickleball, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing pickleballs, rackets, ball storage containers, retrievers, mobile whiteboards, and other Pickleball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to study, practice, and develop skill and competency at a proficient level, and to be able to successfully participate and play a game of pickleball.
May be repeated twice.

PE 1130 - Golf, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk*

Typically Taught Fall Semester: *1st Blk*

Course Fee: \$100.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing golf balls (regular, wiffle, foam), clubs, mats, tees, training aides, gps trackers, swing trainers, impact bags, and other Golf equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources. A large portion of the fees will also go towards driving range balls as well as course fee costs.

Description: A beginning level physical activity course that allows students to learn and develop the skills needed to play golf.

PE 1131 - Golf, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk*

Typically Taught Fall Semester: *2nd Blk*

Course Fee: \$100.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing golf balls (regular, wiffle, foam), clubs, mats, tees, training aides, gps trackers, swing trainers, impact bags, and other Golf equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources. A large portion of the fees will also go towards driving range balls as well as course fee costs.

Description: An intermediate level physical activity course that allows students to learn and develop the skills needed to play golf.

PE 1132 - Golf, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk*

Typically Taught Fall Semester: *3rd Blk*

Course Fee: \$100.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing golf balls (regular, wiffle, foam), clubs, mats, tees, training aides, gps trackers, swing trainers, impact bags, and other Golf equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources. A large portion of the fees will also go towards driving range balls as well as course fee costs.

Description: An advanced level physical activity course that allows students to learn and develop the skills needed to play golf.

PE 1135 - Archery, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing bows, arrows, sights, bands, targets, stabilizers, target faces, blunts, arrowheads, and other archery equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to practice archery.

PE 1136 - Archery, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing bows, arrows, sights, bands, targets, stabilizers, target faces, blunts, arrowheads, and other archery equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to practice archery.

PE 1137 - Archery, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing bows, arrows, sights, bands, targets, stabilizers, target faces, blunts, arrowheads, and other archery equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to practice archery.

PE 1140 - Marksmanship

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Description: A physical activity course that allows students to learn and develop the skills needed to practice shooting and other skills related to marksmanship.

PE 1145 - Bowling, Level I

Credits: (1)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$75.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing lane rentals, balls, gloves, and other Bowling equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to practice bowling.

PE 1146 - Bowling, Level II

Credits: (1)

Typically Taught Summer Semester: *3rd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$60.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing lane rentals, balls, gloves, and other Bowling equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to practice bowling.

PE 1147 - Bowling, Level III

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$60.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing lane rentals, balls, gloves, and other Bowling equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to practice bowling.

PE 1150 - Billiards, Level I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing cue sticks, balls, table rentals, chalk, training aides, and other Billiards equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to practice billiards.

PE 1151 - Billiards, Level II

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A physical activity course that allows students to learn and develop the skills needed to practice billiards.

PE 1152 - Billiards, Level III

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A physical activity course that allows students to learn and develop the skills needed to practice billiards.

PE 1155 - Fencing, Level I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing masks, uniforms, gloves, cuffs, lames, fencing bags, covers, coaching gear, foils, practice weapons, grips, socket clips, electric blades, body cords, reel parts, scoring equipment, and other Fencing equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to practice fencing.

PE 1156 - Fencing, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing masks, uniforms, gloves, cuffs, lames, fencing bags, covers, coaching gear, foils, practice weapons, grips, socket clips, electric blades, body cords, reel parts, scoring equipment, and other Fencing equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to practice fencing.

PE 1157 - Fencing, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing masks, uniforms, gloves, cuffs, lames, fencing bags, covers, coaching gear, foils, practice weapons, grips, socket clips, electric blades, body cords, reel parts, scoring equipment, and other Fencing equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to practice fencing.

PE 1200 - Basketball, Level I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing basketballs, pumps, cones, agility equipment, rebounder equipment, toss trainers, and other Basketball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play basketball.

PE 1201 - Basketball, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing basketballs, pumps, cones, agility equipment, rebounder equipment, toss trainers, and other Basketball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play basketball.

PE 1202 - Basketball, Level III

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing basketballs, pumps, cones, agility equipment, rebounder equipment, toss trainers, and other Basketball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play basketball.

PE 1210 - Volleyball, Level I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing nets, volleyballs, safety equipment, knee pads, poles, volleyball carts and storage equipment, blocking pads, targets, challenger machines, and other Volleyball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play volleyball.

PE 1211 - Volleyball, Level II

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing nets, volleyballs, safety equipment, knee pads, poles, volleyball carts and storage equipment, blocking pads, targets, challenger machines, and other Volleyball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play volleyball.

PE 1212 - Volleyball, Level III

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing nets, volleyballs, safety equipment, knee pads, poles, volleyball carts and storage equipment, blocking pads, targets, challenger machines, and other Volleyball equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play volleyball.

PE 1225 - Softball

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A physical activity course that allows students to learn and develop the skills needed to play softball.

PE 1230 - Soccer, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing soccer balls, pop up goals/nets, cones, skill master trainers, agility equipment, and other Soccer equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play soccer.

PE 1231 - Soccer, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing soccer balls, pop up goals/nets, cones, skill master trainers, agility equipment, and other Soccer equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play soccer.

PE 1232 - Soccer, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing soccer balls, pop up goals/nets, cones, skill master trainers, agility equipment, and other Soccer equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to play soccer.

PE 1235 - Flag Football

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing flags, footballs, agility equipment, pinnies, belts, and other Flag Football equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: This physical activity course is intended to engage students in the sport of flag football. Students will learn techniques, drills, and games to assist with development of skills and competitive game play.

PE 1245 - Ultimate Frisbee, Level I

Credits: (1)

Typically Taught Summer Semester: *1st Blk; 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *1st Blk; 2nd Blk*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing frisbees, cones, flags, and other Ultimate Frisbee equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: This physical activity course is intended to engage students in the sport of Ultimate Frisbee. Students will learn techniques, drills, and games to assist with development of skills and competitive game play. May be repeated up to 20 times.

PE 1246 - Ultimate Frisbee, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing frisbees, cones, flags, and other Ultimate Frisbee equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: This physical activity course is intended to engage students in the sport of Ultimate Frisbee. Students will learn techniques, drills, and games to assist with development of skills and competitive game play. May be repeated up to 20 times.

PE 1247 - Ultimate Frisbee, Level III

Credits: (1)

Typically Taught Summer Semester: *Fall Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Fall Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Fall Sem, 1st Blk, 2nd Blk*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing frisbees, cones, flags, and other Ultimate Frisbee equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: This physical activity course is intended to engage students in the sport of Ultimate Frisbee. Students will learn techniques, drills, and games to assist with development of skills and competitive game play. May be repeated up to 20 times.

PE 1265 - Water Sports

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A physical activity course that allows students to learn and develop skills needed to play water sports. Water sports include, but are not limited to: swimming, water aerobics, water polo, and snorkeling.

PE 1300 - Swimming, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing aquatic fitness gloves, snorkels, fins, paddles, resistance gear, and other Swimming equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources. Fees will also be used to pay for lifeguard fees.

Description: A physical activity course that allows students to engage in the sport of swimming.

PE 1301 - Swimming, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing aquatic fitness gloves, snorkels, fins, paddles, resistance gear, and other Swimming equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources. Fees will also be used to pay for lifeguard fees.

Description: A physical activity course that allows students to engage in the sport of swimming.

PE 1302 - Swimming, Level III

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing aquatic fitness gloves, snorkels, fins, paddles, resistance gear, and other Swimming equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources. Fees will also be used to pay for lifeguard fees.

Description: A physical activity course that allows students to engage in the sport of swimming.

PE 1310 - Water Aerobics, Level I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing aqua joggers, floating barbells, webbed gloves, and other Water Aerobics equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: This physical activity course will introduce students to water conditioning. Through aerobic conditioning, abdominal toning, and stretching, students will learn how to maintain a high level of fitness through application of aerobic training principles in an aquatic environment.

PE 1311 - Water Aerobics, Level II

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This physical activity course will introduce students to water conditioning. Through aerobic conditioning, abdominal toning, and stretching, students will learn how to maintain a high level of fitness through application of aerobic training principles in an aquatic environment.

PE 1312 - Water Aerobics, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing aqua joggers, floating barbells, webbed gloves, and other Water Aerobics equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: This physical activity course will introduce students to water conditioning. Through aerobic conditioning, abdominal toning, and stretching, students will learn how to maintain a high level of fitness through application of aerobic training principles in an aquatic environment.

PE 1340 - Lifeguarding

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Skills and knowledge needed by lifeguards to prevent and respond to aquatic emergencies. The course content and activities prepare lifeguard candidates to recognize emergencies, respond quickly and effectively to emergencies, and prevent drownings and other incidents. The course also teaches other skills and individual needs to become a professional lifeguard. Upon successful completion of this course participants will be certified in American Red Cross CPR for Professional Rescuer and Lifeguard Training.

Pre-requisite(s): Skills screening will be required.

Please note: The Lifeguard Training certificate includes certification in first aid.

PE 1400 - Self Defense, Level I

Credits: (1)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other Self-Defense equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform the art of self-defense, in a safe and controlled environment.

PE 1401 - Self Defense, Level II**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other Self-Defense equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform the art of self-defense, in a safe and controlled environment.

PE 1402 - Self Defense, Level III**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other Self-Defense equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform the art of self-defense, in a safe and controlled environment.

PE 1403 - Smart Defense**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This course offers empowerment-based training for individuals to discover and develop their physical, mental, and emotional strength. It focuses on promoting social norms that protect against violence and equips participants with skills to prevent sexual violence and support recovery.

PE 1404 - Smart Defense for Becoming an Ally

Credits: (1)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Typically Taught Fall Semester: *1st Blk, 2nd Blk*

Typically Taught Spring Semester: *1st Blk, 2nd Blk*

Description: This course offers empowerment-based training for individuals to discover and develop their physical, mental, and emotional strength to become a sexual assault ally. It focuses on promoting social norms and creating safe spaces that protect against violence and equips participants with skills to prevent sexual violence.

PE 1410 - TaiChi, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other tai-chi equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform TaiChi, which engages the body and mind and to reduce stress.

PE 1411 - TaiChi, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other tai-chi equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform TaiChi, which engages the body and mind and to reduce stress.

PE 1412 - TaiChi, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other tai-chi equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform TaiChi, which engages the body and mind and to reduce stress.

PE 1425 - Jiu Jitsu, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other Jiu Jitsu equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop skills needed to perform the various styles of Jiu Jitsu.

May be repeated twice.

PE 1426 - Jiu Jitsu, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other Jiu Jitsu equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop skills needed to perform the various styles of Jiu Jitsu.

May be repeated twice.

PE 1427 - Jiu Jitsu, Level III

Credits: (1)

Typically Taught Summer Semester: *1st Blk; 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing free standing punching bags, focus mitts, chest protectors, sparring equipment,

belts, head guards, hand wraps, shin/instep/forearm protectors, and other Jiu Jitsu equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources
Description: A physical activity course that allows students to learn and develop skills needed to perform the various styles of Jiu Jitsu.
May be repeated twice.

PE 1435 - Kempo, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other Kempo equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform the various fighting styles of Kempo Karate.

PE 1436 - Kempo, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other Kempo equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform the various fighting styles of Kempo Karate.

PE 1437 - Kempo, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other Kempo equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform the various fighting styles of Kempo Karate.

PE 1440 - Mixed Martial Arts, Level I

Credits: (1)

Typically Taught Summer Semester: *Fall Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Fall Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Fall Sem, 1st Blk, 2nd Blk*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other MMA equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn how to improve physical fitness and become mentally strong while mastering self-discipline and self-control to master the various techniques and forms of martial arts as they pertain to the sport of Mixed Martial Arts.

May be repeated up to 20 times.

PE 1441 - Mixed Martial Arts, Level II

Credits: (1)

Typically Taught Summer Semester: *Fall Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Fall Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Fall Sem, 1st Blk, 2nd Blk*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other MMA equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn how to improve physical fitness and become mentally strong while mastering self-discipline and self-control to master the various techniques and forms of martial arts as they pertain to the sport of Mixed Martial Arts.

May be repeated up to 20 times.

PE 1442 - Mixed Martial Arts, Level III

Credits: (1)

Typically Taught Summer Semester: *Fall Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Fall Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Fall Sem, 1st Blk, 2nd Blk*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, exercise balls, mats, fitness bands, flooring, HR monitors, steps, toning bars, weight plates, bars, foam rollers, free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other MMA equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn how to improve physical fitness and become mentally strong while mastering self-discipline and self-control to master the various techniques and forms of martial

arts as they pertain to the sport of Mixed Martial Arts.
May be repeated up to 20 times.

PE 1445 - Tae Kwon-do, Level I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other Tae kwon-do equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform the martial art of Tae Kwon-do through combat and self-defense while incorporating sport and exercise.

PE 1446 - Tae Kwon-do, Level II

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other Tae kwon-do equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform the martial art of Tae Kwon-do through combat and self-defense while incorporating sport and exercise.

PE 1447 - Tae Kwon-do, Level III

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing heavy bags, free standing punching bags, focus mitts, chest protectors, sparring equipment, belts, head guards, hand wraps, shin/instep/forearm protectors, and other Tae kwon-do equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that allows students to learn and develop the skills needed to perform the martial art of Tae Kwon-do through combat and self-defense while incorporating sport and exercise.

PE 1515 - Sailboating

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A physical activity course that introduces students to the outdoor activity of sailboating. The fundamental skills of sailboating will be addressed for both beginning and recreational sailors.

PE 1557 - Bicycling, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A physical activity course that allows students to learn and develop the skills and knowledge needed to safely enjoy bicycling.

PE 1558 - Bicycling, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A physical activity course that allows students to learn and develop the skills and knowledge needed to safely enjoy bicycling.

PE 1559 - Bicycling, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A physical activity course that allows students to learn and develop the skills and knowledge needed to safely enjoy bicycling.

PE 1575 - Rodeo I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A physical activity course that engages students to learn how to participate in rodeo events. Students will learn various skills, history and culture, and styles, as well as how to maintain a high level of fitness through participation in rodeo.

May be repeated 2 times up to 3 credit hours.

PE 1670 - Ice Skating, Level I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this

specific course include replacing ice skate rentals, admittance into the ice sheet, and other Ice Skating equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that introduces students to ice skating. The fundamental skills of ice skating will be addressed for both beginning and recreational skaters.

PE 1710 - Country Swing Dance Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing stereo equipment, dance props, music, and other Country Square Dance equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students to learn how to dance in the form of Country swing. Students will learn various skills, history and culture, and styles, as well as how to maintain a high level of fitness through participation in Country Swing Dancing.

May be repeated 12 times with a maximum of 12 credit hours.

PE 1711 - Country Swing Dance Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing stereo equipment, dance props, music, and other Country Square Dance equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students to learn how to dance in the form of Country swing. Students will learn various skills, history and culture, and styles, as well as how to maintain a high level of fitness through participation in Country Swing Dancing.

May be repeated 12 times with a maximum of 12 credit hours.

PE 1712 - Country Swing Dance Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing stereo equipment, dance props, music, and other Country Square Dance equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and

other digitally based resources

Description: A physical activity course that engages students to learn how to dance in the form of Country swing. Students will learn various skills, history and culture, and styles, as well as how to maintain a high level of fitness through participation in Country Swing Dancing.

May be repeated 12 times with a maximum of 12 credit hours.

PE 1765 - Hip Hop for Fitness Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing stereo equipment, dance props, music, and other Hip-hop equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students to learn how to dance in the form of Hip-Hop. Students will learn various skills, history and culture, and styles, as well as how to maintain a high level of fitness through participation in Hip-Hop.

May be repeated 12 times with a maximum of 12 credit hours.

PE 1766 - Hip Hop for Fitness Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing stereo equipment, dance props, music, and other Hip-hop equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based resources

Description: A physical activity course that engages students to learn how to dance in the form of Hip-Hop. Students will learn various skills, history and culture, and styles, as well as how to maintain a high level of fitness through participation in Hip-Hop.

May be repeated 12 times for a maximum of 12 credit hours.

PE 1767 - Hip Hop for Fitness Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$5.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing stereo equipment, dance props, music, and other Hip-hop equipment/training aides, and technology based teaching and learning aides, including but not limited to apps and other digitally based

resources

Description: A physical activity course that engages students to learn how to dance in the form of Hip-Hop. Students will learn various skills, history and culture, and styles, as well as how to maintain a high level of fitness through participation in Hip-Hop.

May be repeated 12 times for a maximum of 12 credit hours.

PEP 1000 - Foundations for Success in Physical Education

Credits: (1)

Typically Taught Summer Semester: *1st Blk-Online, 2nd Blk-Online*

Typically Taught Fall Semester: *1st Blk-Online, 2nd Blk-Online*

Typically Taught Spring Semester: *1st Blk-Online, 2nd Blk-Online*

Description: This one-credit course provides students with the tools and insights needed to thrive in the Health, Physical Education, and Recreation (HPER) program. Students will explore Health, Physical Education, and Outdoor Community and Recreation Education (OCRE) as dynamic, innovative fields of study. The course also introduces essential academic resources, strategies for success, and pathways to personal and professional growth within the program and campus community.

PEP 1079 - Weightlifting, Level III

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A vigorous physical conditioning course intended to assist students in skill development specific to Olympic weightlifting. The clean-and-jerk, and snatch, lifts will be emphasized exclusively.

Pre-requisite(s): PE 1080, or instructor approval.

PEP 2000 - Foundations of Physical Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing basketballs, scarves, hula hoops, coloring/art equipment, balloons, ribbon wands, app based software to aid teaching, purchasing your PEP Polo for wear in school visits and practicums, and other equipment used in Physical Education and in this course.

Description: Examination of history, philosophy, career opportunities, issues, and trends in physical education. Emphasis on professional preparation requirements and competencies.

PEP 2100 - Introduction to Coaching Sport

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Examines various coaching philosophies and styles along with the duties and responsibilities of the coach, with an emphasis on leadership skills, organizational and administrative duties, the legal responsibilities that affects sport and the evaluation of the athletic program.

PEP 2480 - Fitness for Life Concepts

Credits: (1)

Description: Prescribe individualized programs for weight control, cardiovascular endurance, strength and flexibility.

Note: This course is not currently offered.

PEP 2500 - Sport Pedagogy**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing basketballs, scarves, hula hoops, coloring/art equipment, balloons, ribbon wands, app based software to aid teaching, and other equipment used in Physical Education and in this course.

Description: This course is designed to provide information on skill development, practice and game planning, season schedules, creating drills and practice sessions, motivating players and coaching tips.

PEP 2600 - Growth and Motor Development**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Description of the structural and functional principles of human growth and development. Introduction of motor learning principles with emphasis on their application to pedagogy.

Pre-requisite(s): PEP 2000 or concurrent enrollment in PEP 2000.

PEP 2700 SS - Sociohistorical Aspects of Sport**Credits: (3)**

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Online*

Typically Taught Spring Semester: *Online*

Description: This course examines the sociological and historical aspects of sport in American society with the purpose of gaining an understanding of how race, class, gender, ethnicity, politics, and religion can bind Americans in a community of shared values and aspirations. Students will explore the unifying power of sport, as well as how sport serves to reproduce many inequalities present in the larger society. Gaining an understanding of how these issues, and others, interplay with sport is critical for those aspiring to become successful sport coaches, as well as for those who simply wish to gain an understanding of the complex relationship between sport and society (e.g., parents, fans, and sport participants).

PEP 2800 - Individual Projects**Credits: (1-4)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A comprehensive study of a significant problem in the field of physical education. Hours to be arranged.

May be repeated 3 times up to 4 credit hours.

PEP 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is taught as needed.

PEP 3100 - Principles of Motor Learning and Motor Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to introduce and explore motor learning and motor development principles. Particular focus will be on how the application of motor learning and motor development impact the physical education and coaching learning environments.

Pre-requisite(s): PEP 2000.

Co-Requisite(s): PEP 3520.

PEP 3240 - Skill Development and Methods of Field Sports

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of this course is to provide prospective physical education teachers experiences that will lead to skill acquisition, the ability to analyze, diagnose and correct errors in skill performance, the development of skills, drills, and game progressions, and the pedagogical skills needed to teach a variety of field sports (e.g., flag football, soccer, and softball).

Pre-requisite/Co-requisite: Prerequisite or concurrent enrollment in PEP 2000.

PEP 3242 - Skill Development and Methods of Court Sports

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to provide prospective physical education teachers experiences that will lead to skill acquisition the ability to analyze, diagnose and correct errors in skill performance, the development of skills, drills, and game progressions, and the pedagogical skills needed to teach a variety of court sports (e.g., basketball and volleyball).

Pre-requisite/Co-requisite: Prerequisite or concurrent enrollment in PEP 2000.

PEP 3260 - Methods of Teaching Lifelong Activities

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Designed to give students a broad variety of noncompetitive/nonconventional activities and sports that are beneficial as lifetime sports.

Pre-requisite/Co-requisite: Prerequisite or concurrent enrollment in PEP 2000.

PEP 3262 - Methods of Teaching Individual Sports

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this course is to provide prospective physical education teachers experiences that will lead to skill acquisition, the ability to analyze, diagnose and correct errors in skill performance, the development of skills, drills, and game progressions, and the pedagogical skills needed to teach a variety of individual sports (e.g.,

golf, swimming, and track and field).

Pre-requisite/Co-requisite: Prerequisite or concurrent enrollment in PEP 2000.

PEP 3264 - Skill Development and Methods of Teaching Racket Sports

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of this course is to provide prospective physical education teachers experiences that will lead to skill acquisition, the ability to analyze, diagnose and correct errors in skill performance, the development of skills, drills, and game progressions, and the pedagogical skills needed to teach a variety of racket sports (e.g., badminton, raquetball, and tennis/pickleball).

Pre-requisite/Co-requisite: PEP 2000.

PEP 3270 - Methods of Teaching Aerobic Conditioning

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Examine, evaluate and practice aerobic conditioning theories and current practices for the purpose of preparing entry level professionals to select, incorporate, and facilitate appropriate aerobic activities, as well as, design and evaluate the effectiveness of aerobic conditioning programs.

Two lecture/labs per week.

Pre-requisite(s): PEP 2000, PEP 2600 or concurrent enrollment in PEP 2000 or PEP 2600 .

Pre-requisite/Co-requisite: Prerequisite or concurrent enrollment in PEP 2000.

PEP 3280 - Methods of Teaching Strength and Conditioning

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include laboratory equipment costs and maintenance, as well as the provision of test preparation materials for the CSCS exam.

Description: Examine, evaluate and practice strength and conditioning theories and current practices for the purpose of preparing entry level professionals to select, incorporate, and facilitate appropriate conditioning activities, as well as, design and evaluate the effectiveness of strength and conditioning programs.

Two lecture/labs per week.

Pre-requisite(s): PE 1080.

PEP 3290 - Methods of Teaching Fitness for Life

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to introduce the fundamental principles of cardiovascular fitness, flexibility, and strength development, as well as to assist each individual to design and implement their own personal fitness program based on individual needs, assessments, and personal preferences. Students will explore resources for and methods of teaching the principles of fitness in the secondary school setting. This is a required course for the physical education major and the physical education/coaching minor.

Pre-requisite/Co-requisite: Prerequisite or concurrent enrollment in PEP 2000.

PEP 3320 - Techniques for Teaching Lifeguarding

Credits: (2)

Description: Professional techniques and methods in teaching water safety, educational programs, lifeguard training and reviews, and lifeguard progressions are taught. This course leads to Red Cross certification as a lifeguard instructor.

Note: This course is taught as needed.

PEP 3400 - Sport Psychology for Coaches

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course involves understanding the study and analysis of human behavior patterns as they relate to sport performance. Students (coaches) are provided with necessary information regarding mental processes, and applicable uses for this information. Recommended Prerequisite: PSY 1010.

PEP 3520 - Curriculum and Assessment

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing basketballs, scarves, hula hoops, coloring/art equipment, balloons, ribbon wands, app based software to aid teaching, and other equipment used in Physical Education and in this course.

Description: Course emphasis is on developing curriculum necessary to meet the needs of diverse learners. Emphasis is also on development of assessment strategies that correctly match objectives and instruction. The students are given a basic understanding of the statistical use of data for grade determination. Students will have hands on experience in designing and implementing various assessments and grading methods relating to physical education objectives. Students will also be provided the opportunity to learn how to design and implement lessons using up-to-date forms of technology that are currently being used in public schools.

Pre-requisite(s): PEP 2000.

Co-Requisite(s): PEP 3100.

PEP 3520L - Curriculum and Assessment Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will avail students a practicum opportunity to apply in an area K-12 school the theory learned and the curriculum prepared in the Curriculum and Assessment PEP 3520 course. Students will develop lessons and assessments to determine students learning and implement them in a teaching experience in the school setting.

Co-Requisite(s): PEP 3520.

PEP 3600 - Measurement and Statistics in Exercise Science

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The selection, administration, and interpretation of measurement techniques and statistical procedures for the purpose of evaluation and research as related to exercise science and health promotion.

Pre-requisite(s): Meet WSU Quantitative Literacy requirement and complete WEB 1700.

PEP 3610 - Assessment/Technology in Physical Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to help students develop assessment strategies that correctly match objectives and instruction. The students are given a basic understanding of the statistical use of data for grade determination. Students will have hands on experience in designing and implementing various assessment (affective, cognitive, and psychomotor) and grading methods relating to physical education objectives. Students will also be provided the opportunity to learn how to design and implement lessons using up-to-date forms of technology that are currently being used in public schools.

Pre-requisite(s): A minimum of 3 Skill Development and Methods of Teaching Courses.

PEP 3620 - Methods of Teaching Physical Education and Health for Elementary Teachers

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$7.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing basketballs, scarves, hula hoops, coloring/art equipment, balloons, ribbon wands, app based software to aid teaching, and other equipment used in Physical Education and in this course.

Description: The course is designed to provide students with instructional methods, activities and skills for teaching Physical Education K-6 and Health Education. The course will include a 15-hour hands-on-practicum teaching experience in an area public school. The content of this course will be presented through various instructional strategies and teaching models.

Pre-requisite/Co-requisite: EDUC 3100.

PEP 3630 - Methods of Teaching Elementary School Physical Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing basketballs, scarves, hula hoops, coloring/art equipment, balloons, ribbon wands, app based software to aid teaching, and other equipment used in Physical Education and in this course.

Description: Provides prospective elementary physical education teachers with the knowledge, skills, and experience necessary to delivering quality physical education lessons for elementary school-aged students. Principles, concepts, strategies, classroom management, skill development, and assessment will be explored.

Pre-requisite(s): PEP 2000 or PEP 3100 and PEP 3520.

PEP 3660 - Adapted Physical Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing basketballs, scarves, hula hoops, coloring/art equipment, balloons, ribbon wands, app based software to aid teaching, and other equipment used in Physical Education and in this course.

Description: The purpose of this course is to introduce and explore various congenital and acquired disabilities as well as gain an understanding of the legal mandates for individuals with disabilities and their educational rights. Particular emphasis and focus of this course will be on the application of various teaching methodologies to ensure inclusion for all in the physical education learning environment. In addition to meeting in the classroom, students will be required to participate in practicums both in the local school systems and at Weber State University.

Pre-requisite(s): PEP 2000, PEP 3100, and PEP 3520.

PEP 4700 - Methods of Teaching Junior High School Physical Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing basketballs, scarves, hula hoops, coloring/art equipment, balloons, ribbon wands, app based software to aid teaching, and other equipment used in Physical Education and in this course.

Description: Provides prospective Junior High School physical education teachers with the knowledge, skills, and experience necessary to delivering quality physical education lessons for Junior High School-aged students. Principles, concepts, strategies, classroom management, skill development, and assessment will be explored.

Pre-requisite(s): PEP 2000 and PEP 3100 and PEP 3520.

PEP 4710 - Methods of Teaching High School Physical Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include replacing basketballs, scarves, hula hoops, coloring/art equipment, balloons, ribbon wands, app based software to aid teaching, and other equipment used in Physical Education and in this course.

Description: Provides prospective high school physical education teachers with the knowledge, skills, and experience necessary to delivering quality physical education lessons for high school-aged students. Principles, concepts, strategies, classroom management, skill development, and assessment will be explored.

Pre-requisite(s): PEP 2000 and PEP 3100 and PEP 3520.

PEP 4800 - Individual Projects

Credits: (1-4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A comprehensive study of a significant problem in the field of physical education. Hours to be

arranged. For seniors only.
May be repeated 3 times up to 4 credit hours.

PEP 4830 - Directed Readings

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individualized readings and investigation of professional literature and its application to current and future specialized topics supervised by a faculty member. Extensive reading and formal writing required. Hours to be arranged. For seniors only.

May be repeated 2 times up to 3 credit hours.

PEP 4860C INT - Field Experience Coaching

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Work experience which applies prior academic learning in a supervised setting.

Pre-requisite/Co-requisite: PEP 2100 and PEP 2500.

PEP 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is taught as needed.

PEP 4990 INT - Field Experience/Senior Seminar

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to provide students with the opportunity to gain practical experiences in the field of physical education by teaching a class or classes in local public school grades 6-12. The course is also designed for students to meet and discuss a variety of issues relevant to preparing students to be physical educators.

Pre-requisite(s): PEP 3520 and PEP 3100 and a minimum of 3 methods courses (12 credits). Choice of Methods Courses: PEP 3280, PEP 3290, PEP 3630, PEP 3660, PEP 4700, PEP 4710.

PEP 5000 - Principles of Athletic Administration and Program Management

Credits: (3)

Typically Taught Summer Semester: *1st Blk-Online, 2nd Blk-Online*

Typically Taught Fall Semester: *1st Blk-Online, 2nd Blk-Online*

Typically Taught Spring Semester: *1st Blk-Online, 2nd Blk-Online*

Course Fee: \$210.00

Course Fee Purpose: This course has a fee attached. Course fees are established to benefit the students in this course and may be used to cover the costs of the NIAAA course materials and for LTC credits. The total cost of course fees will be \$210.

Description: This advanced course introduces the fundamentals of athletic administration, covering key areas such as leadership, personnel management, scheduling, contest management, and financial responsibilities. It addresses

critical topics like eligibility, legal issues, liability, and crisis planning. Students will explore program culture, leadership styles, and the role of national and state organizations (NIAAA, NFHS), as well as professional development opportunities. Additional focus areas include public relations, sportsmanship, fundraising, and strategic planning in athletic programs. Upon completion, students will be eligible for the "Registered Athletic Administrator" certification through the NIAAA.

PEP 6010 - Leadership in Physical Education

Credits: (3)

Description: Designed to provide graduate students with an understanding of both theoretical and practical aspects of leadership in their respective fields of study. The ultimate goal of the course is to encourage daily application of leadership concepts in the personal and professional lives of the students.

Note: This course is taught as needed.

PEP 6100 - Current Trends in Health and Physical Education

Credits: (3)

Description: A study of health and physical education perspectives with an emphasis on the changes, trends, and future prospects that will affect the profession and the needs of those they serve.

Note: This course is taught as needed.

PEP 6370 - Exercise Management for Special Populations

Credits: (2)

Description: Exercise management for populations with special conditions. Overview of each condition's unique physiology, effects of the condition on the exercise response, effects of exercise training on the condition, and recommendations for exercise testing and programming are presented in a selected topics format.

Pre-requisite(s): ESS 2300 and ESS 3510.

Note: This course is taught as needed.

PEP 6420 - Curriculum in Physical Education

Credits: (3)

Description: Designed to provide an understanding of the role and importance of physical education in today's society, steps involved in curriculum planning, trends and issues in curriculum and to orient the student to various ideas in curriculum design.

Note: This course is taught as needed.

PEP 6520 - Improving Physical Education

Credits: (3)

Description: Designed for elementary classroom teachers to provide an opportunity for the teacher to further develop teaching skills, personal performance skills, knowledge and competencies. A major goal of this course will be to help the classroom teacher gain additional confidence in teaching physical education activities.

Note: This course is taught as needed.

PEP 6830 - Motor Learning

Credits: (3)

Description: An in-depth study of the psychomotor domain of development. Special emphasis is given to skilled performance, learning theory, motor abilities, individual differences, developmental considerations, instructional and

training procedures. Secondary school and athletic populations are considered regarding these topics.
Note: This course is taught as needed.

PHIL 1000 HU/CC - Introduction to Philosophy

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: An introduction to the methods and problems of philosophy, with special emphasis on topics pertaining to the nature of reality, the theory of knowledge, and value theory.

PHIL 1250 HU - Critical Thinking

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to informal logic, focusing on issues of logical form, standards of good and bad reasoning, and argumentative writing.

PHIL 2050 HU - Practical Ethics

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem, Full Sem-Online*

Typically Taught Spring Semester: *Full Sem, Full Sem-Online*

Description: An introduction to ethical theories and their application to contemporary moral issues. Topics reflect current issues, but are at the instructor's discretion, and may include climate change, the ethics of the beginning- and end- of life, immigration, animal rights and welfare, food, medical and bioethics, and similar practically-oriented ethical dilemmas.

PHIL 2200 - Deductive Logic

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An introduction to the concepts and methods of modern symbolic logic. Emphasis is placed on problems of translating English expressions into logical symbols, on the development of skills in using the formal proof procedures of sentential and predicate logic, and development of the predicate calculus.

PHIL 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and number of credits authorized will appear on the student's transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

PHIL 3010 - History of Philosophy: Classical & Medieval

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: A survey of the major philosophers and issues from the Presocratics to the beginning of the early modern period, covering such major figures as Plato, Aristotle, Plotinus, Augustine, and Aquinas.

PHIL 3020 - History of Philosophy: Modern

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: A topical survey of the major philosophers and issues from the seventeenth century to the beginning of the nineteenth century (Descartes to Kant).

PHIL 3150 - Existentialism

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An examination of central themes in Existentialism, including anxiety, dread, freedom, awareness of death, and the consciousness and meaning of existence. These themes will be traced through the writings of such writers as Kierkegaard, Nietzsche, Heidegger, Camus, Sartre, and Simone de Beauvoir.

PHIL 3200 - Philosophy of Democracy

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: An examination of the ideals of and justifications for democratic institutions.

PHIL 3250 - Philosophy of Law

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: An examination of central topics in the philosophy of law, including the relationship between law and morality, the justification of punishment, and legal reasoning.

PHIL 3350 - Medical Ethics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A survey of fundamental moral issues arising from the practice of medicine and from advances in medical science.

PHIL 3500 - Philosophy of Western Religion

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: A survey of topics in the philosophy of religion, especially as they pertain to Judaism, Christianity, and Islam.

PHIL 3550 - Philosophy of Eastern Religion

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: An examination of classic philosophical issues in Eastern religious thought, with a special emphasis on Hinduism, Buddhism, Taoism, and Confucianism.

PHIL 3650 - Aesthetics

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: An examination of philosophical issues concerning the nature and importance of aesthetic experience and appreciation in the arts and the environment, including questions about the definition of art, artistic representation and expression, and aesthetic value.

PHIL 3700 - Environmental Philosophy

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An introduction to central issues in the field of environmental philosophy. The course may cover such topics as conceptions of nature; moral frameworks for addressing environmental problems, including theories of social justice; values in nature, both moral and aesthetic; and applied ethical issues, such as the ethics of climate change and animal rights/welfare.

PHIL 3800 - Philosophy of Race, Gender, and Justice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A study of theories of racial and gender justice and injustice in relation to current issues, such as affirmative action, policing, reparations, Indigenous land rights, access to reproductive and transgender healthcare, and gendered disparities in paid and unpaid work.

PHIL 4400 - Great Issues in Philosophy

Credits: (3)

Description: A selected study of one of the traditional questions of philosophy, such as the nature of knowledge and truth, the mind/body problem, free will/determinism, and the nature of moral/aesthetic value.

May be repeated once up to six credits covering a different topic.

Note: This course is offered as needed.

PHIL 4450 - Great Thinkers of Philosophy

Credits: (3)

Description: Selected study of the major works of a single central figure in philosophy. Philosophers whose works may be taught include, but are not limited to: Plato, Aristotle, Augustine, Aquinas, Descartes, Leibniz, Spinoza, Locke, Berkeley, Hume, Kant, Nietzsche, Mill, and Wittgenstein.

May be repeated once up to six credits covering a different philosopher.

Note: This course is offered as needed.

PHIL 4510 - Metaphysics

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: A study of enduring topics concerning the nature of reality, such as the mind/body problem, free will/determinism, the problem of universals, and the existence of God. Historical and contemporary philosophers are discussed.

PHIL 4520 - Epistemology

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: A study of enduring topics in the theory of knowledge, such as the nature of justification; the relationship between knowledge, justification, and belief; the nature of truth; and sources of knowledge. Historical and contemporary philosophers are discussed.

PHIL 4530 - Philosophy of Mind

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: A study of enduring topics in the philosophy of mind, such as the nature of mind; the mind-body problem; consciousness; the individuation of mental content; artificial intelligence. Historical and contemporary philosophers are discussed.

PHIL 4540 - Philosophy of Language

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: A survey of central topics in the philosophy of language, including semantic content, speech acts, and the connection between meaning and truth. Historical and contemporary philosophers are discussed.

PHIL 4600 - Ethical Theory

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: An in-depth study of western ethical theories, including utilitarianism, Kantian ethics, virtue ethics, and social contract theory.

PHIL 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

PHIL 4830 - Directed Readings

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individually designed tutorial for philosophy minors and majors, intended to satisfy program requirements not available through scheduled class offerings.

May be repeated 8 times for a maximum of 9 credits.

PHIL 4900 - Senior Capstone Seminar

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A comprehensive review of the various areas of philosophy and an in-depth study of a single philosopher with the goal of producing a substantial thesis paper.

PHIL 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and number of credits authorized will appear on the student's transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

PHYS 1010 PS - Elementary Physics

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$10.00

Course Fee Purpose: Consumables and maintenance of equipment used for teaching demonstrations

Description: A brief survey of physics at the introductory level. Topics covered include laws of motion, gravity, energy, light, heat, sound, electricity, magnetism, atomic and nuclear physics, radioactivity, and relativity.

Three hours of lecture per week.

PHYS 1040 PS - Elementary Astronomy

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$10.00

Course Fee Purpose: Consumables and maintenance of equipment used for teaching demonstrations

Description: A brief survey of the physical universe using the fundamental laws of physics. Topics include the history of astronomy, the solar system, the sun, the evolution of stars, pulsars, black holes, the Milky Way galaxy, galaxies, quasars, and the Big Bang.

Three hours of lecture per week.

Cross-listed with ASTR 1040.

PHYS 1300 - Scientific Data Processing and Visualization

Credits: (1)

Typically Taught Fall Semester: *1st Blk*

Description: An introduction to computer programming and computational techniques used across a broad spectrum of scientific applications. These include parsing complex data, plotting and visualization methods, interpolation techniques, basic statistics, and curve fitting.

Pre-requisite(s): MATH 1040 or MATH 1050 or MATH 1080 or permission of the instructor (grade of C or better).

PHYS 1360 PS - Principles of Physical Science

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: A lecture/laboratory course designed to provide an introduction to the scientific method and its

application to the study of selected topics in physics and chemistry.
Two hours of lecture and one 3-hour lab per week.
Recommended for Elementary Education majors.

PHYS 2010 PS - College Physics I

Credits: (5)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: First semester of a two-semester sequence in general physics, primarily for students in pre-medicine, pre-dentistry, technology and other disciplines requiring physics without calculus. This semester covers topics in mechanics, including kinematics, Newton's laws, and the conservation laws of energy, linear momentum, and angular momentum. Also covered are topics in gravity, fluid mechanics, waves, and thermodynamics.

Class meets five hours per week in lecture/discussion format. One 3-hour lab per week (PHYS 2019).

Pre-requisite(s): MATH 1060 OR MATH 1080 OR MATH 1210.

Co-Requisite(s): PHYS 2019.

PHYS 2015 - College Physics I Lab

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Enrollment limited to transfer students.

One 3-hour lab per week.

Co-Requisite(s): PHYS 2010.

Enrollment limited to transfer students.

PHYS 2019 - College Physics I Lab

Credits: (0)

Course Fee: \$25.00

Course Fee Purpose: Laboratory consumables, maintenance of laboratory equipment, hourly employee lab assistance

Description: 3-hour lab to be taken concurrently with PHYS 2010.

Co-Requisite(s): PHYS 2010.

PHYS 2020 - College Physics II

Credits: (5)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Second semester of a two-semester sequence in general physics. This semester covers topics in electricity and magnetism, electromagnetic waves, light and optics, relativity, atomic, and nuclear physics.

Class meets five hours per week in lecture/discussion format. One 3-hour lab per week (PHYS 2029).

Pre-requisite(s): PHYS 2010.

Co-Requisite(s): PHYS 2029.

PHYS 2025 - College Physics II Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Enrollment limited to transfer students.

One 3-hour lab per week.

Co-Requisite(s): PHYS 2020.

Enrollment limited to transfer students.

PHYS 2029 - College Physics II Lab

Credits: (0)

Course Fee: \$25.00

Course Fee Purpose: Laboratory consumables, maintenance of laboratory equipment, hourly employee lab assistance

Description: 3-hour lab to be taken concurrently with PHYS 2020.

Co-Requisite(s): PHYS 2020.

PHYS 2040 PS - Principles of Observational Astronomy

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An introductory course in observational astronomy. Topics will include planetary, stellar, and galactic astronomy, with a focus on modern observational techniques, including digital imagery, spectroscopy, and observing with science-grade astronomical instrumentation. *Cross-listed with ASTR 2040.*

Pre-requisite(s): MATH 1060 (minimum grade of C).

PHYS 2090 PS SUS - Energy and the Environment

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This interdisciplinary course explores how energy moves through our modern technological society. We will study the many forms of energy, traditional, and emerging sources of energy, and how energy use affects our environment. Much of the course will focus on identifying energy-related problems and their potential solutions.

PHYS 2210 PS - Physics for Scientists and Engineers I

Credits: (5)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: First semester of a two-semester sequence in calculus-based physics, primarily for students in science, math, computer science, and pre engineering. This semester covers topics in mechanics, including kinematics, Newton's laws, and the conservation laws of energy, linear momentum, and angular momentum. Also covered are topics in gravity, fluid mechanics, waves, and thermodynamics.

Class meets five hours per week in lecture/discussion format. One 3-hour lab per week (PHYS 2219).

Co-Requisite(s): MATH 1210 and PHYS 2219.

PHYS 2215 - Physics for Scientists and Engineers I Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Enrollment limited to transfer students.

One 3-hour lab per week.

Co-Requisite(s): PHYS 2210.

Enrollment limited to transfer students.

PHYS 2219 - Physics for Scientists and Engineers I Lab

Credits: (0)

Course Fee: \$25.00

Course Fee Purpose: Laboratory consumables, maintenance of laboratory equipment, hourly employee lab assistance

Description: 3-hour lab to be taken concurrently with PHYS 2210.

Co-Requisite(s): PHYS 2210.

PHYS 2220 - Physics for Scientists and Engineers II

Credits: (5)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Second semester of a two semester sequence in calculus-based physics. This semester covers topics in electricity and magnetism, electromagnetic waves, light and optics, relativity, and quantum, atomic, and nuclear physics.

Class meets five hours per week in lecture/discussion format. One 3-hour lab per week (PHYS 2229).

Pre-requisite(s): PHYS 2210.

Pre-requisite/Co-requisite: MATH 1220 or MATH 2210.

PHYS 2225 - Physics for Scientists and Engineers II Lab

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Enrollment limited to transfer students.

One 3-hour lab per week.

Co-Requisite(s): PHYS 2220.

Enrollment limited to transfer students.

PHYS 2229 - Physics for Scientists and Engineers II Lab

Credits: (0)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Laboratory consumables, maintenance of laboratory equipment, hourly employee lab assistance

Description: One 3-hour lab per week.

Co-Requisite(s): PHYS 2220.

PHYS 2300 - Scientific Computing for Physical Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An introduction to computer programming and fundamental numerical algorithms as used for problem solving and visualization in the natural sciences. Applications may include nonlinear dynamics, chaos, many-particle systems, and Monte Carlo techniques.

Pre-requisite(s): PHYS 2210, MATH 1210, and either MATH 1200 or CS 1030 or permission of the instructor.

PHYS 2600 - Laboratory Safety

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An interdisciplinary, course that will be an overview of the major chemical, biological and physical safety issues related to science laboratories and field work.

Class will meet once per week and will be taught in a lecture/demonstration format.

Cross-listed with BTNY, CHEM, GEO, and PHYS.

PHYS 2710 - Introductory Modern Physics**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: Relativity, quantum effects, the hydrogen atom, many-electron atoms, molecular and solid-state bonding, quantum effect devices, nuclear structure, nuclear reactions and devices, elementary particles.

Pre-requisite(s): PHYS 2220, MATH 1200 (may be taken concurrently), and MATH 1220.

PHYS 2800 - Introductory Individual Research Problems**Credits: (1-3)**

Description: Time and credit to be arranged. Intended for students working on a directed research project which includes physics/astronomy at the lower division level for one or more semesters.

Pre-requisite(s): Consent of instructor.

Cross-listed with ASTR 2800.

May be repeated up to 10 times.

PHYS 2820 - Elements of Research in the Sciences**Credits: (3)**

Typically Taught Spring Semester: *Full Sem*

Description: This interdisciplinary course provides concrete skills for productive entry-level scientific research. Students engage in a hands-on introduction to scientific research and methods, including an introduction to sample handling, data analysis, and dissemination of results through papers and presentations. Upon completion of the course, a student will be prepared for potential internships, summer research programs, and research assistantships both on and off campus.

Pre-requisite(s): MATH 1060 or MATH 1080 or MATH 1210; and CHEM 1210 or PHYS 2210 or PHYS 2010 or (GEO 1110 and GEO 1115).

Cross-listed with CHEM 2820 and GEO 2820.

PHYS 2830 - Introductory Readings in Physics/Astronomy**Credits: (1-3)**

Description: Time and credit to be arranged. Intended for students working on a directed reading project which includes physics/astronomy at the lower division level for one or more semesters.

Pre-requisite(s): Consent of instructor.

Cross-listed with ASTR 2830.

May be repeated up to 10 times.

PHYS 2890 INT - Cooperative Work Experience**Credits: (1-6)**

Description: Open to all students in the Physics Department who meet the minimum Cooperative Work Experience requirements of the department. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by the department.

PHYS 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

PHYS 3120 - General Relativity

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to some of the mathematical and physical aspects of the general theory of relativity. Topics include tensor calculus, the mathematics of curved spacetime, the covariant formulation of the laws of nature, the motion of objects in curved spacetime, the Einstein equation, black holes, and gravitational waves. Offered in spring semester of even years.

Pre-requisite(s): PHYS 2220 and MATH 2210.

Suggested Requisite(s): PHYS 2710 and PHYS 3500.

PHYS 3160 - Stellar and Planetary Astrophysics

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: Selected topics in astrophysics, with a focus on stellar and planetary systems. Topics may include celestial mechanics, interaction of light and matter, stellar and planetary spectroscopy, stellar atmospheres and interiors, binary star systems, planets and planet formation, and extrasolar planets.

Pre-requisite(s): PHYS 2220.

Cross-listed with ASTR 3160.

PHYS 3170 - Galaxies and Cosmology

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: Selected topics in astrophysics, with a focus on galactic astronomy and cosmology. Topics may include gravitational dynamics, interaction of light and matter, galaxy classification, galaxy formation and evolution, the structure of the universe, cosmology, and the origin and fate of the universe.

Pre-requisite(s): PHYS 2220.

Cross-listed with ASTR 3170.

PHYS 3180 - Thermal Physics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to thermodynamics and statistical mechanics. Topics include heat and work; ideal gases; equipartition of energy; entropy; the Boltzmann, Fermi-Dirac, and Bose-Einstein distributions; applications to heat engines, refrigeration, chemical equilibrium, phase transitions, blackbody radiation, and properties of solids.

Pre-requisite(s): PHYS 2220, MATH 1200 and MATH 1220.

PHYS 3190 CRE - Applied Optics

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: Geometrical and physical optics, lasers, lenses, optical instruments, interference, thin films,

interferometry, holography, diffraction, gratings, crystal diffraction, polarization.
Two lectures and one 3-hour lab a week.

Pre-requisite(s): PHYS 2220 and MATH 1220.

PHYS 3310 - Scientific Computing for Physical Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An exploration of computer programming and fundamental numerical algorithms as used for problem solving and visualization in the natural sciences. Applications may include nonlinear dynamics, chaos, many-particle systems, and Monte Carlo techniques.

Pre-requisite(s): PHYS 2210 and PHYS 1300 or permission of instructor.

PHYS 3320 - Advanced Computational Physics

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: This course extends the computational skills developed in PHYS 3310 to address a wider range of problems in modern physics. Students will explore the limits of computational methods and develop techniques suited to high-performance computing. Applications may be chosen from nonlinear dynamics, astrophysics, condensed matter physics, and quantum mechanics.

Pre-requisite(s): PHYS 2220 and PHYS 3310.

PHYS 3410 - Electronics for Scientists

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: An introductory course in electronics for students in physics and other sciences. The course includes D.C. and a.c. circuit analysis using complex impedances and covers basic principles of semiconductor operation, transistors, analog and digital integrated circuits, analog-to-digital conversion techniques used in computer interfacing, and noise.

Three lectures and one 3-hour lab a week.

Pre-requisite(s): PHYS 2220.

PHYS 3420 - Data Analysis, Statistics, and Instrumentation

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: Intermediate-level course in computer interfacing (data acquisition and analysis) for students in physics and all other sciences. Topics may include: data acquisition with industry-standard software packages, computerized test and measurement, analog-to-digital and digital-to-analog conversion, data acquisition electronics, electronic sensors (thermal sensors, light sensors, etc.), least squares curve fitting, fast Fourier transforms (FFT), Nyquist's theorem, noisy and weak signals.

Two lectures and one 3-hour lab a week.

Pre-requisite(s): PHYS 2020 or PHYS 2220 and PHYS 1300.

PHYS 3500 - Analytical Mechanics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Particle motion, oscillating systems; planetary motion, stability of orbits; collisions; Euler's equations, gyroscopic motion; Lagrange's equations, Hamilton's equations, theory of vibrations.

Pre-requisite(s): PHYS 2220, MATH 1200 and MATH 2280.

PHYS 3510 - Electromagnetic Theory

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Vector analysis; electrostatics; calculating electric potentials; solving Laplace's equation; multipole expansions; electrostatic fields in matter; magnetostatics; charges in motion; electrodynamics; Faraday's law; Maxwell's equations.

Pre-requisite(s): PHYS 2220, MATH 1200, MATH 2210 and MATH 2280.

PHYS 3540 - Mechanical and Electromagnetic Waves

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Periodic motions, free and forced vibrations; resonance; normal modes; dispersion; boundary conditions; electromagnetic waves and light; the Fresnel equations; electromagnetic radiation from accelerating charges.

Pre-requisite(s): PHYS 3500, PHYS 3510.

PHYS 3570 - Foundations of Science Education

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A thorough investigation of research in science learning and curricular standards at the state and national levels. Foundations of the philosophy of science and scientific inquiry as applicable to science teaching at the secondary level. This course serves as a foundation to a preservice science teacher's education coursework.

PHYS 3710 - Nuclear and Particle Physics

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: Nuclear structure and nuclear reactions including radioactive decay, fission, and fusion, with selected applications. The standard model of elementary particles and interactions. Collider experiments and their interpretation in terms of Feynman diagrams. Topics of current research at the high-energy frontier.

Pre-requisite(s): PHYS 2710.

PHYS 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Individual courses offered on an experimental basis, identified by specific name and description. The specific title will appear on student's transcript along with the authorized credit.

May be repeated for a total maximum of 6 credit hours.

PHYS 4200 - The Physics of Materials

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: An introduction to the modern theory of condensed matter. Emphasis is placed on the structural, electrical, and thermal properties of solids, with particular attention to materials of current research interest.

Pre-requisite(s): CHEM 1210 and either PHYS 2710 or CHEM 3410.

PHYS 4400 CRE - Advanced Physics Laboratory

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Advanced experiments in mechanics, electromagnetism, modern physics, and nuclear physics. This course also covers general laboratory practice, data analysis, and error propagation. Four hours of lab per week.

Pre-requisite(s): PHYS 1300, PHYS 2220; either PHYS 3190 or PHYS 3410.

PHYS 4410 CRE - Materials Characterization Laboratory

Credits: (2)

Typically Taught Fall Semester: *Full Sem even years*

Description: A series of experiments for advanced students employing modern methods of measurement of properties of materials. The course will teach microscopic and spectroscopic techniques and general laboratory practice, data analysis, and error propagation.

Four hours of lab per week.

Pre-requisite(s): PHYS 1300, PHYS 2220 and PHYS 3410.

PHYS 4570 CEL - Secondary School Science Teaching Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Acquaintance and practice with various teaching and assessment methods. Development of science curricula including lesson and unit plans. It is recommended that this course be completed immediately before student teaching.

Pre-requisite(s): Admission to the Teacher Education Program.

PHYS 4610 - Quantum Mechanics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Wave-particle duality, Schrodinger equation, wave function, quantization rules, one-dimensional motion, one-electron atoms, spin and orbital angular momentum.

Pre-requisite(s): MATH 2270 and PHYS 2710.

Pre-requisite/Co-requisite: PHYS 3500.

PHYS 4620 - Advanced Quantum Mechanics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Approximation methods and other selected topics in pure and applied quantum mechanics.

Pre-requisite(s): PHYS 4610.

PHYS 4800 - Individual Research Problems

Credits: (1-3)

Description: Time and credit to be arranged. Open to qualified students for one or more semesters.

Pre-requisite(s): Consent of instructor.

Cross-listed with ASTR 4800.

May be repeated up to 10 times.

PHYS 4830 - Readings in Physics/Astronomy

Credits: (1-3)

Description: Topics which can be studied include (but are not limited to): mechanics, thermodynamics, kinetic theory, statistical mechanics, electronics, electromagnetism, optics, solid-state physics, modern physics, nuclear physics, relativity, cosmology, and astrophysics. These courses may be taken at any time on a personalized basis. Time and credit to be arranged.

Pre-requisite(s): Consent of instructor.

Cross-listed with ASTR 4830.

May be repeated up to 10 times.

PHYS 4890 INT - Cooperative Work Experience**Credits: (1-6)**

Description: A continuation of PHYS 2890. Open to all students.

May be repeated for credit up to three times.

PHYS 4920 - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

PHYS 4970 - Senior Thesis**Credits: (2)**

Description: An individual research program pursued under faculty supervision. It is expected that one or more semesters of research (PHYS 4800) will precede registration for this course. Course evaluation will include an oral and a written report.

Pre-requisite(s): senior class standing and consent of departmental committee.

PHYS 4990 - Seminar in Physics**Credits: (1)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Weekly presentations by students, faculty, and visitors on topics in physics and astronomy. Each student taking this course for credit will make a presentation on a topic agreed upon with a faculty mentor and the seminar instructor.

Pre-requisite(s): previous upper division physics course.

May be taken twice for credit.

PHYS 5030G - Physics for Teachers**Credits: (2-3)**

Description: Science content course for teachers in the MEd Science Emphasis Program. To register, select another departmental course and develop a contract detailing additional work required for graduate credit. Contract must be approved by instructor, department chair, and Director of the Master of Education Program.

May be repeated once up to 6 credit hours.

POLS 1010 SS/CC - Politics, Power, and the State

Credits: (3)

Typically Taught Summer Semester: *1st Blk Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is an introduction to the study of political science. It presents an overview of the discipline, including the basic theories, concepts, approaches, and enduring questions of political science. The course introduces students to the primary subfields of political science, American, Comparative, International Relations, Political Theory, Public Administration and Public Law. The focus is on the substance of politics, power, and the state. This includes the roles played by states, mass publics, organizations, institutions, and individuals and the output of their interactions on public policy and international relations, providing students with a foundation of knowledge and the analytical skills necessary to understand modern politics in a global and historical context.

POLS 1100 AI - American National Government

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: A study of American constitutional democracy at the national level, including political institutions, interests, ideals, and the processes through which policies are formulated and implemented.

POLS 1520 SS - Leadership and Political Life

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The purpose of the Leadership and Political Life class is to introduce students to the theory and practice of leadership in the public realm, which is applicable to the private sector.

POLS 2100 SS SUS GLB - International Politics, Organizations, and Society

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will allow students to explore the foundations and forces that shape international politics and society. It examines the concept of power and sovereignty within the system including discussions of conflict, war, and terrorism. Global economics will be examined, including economic interdependence, globalization, trade, and development. International institutions will be examined including the United Nations to understand the role of international organization, international law, and the concepts of sustainable development.

POLS 2200 SS GLB - Global Governments, Politics, and Societies

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An introductory survey, comparing and contrasting political ideas, institutions and processes in the political systems of the world to gain a deeper knowledge of, and a broader perspective on, political phenomena.

POLS 2300 SS - Introduction to Political Theory

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: An examination of the arguments behind and the implications of the dominant theories of politics. Theories that are studied include liberalism, conservatism, socialism, and republicanism, among others. In studying these theories, the works of such theorists as Plato, Aristotle, Locke, Rousseau, Marx, and Mill will be examined.

POLS 2400 SS - Introduction to Law and Courts

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An introductory survey of law and courts emphasizing the structure of courts, different forms of law, and the various actors involved in legal conflicts.

POLS 2500 SS/CC/GLB - Human Rights in the World

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Human rights (HR) are a powerful idea in the modern world, but also the focus of controversy. This course will provide students with a broad foundation in human rights including the ability to analyze HR in domestic and int'l law, examine prevention and prosecution techniques, and debate current issues at home and abroad. Emphasis will be placed on women and gender studies (including LGBT issues), vulnerable populations such as refugees, and atrocity crimes.

POLS 2700 - Introduction to Public Administration

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: To understand the role of public administration in the United States, this course examines the administrators who manage and implement policy, the tools they use, and the environments in which they work. We will cover the economic, political, and social dynamics within public administration as well as management challenges related to human resources, finance, program development, evaluation, and strategic planning. Introduction to public administration would not be complete without discussions about the values and ethics unique to the public sector. We will be using textbooks, other assigned readings, case studies, simulations of ethical quandaries, and whenever possible hands-on learning experiences. The first half of the course will include historical milestones in the history of the administrative state, the logic of public service and the constitutional context of executive power, and management challenges for the public sector in the 21st century. The second half of the course will focus on the policy cycle, program implementation and evaluation, budgeting, leadership and ethics, and the future of public administration.

POLS 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Course not currently being offered.

POLS 2930 - Peacebuilding in Rwanda

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Description: In this course, students will travel to Rwanda (Africa) to participate in a Peacebuilding Institute (PBI) with Weber State University and Never Again Rwanda. Weber State students and Rwandan University students will work together for an unforgettable academic experience. Through readings, site visits, lectures from specialists, and group discussions, students will explore themes of genocide, human rights, transitional justice, and good governance. In addition they will develop skills in cross-cultural dialogue exchange.

POLS 3070 - Moot Court

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Students in teams of two prepare appellate arguments based on a hypothetical case with Constitutional Law issues that are argued before the Supreme Court of the United States. Students develop legal arguments and briefs for both the petitioner and the respondent for two issues based on a closed set of approximately twenty real Supreme Court cases. Students are required to make use of existing Supreme Court precedents in addition to arguing the facts in the hypothetical case. Students develop, prepare, and practice their arguments with one another in class and compete against other teams in the Western Regional Moot Court competition held in November in California. Counselors are judged by a panel typically made up of law school professors, attorneys, and graduate and law school students.

Suggested Requisite(s): Recommend prior constitutional law and legal studies coursework, but not required.

POLS 3140 GLB - Foreign Policy of the United States

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: An analysis of the making of American foreign policy with reference to the role and influences of beliefs, interests, public opinion, media and especially the institutional struggle between President & Congress. The challenges facing contemporary U.S. foreign policy will also be examined.

POLS 3150 GLB - Model United Nations

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Model United Nations (Model UN) is designed to familiarize students with the most pressing global challenges facing the world. The course is an educational simulation that replicates the workings of the United Nations. Model UN provides a high-impact practice platform for students to engage in diplomacy, research, public speaking, critical thinking, and technical writing. The class fosters a deeper understanding of international relations, global issues, and the political perspectives of different nationalities on contemporary world issues. Selected students may attend the Model United Nations Far West conference and other events. The course may be repeated once for a maximum of 6 credits total.

May be repeated once for 6 credit hours.

POLS 3151 GLB - Model United Nations Team

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course prepares students on the Model UN team for the upcoming Fall/Spring conference.

Pre-requisite(s): POLS 3150 with a minimum grade of B. Permission of the instructor.

May be repeated up to 12 credit hours.

POLS 3200 GLB - Middle East and North Africa

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A survey of the political dynamics of selected states and societies in the Middle East and North Africa (MENA). Issues to be covered: the impact of early Middle Eastern/North African history upon today's politics; class structures in the MENA countries and their impact on politics; the rise of Arab nationalism; Zionism; the politics of oil; the status of women; the political impact of economic restructuring; Islamic movements; state-building; and political liberalization and democratization in the Middle East and North Africa.

POLS 3210 GLB - Politics in the European Union

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course examines the origins and development of the European community/EU and its institutions, theories of integration, and challenges in the creation of a supranational authority. It also compares the impact of EU policies on domestic politics in the individual European states with emphasis on relevant issues of the day, such as EU enlargement, immigration, and the political economy.

POLS 3290 GLB - Democratization and Political Transitions

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: A survey of the democratic transitions literature with focus on political transitions in comparative perspective. This course will compare a variety of different kinds of political transitions in different regions of the world, including cases in which countries have transitioned back to authoritarianism.

POLS 3320 - American Political Thought: The Founding

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course looks at the political theory of the American founding from the Declaration of Independence to the drafting and ratification of the U.S. Constitution.
Taken 1 time for a max of 3 credits.

POLS 3330 - American Political Thought: Contemporary

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: An examination of late 20th and early 21st century American Political Thought. In this course we will examine a variety of political theories put forth by American thinkers, including social welfare liberalism, libertarianism, civic republicanism, critical race theory, and others.

POLS 3340 - Environmental Political Theory

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: This is an upper division course in political theory, with the specific focus being environmental political theory. The course examines a range of theoretical perspectives on a range of issues including how we conceptualize humans, nature, and politics.

POLS 3400 - LGBTQ Politics

Credits: (3)

Description: Social movements employ a variety of methods to achieve the protection of their members' rights and interests. This course focuses on these issues through the study of gender and sexual minorities in the United States from the mid-Twentieth Century to the present. It examines the strategies, both formal and informal, adopted to achieve social change.

Note: This course is taught during odd years.

POLS 3600 - Political Parties

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: A study of the organization and function of the American political parties, political organizations that play a role alongside political parties in the American political system, such as interest groups, and a comparative study of political parties in other countries.

POLS 3610 - Campaigns and Elections

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: A study of the electoral process in the United States with an examination of national institutional elections, state and local elections, as well as election rules. Also a study of campaigning techniques in elections at all levels.

POLS 3620 - Political Behavior

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: This course is designed to introduce students to the nature of mass political behavior and its role in the political process. Further, it examines the interaction between and among diverse social groups, the media, and policy makers. The course will also emphasize the political psychology of public opinion formation and political decision of those outside the mainstream political institutions.

POLS 3640 - Media and Politics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: In terms of influencing American politics, media perform three functions: supplying information about issues and candidates; setting the agenda for public debate; conveying messages between elected officials and the public. In this course we will focus on the effect media has on political discourse in the United States.

POLS 3700 - Bureaucratic Politics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Presents basic theories, concepts, and analysis of current practices and problems in governmental administration.

POLS 3750 - Urban Government and Politics

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: A study of local government organization and policy problems, with an emphasis on problems of the metropolitan areas.

POLS 3760 - State Government and Politics

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: An examination of governmental organization, operation, policy making, and electoral politics of state governments and the dynamics of relationships with other levels of government.

POLS 3780 - Lobbying: Theory and Practice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course looks at both the theory and practice of lobbying, primarily at the state and local governmental levels; and it examines the business of lobbying, how the profession of lobbying has developed, what lobbyists do, the ethical constraints of lobbying, and from where the right to petition the government is derived.

POLS 3990 - Political Analysis

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to the scope and methods of political science. This course focuses on the formulation of hypotheses, the collection of data, appropriate study design, and study analysis through statistical testing and interpretation.

POLS 4020 - Constitutional Law: Powers

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An introduction to many of the doctrines of American Constitutional Law around the structure of the U.S. Constitution, governmental powers, and federalism. Topics include constitutional theory; congressional, executive, and judicial power; and the relationship between federal and state governments.

POLS 4030 - Constitutional Law: Rights

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to many of the doctrines of American Constitutional Law. Topics include the study of various fundamental rights including free speech, religious freedom, equal protection, and privacy rights.

POLS 4050 - Institutional Presidency

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: We will examine the American Presidency from four perspectives this semester. First, the course considers the creation of the presidency and "the executive power" in the Constitution. Second, it surveys the institutional development of the presidency and executive branch from the late 1700s through the present. Third, it examines different theories on the politics and effectiveness of presidential leadership. Finally, it asks whom the president represents and, having considered the institutional development of the presidency, whether the president needs more tools to fulfill expectations placed upon him or her.

Pre-requisite(s): POLS 1100.

POLS 4100 - Free Speech

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course explores the historical meaning of free speech in the United States, the modern development of free speech principles in constitutional law, and the application of those principles to modern controversies.

POLS 4160 - Topics in Global Politics

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Description: The study of selected contemporary problem areas in world politics to assess their impact within the international arena.

May be repeated for a maximum of 6 hours toward the hours required for Political Science majors and only 3 hours will be counted toward the political science minor requirement.

POLS 4170 GLB - Gender, Power, and Global Politics

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course is a comprehensive introduction to the gendered nature of global politics and how power and gender influences the world around us. During the semester, we will examine what cultural, structural, and political factors shape gendered access to power worldwide. We will discuss why women have succeeded in obtaining sustainable political power in some countries and not others. We will determine what factors influence why women and transgendered individuals are excluded from political processes and not represented proportionately in political, influential, or leadership positions. At the conclusion of this course, students will be familiar with multiple approaches to understand how gender matters in many facets of world politics and how gender can intersect with other social identities such as race, ethnicity, class, and sexual orientation.

POLS 4180 GLB - International Law and Organization

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: In-depth exploration of international society through the basis principles of international law and the organizations that comprise our world. Emphasis is given to international criminal law, international humanitarian law, human rights law and the prominence of the United Nations.

POLS 4190 GLB - Theories of International Politics

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: An analysis of traditional and contemporary theories offered to explain politics in the international arena.

POLS 4200 GLB - Dictatorships

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Political science has long had a bias towards democracies. Authoritarian governments, however, are far more common both over history and today. This course will thus expand the coverage of governmental types and instruct students in the varieties of authoritarian governments and their methods of governance.

POLS 4210 GLB - Violence and Contestation

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course examines theories and case studies on the processes shaping collective challenges to authority in different countries around the world. Topics include causes and mechanics of mobilization, the contexts in which protest movements emerge, repression and violence, strategies, and determinants of political outcomes.

POLS 4380 - Modern Political Thought

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: A survey of political theory from the 17th century to the present, with a focus on theoretical formulations and critiques of democratic government and the political subject.

POLS 4600 - American Congress

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: A study of the United States Congress and its members. This course examines the legislative decision making process as well as an emphasis on the history of the institution.

POLS 4620 - The U.S. Supreme Court

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: A study of the U.S. Supreme Court as a legal and political institution. This course examines the historical development of the Supreme Court, its relationship to other institutions, and judicial decision-making.

POLS 4640 - American Presidency

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: A study of the United States presidency and the people who have held the office. This course examines individual presidential character and personality as well as providing a survey of the history of the institution.

POLS 4750 - Public Policy Analysis

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: A study of the American policy process, with an emphasis on the dynamics involved in the creation, adoption and implementation of selected domestic policies.

POLS 4760 - Rwanda: Genocide and Aftermath

Credits: (3)

Typically Taught Summer Semester: *Online*

Description: This course will examine the 1994 Rwandan genocide and its aftermath. The class will discuss the historical legacy of colonialism and the impact that post-colonial policies had in pre-genocide Rwanda. Next, the events surrounding the genocide within Rwanda will be discussed in addition to its immediate impact on the surrounding Great Lakes countries of Africa. Finally, the legacy of the Rwandan genocide will be examined, especially in regards to politics and international law. Specific issues to be addressed include the complex relationship between political and legislated memories, ethnic identities before and after the genocide, the creation and implementation of transitional justice measures including the national courts, gacaca courts, and the International Criminal Tribunal for Rwanda.

POLS 4770 GLB - Genocide, War, and Human Rights

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course examines the complexity of genocide studies, within the framework of war and human rights abuses, including an examination of genocide theories, definitions and debates. Within this context, both internationally recognized genocides will be examined (Germany, Rwanda, former Yugoslavia) and those which are more contested such as indigenous and political based massacres. The course will also examine Crimes Against Humanity, War Crimes and how societies recover from these types of crimes. The course will take an interdisciplinary approach; with an emphasis on law and politics.

POLS 4800 - Individual Projects and Research

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Pre-requisite(s): Department approval required.

A maximum of 6 hours may be counted toward the major or 3 hours toward the minor.

POLS 4830 - Directed Readings

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Pre-requisite(s): Department approval required.

A maximum of 6 hours may be counted toward the major or 3 hours toward the minor.

POLS 4860 INT - Internships

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Pre-requisite(s): Department approval required.

A maximum of 6 hours may be counted toward the major or 3 hours toward the minor.

POLS 4861 INT - International Internships

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Internships located outside of the United States. Department approval required.

A maximum of 6 hours may be counted toward the major or 3 hours toward the minor.

POLS 4865 INT - Utah State Legislature Internship

Credits: (1-6)

Typically Taught Spring Semester: *Full Sem - Online*

Description: Utah State Legislature Internship. Professor approval required.

May be repeated up to 5 times and up to 6 credit hours.

POLS 4870 INT - Internship in Perspective

Credits: (3)**Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This course is designed to put the internship experience in broader context. Students will read books and articles on current issues and then focus on the way that government and non-governmental institutions combine to make policy. In this students will take their political science knowledge and apply it to practical politics.

Co-Requisite(s): POLS 4860.

POLS 488o INT - Internship Research**Credits: (3)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This course is designed to complement the student intern's experience while in the placement. This course is designed to give the student a chance to do a research project based on his or her experience in the internship. The research evolves out of assignments given at the internship.

Pre-requisite(s): POLS 4860.

POLS 492o - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: Course not currently being offered.

POLS 499o - Senior Seminar/Senior Thesis**Credits: (3)****Typically Taught Fall Semester:** *Full Sem*

Description: A seminar in the field of political science. Students will be required to produce a major paper out of this seminar. Required for Political Science majors.

Pre-requisite(s): POLS 1010. Department approval required.

Note: Note: Political Science BS students must take POLS 3990 before POLS 4990.

PS 1143 - Principles of Selling and Persuasion**Credits: (3)****Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem; Full Sem Online***Typically Taught Spring Semester:** *Full Sem; Full Sem Online*

Description: A retail, wholesale, and direct selling and persuasion course. Emphasis upon mastering and applying the fundamentals of selling and persuasion. Preparation for and execution of sales demonstrations required.

PS 1303 - Sales Channels**Credits: (3)****Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem; Full Sem Online***Typically Taught Spring Semester:** *Full Sem; Full Sem Online*

Description: Examination of the distribution process of goods and services, the interrelationships of customer demands, production, pricing, promotion, and the movement of goods from producer to consumer.

PS 1401 - Introduction to Sales and Service Technology

Credits: (1)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: This course is designed to help those new PS majors or those exploring the PS major field learn more about the career/ employment options available. This course is also designed to review the various academic emphases, major requirements, and decision making process.

PS 1403 - Introduction to Customer Care

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A study of the basic techniques for providing quality service to clients.

PS 1503 - Introduction to Fashion Merchandising

Credits: (3)

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: A study of the Fashion Merchandising industry, including careers in design, manufacturing, wholesaling, promotion, and retailing, including well-known designers, manufacturers, promotion media and apparel and accessory retail institutions.

PS 1890 INT - Work Experience

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to all first year declared majors in Professional Sales. Provides academic credit for on-the-job experience. Grade and amount of credit will be determined by department.

May be repeated a maximum of 3 times or until a maximum of 6 credit hours is reached.

PS 2182 - Credit and Collection Methods

Credits: (2)

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: The study of specific credit and collection methods for retail, wholesale, and service industries; including cost of retail credit, credit investigation, methods of collecting bad accounts, securing new business through credit applications, and credit control.

PS 2383 - Retail Merchandising and Buying Methods

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: The study of the retail buyer's duties, different buying organizations, and techniques, procedures of purchasing merchandise for resale and retail merchandising strategies.

PS 2443 - Advertising Methods

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: A study of advertising methods as they relate to local retail, wholesale, and service industries, including newspaper, magazine, radio, TV, mail, outdoor and special promotion events.

PS 2603 - Advanced Selling Techniques

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: Study of advanced techniques including, opening, investigating, demonstrating capability and obtaining commitment of the consultative and strategic seller.

PS 2703 - Internet Sales and Service

Credits: (3)

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: The study of Internet sales, service and technology. Understanding the process of establishing an online business, setting up online shopping capabilities and database integration. Online customer service and retention, buyer behavior and current Internet sales issues are presented.

PS 2890 INT - Work Experience II

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Open to second year declared majors in Professional Sales. A continuation of PS 1890. May be repeated a maximum of 3 times or until a maximum of 6 credit hours is reached.

PS 2903 - Professional Selling Methodologies

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The study of selling and customer service techniques as they apply to virtual, inside and field sales.

PS 2991 - Sales/Service Technology Seminar

Credits: (1-3)

Typically Taught Spring Semester: *Full Sem*

Description: Directed studies, group discussions, and analysis of selected topics pertinent to sales and service

technology. Also designed to prepare sales and service majors for the job market and career opportunities. May be repeated until a maximum of 3 credit hours is reached.

PS 3001 - Sales Career Strategies

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The study of developing a sales career including finding sales opportunities and how to market yourself into landing those opportunities.

PS 3003 - Sales Development

Credits: (3)

Typically Taught Summer Semester: *Full Sem- Online*

Typically Taught Fall Semester: *Full Sem- Online*

Typically Taught Spring Semester: *Full Sem- Online*

Description: This course teaches and develops the knowledge and skills needed to excel in the early-stage sales process used by sales and business development representatives (SDRs/BDRs). The course will take a deep dive into prospecting through initial qualification, technology-based prospecting for lead generation, client pre-call research, and other critical sales and business development skills used in the early stages of the sale.

Pre-requisite(s): PS 1143.

PS 3103 - Sales Personalities and Profiles

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: Discovering and understanding your own personality style and how to adapt to your client for selling success is the focus of this course. We will utilize the Everything DISC Sales assessment to distinguish the 4 behavior styles and the Strengths Finder assessment to utilize our talents throughout the selling process.

Pre-requisite(s): PS 1143.

PS 3203 - Customer Service Techniques

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: A study of customer service techniques required in order to sell and service products, systems, or services needed by industrial manufacturing, processing, mining, construction firms, or other related technical areas.

PS 3250 - Business Communication

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: Application of oral and written communication, including diversity and international aspects of communication.

Pre-requisite(s): ENGL 2010.

PS 3303 - Technology in Sales

Credits: (3)

Typically Taught Summer Semester: *Full Sem online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course will teach professional sales people to use sales technologies to (1) attract new clientele (2) strengthen customer relationships (3) expand existing accounts and (4) establish a position as an authority in the field.

Pre-requisite(s): PS 1143.

PS 3363 - Contract and Sales Negotiation Techniques

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: Principles, techniques and analysis of strategies involved in contract and sales negotiations. Development of integrated strategies through group and individual interaction.

Pre-requisite(s): PS 1143.

PS 3403 - Pharmaceutical and Medical Device Sales

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A study of the opportunities that exist in the medical field as it pertains to selling. The course examines the integral relationship that pharmaceutical and medical device representatives have within the medical community.

Pre-requisite(s): PS 1143 and PS 2603.

PS 3503 - Sales Planning and Forecasting

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: A study of sales planning and forecasting. Special emphasis will be given to goal setting, prioritizing, sales forecasting and establishing and managing a sales territory. The student will also learn techniques for individual goal setting and time management.

PS 3563 - Principles of Sales Supervision

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: Practical application of first-line supervisory skills including choosing, organizing, training, and evaluating entry-level employees; making supervisory decisions; and solving first-line supervisory problems. Understanding the basic responsibilities of a supervisor in production organizations and service organizations.

PS 3702 - Developing Team Leadership Skills

Credits: (2)

Typically Taught Summer Semester: *Full Sem; Full Sem Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A skills based course designed to develop the interpersonal and leadership skills necessary to work effectively in teams and guide teams through the group stages of development. This course will be facilitated in such a way the participants will learn how to diagnose team developmental level and develop a high performing team by applying the principles of situational leadership and the DISC personality profiles system.

Pre-requisite(s): PS 3563.

PS 3703 - Professional Sales Simulations

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Application of advanced persuasion skills to use in professionally organized competitions. This course will use simulations and role-playing to develop persuasive techniques and theoretical applications.

Pre-requisite(s): PS 1143.

May be repeated three times for a maximum of six credit hours.

PS 3803 - Sales Proposals

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: A study of selling techniques required in order to sell products, systems, or services needed by industrial manufacturing, processing, mining, construction firms, or other related technical areas.

Pre-requisite(s): PS 3563.

PS 3903 - Sales Presentation Strategies and Techniques

Credits: (3)

Typically Taught Summer Semester: *Full Sem; 1st Blk Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: Principles and practices for the five major categories of professional sales consultants.

Pre-requisite(s): PS 1143 and PS 3803.

PS 4203 - Ethical Sales and Service

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: Principles, techniques and analysis of ethics in the sales and service professions. Utilizes group interaction, individualized hands-on experiences and a field based experience.

Pre-requisite(s): PS 3563.

PS 4610 INT - Senior Project I

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: A capstone project for students in their final year of the professional sales degree. Provides hands-on experiences in the areas of sales and service including sales, customer service techniques, presentation strategies, and team leadership development. This course focuses on working with sales and service problems in a departmentally approved work environment.

Co-Requisite(s): PS 4620.

Pre-requisite/Co-requisite: PS 3103, PS 3363, PS 3903.

PS 4620 INT - Senior Project II

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: A continuation of PS 4610.

Co-Requisite(s): PS 4610.

Pre-requisite/Co-requisite: PS 3103, PS 3363, PS 3903.

PS 4830 - Directed Readings

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual readings supervised by a faculty member.

Pre-requisite(s): Approval of instructor.

May be repeated twice for a maximum of 3 credit hours.

PS 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Typically Taught Fall Semester: *Full Sem*

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

PS 4993 - Sales Career Seminar

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem; Full Sem Online*

Typically Taught Spring Semester: *Full Sem; Full Sem Online*

Description: Research and discussion of sales and service related problems. Also designed to prepare sales and service majors for the job market and career opportunities.

PSY 1010 SS - Introductory Psychology

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk, Full Sem Online*

Course Fee: \$3.00

Course Fee Purpose: Maintenance and oversight of the Introductory Psychology Research Participation pool

Description: This Psychological Science general education course gives students a broad and general understanding

of the science of psychology. Topics will include biological, cognitive, developmental, personality, social, and mental and physical health.

PSY 1540 - Designing Your Life

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course examines theories of and research on young adulthood to understand the issues faced by college students who are transitioning to adulthood.

PSY 2000 SS/CC - The Psychology of Human Relationships

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This Psychological Science general education course presents a systematic review of the research on interpersonal relationships, including the study of multiple factors that contribute to relationship development and functioning and the diverse socio-cultural contexts in which relationships occur.

PSY 2010 - Science and Profession of Psychology

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course helps students better understand psychology as a science. The course covers a range of topics, including research, statistics, ethics, career options, graduate school options and preparation, critical to all fields of psychology and provides the skills necessary for students to succeed in upper-division courses and career preparation. This course is designed for students who are interested in or beginning to pursue psychology as an academic major or minor.

Suggested Requisite(s): PSY 1010.

PSY 2020 - Mental Health Awareness

Credits: (3)

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Description: This course teaches students how to recognize when someone is in crisis, how to listen to a peer in distress, and how to refer them to appropriate services. Students will gain a basic understanding of common types of disorders and distress seen on campus (e.g., depression, anxiety). Students will also gain an understanding of adaptive coping skills and how to implement them in their own lives.

Suggested Requisite(s): PSY 1010.

PSY 2040 - Child, Family, and Adult Advocacy

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will explore behavioral health related advocacy work for those who are interested to be trained to become Behavioral Health Technicians. The class will be utilizing simulation activities such as role-playing and scenario-based video vignettes. Areas of training include professional/ethical standards of advocacy, parental

rights, family rights, and integration of community resources in integrated behavioral healthcare model.

Suggested Requisite(s): PSY 1010.

PSY 2250 - Learning and Memory

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course involves a survey and analysis of the basic processes involved in acquisition, retention, and expression of new behaviors and alterations of existing behaviors in animals and humans. The course will examine the central theoretical concepts and issues in the fields of learning and memory.

Suggested Requisite(s): PSY 1010.

PSY 2370 - Psychology of Women and Gender

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course provides a survey of the scientific study of the psychology of gender focusing on philosophical, theoretical, and applied issues.

Suggested Requisite(s): PSY 1010.

PSY 2400 - Positive Psychology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course presents a survey of the scientific study of how and why people flourish, achieve lasting happiness, and are able to live "The Good Life." The course includes classic and contemporary psychological theory and psychological research dedicated to understanding how people achieve optimal functioning.

Suggested Requisite(s): PSY 1010.

PSY 2710 - Biopsychology

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$05.00

Course Fee Purpose: The \$ 5.00-course fee for this course is used to pay for physiological recording supplies (e.g., adhesive disks and electrodes) and biological lab materials (e.g., sheep brains) used in the lab portion of this course.

Description: This course provides an introduction to the scientific understanding of the biological basis of human and animal behavior and cognition. Topics include neurological development, communication, and anatomy.

PSY 2800 INT CRE - Projects and Research

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course requires supervised participation in faculty research projects in various areas of

psychology. Written report required at end of semester; oral report assigned at discretion of faculty supervisor.

Pre-requisite(s): PSY 1010 and permission of the instructor.

May be repeated 4 times for a maximum of 4 credit hours.

PSY 2830 CRE - Directed Readings

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course requires independent readings or secondary research on advanced special topics under the direction of a faculty mentor. For each hour of credit in a readings project the student is required to read an appropriate number of primary research journal articles and book chapters. A paper written in APA style and oral report are required at the end of the term.

Pre-requisite(s): PSY 1010 and faculty mentor permission.

May be repeated 4 times for a maximum of 4 credit hours.

PSY 2860 - Practicum

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This lower-division practicum course that involves placement of students in state and community agencies for the purpose of providing supervised practice in application of psychological skills and knowledge.

Pre-requisite(s): PSY 1010

May be repeated for a maximum of 6 credit hours.

PSY 2890 INT - Cooperative Work Experience

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides academic credit for on-the-job learning experience. Learning experiences will be specified in a learning contract. Grade and amount of credit will be determined by the department. Limited to two credit hours per semester and four credit hours counted toward the psychology major and minor from the following courses: PYS 2890, PSY 4890, PSY 4860 and PSY 4390 . Federal regulations restrict all Cooperative Work Experience to no more than six semester hours. Must be employed in a position that uses psychological training. By prior permission of instructor only.

Pre-requisite(s): PSY 1010.

May be repeated 4 times for a maximum of 4 credit hours.

PSY 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): PSY 1010.

May be repeated for a total maximum of 6 credit hours.

PSY 3000 - Child Psychology

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course presents an introduction to the psychology of children. Topics covered included the areas of prenatal, motor, emotional, cognitive, language, self, and moral development, as well as the development of peer and family relations.

Pre-requisite(s): PSY 1010.

PSY 3010 - Psychopathology

Credits: (3)

Typically Taught Summer Semester: *1st Blk, Full Sem Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an overview of clinical psychopathology including its etiology, symptoms and treatment of psychological disorders.

Pre-requisite(s): PSY 1010.

PSY 3020 - Child and Adolescent Psychopathology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an overview of the etiology, diagnosis, developmental course, treatment, and prevention of disorders first evident in childhood and adolescence.

Pre-requisite(s): PSY 1010.

PSY 3030 - Health Psychology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course examines how psychological states (e.g. anxiety, stress) influence physical health, and how physical states (e.g. illness, pain) and the environment influence psychological health. Topics will include stress, coping, adherence to treatment, pain, chronic disease, psychoneuroimmunology and health behavior change. The course will emphasize the biopsychosocial model in understanding health and disease.

Pre-requisite(s): PSY 1010.

PSY 3100 - Psychology of Diversity

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Spring Semester: *Full Sem*

Description: This course examines the psychological issues associated with human diversity including culture, disabling conditions, gender, class, ethnicity, and others. It addresses the psychological principles underlying these issues and offers effective ways of dealing with these issues.

Pre-requisite(s): PSY 1010.

PSY 3140 - Adolescent Psychology

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 2nd Blk, Full Sem Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course addresses the principles and theories of biological, cognitive and social transitions, and the development of autonomy, identity, morality, sexuality, psychopathology, and peer, romantic, and family relationships in adolescence.

Pre-requisite(s): PSY 1010.

PSY 3240 - The Psychology of Drug Use and Abuse

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: This course addresses the biopsychology factors influencing the use and abuse of drugs and the behavioral and social consequences of such use and abuse.

Pre-requisite(s): PSY 1010.

Note: This course is offered on the SLCC Miller campus

PSY 3255 - Conditioning, Learning, & Behavior Modification

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course examines the historical and current central theoretical concepts and issues in the fields of conditioning and learning and uses the principles of applied behavioral analysis and modification to teach their application.

Pre-requisite(s): PSY 1010.

PSY 3270 - Motivation and Emotion

Credits: (3)

Typically Taught Fall Semester: *Full Sem-SLCC Miller Campus*

Description: This course focuses on theories, methodologies, and practical applications of motivation and emotion.

Pre-requisite(s): PSY 1010.

PSY 3275 - Psychology of Criminal Behavior

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course provides a comprehensive scientific account of the biological, psychological, and social factors underlying criminal behavior.

Pre-requisite(s): PSY 1010 or CJ 1010.

PSY 3430 - Theories of Personality

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course provides an introduction to the study and science of personality - consistencies in people's thoughts, feelings, and behavior over time and across situations. Topics will include assessment; development; biological and contextual influences on personality; emotion and motivation; the self; personality and culture; psychological adjustment; and clinical disorders of personality. The course will focus on current empirical research and modern theories of personality.

Pre-requisite(s): PSY 1010.

PSY 3450 - Psychology of Language

Credits: (3)

Typically Taught Summer Semester: *Full Sem even years*

Description: This course will provide a comprehensive overview of psycholinguistics. It will focus on the cognitive and social aspects of language production and comprehension in both spoken and written language.

Pre-requisite(s): PSY 1010 or ENGL 3010.

PSY 3460 - Social Psychology

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course provides an exploration of social psychological theory and research. Social psychology is the study of how individuals think, feel, and behave in everyday social situations. Specifically, the course will cover topics such as self-knowledge, perceptions, cognitions, attitudes, conformity, attraction, aggression, prejudice, and stereotyping.

Pre-requisite(s): PSY 1010.

PSY 3500 - Cognition

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course teaches the principles of cognition and thinking including attention, memory, concept learning, decision making, and problem solving.

Pre-requisite(s): PSY 1010.

PSY 3510 - Industrial and Organizational Behavior

Credits: (3)

Description: This course covers the psychological aspects of the work setting including selection, training, motivation, attitudes, and the effects of the organization.

Pre-requisite(s): (Recommended) PSY 1010.

PSY 3600 - Statistics in Psychology

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course covers essential statistical concepts and statistical analytic procedures required to conduct psychological research in particular and research in the behavioral sciences generally.

Pre-requisite(s): MATH 1010 or QL with passing grade of C or better.

PSY 3605 - Psychology Statistics Lab

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Maintenance of two Psychological Science computer labs (LH 302 & LH 304)

Description: This course covers the application of statistical, database, and graphical software for psychological research analysis and presentation.

Pre-requisite/Co-requisite: Pre-requisite or co-requisite: PSY 3600 or equivalent.

PSY 3610 CRE - Research Methods in Psychology

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Research software and research participation tracking

Description: This course covers the scientific methods of behavioral research. Emphasis upon design, conducting, and analysis of experiments on human and animal behavior as well as proposal writing and critiques of experimental literature.

Pre-requisite(s): PSY 1010 and PSY 3600 or equivalent with prior approval from the Department Chair.

Pre-requisite/Co-requisite: PSY 3605 or equivalent with prior approval from the Department Chair.

PSY 3615 - Psychological Statistics and Methods I

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Research software and research participation tracking

Description: This course will focus on the scientific methods of behavioral and psychological research. Specific emphasis will be placed upon research design, study preparation, data collection, and analysis of experiments on human and animal behavior as well as proposal writing and critiques of experimental literature.

Pre-requisite(s): MATH 1010 or QL and PSY 1010.

PSY 3616 - Psychological Statistics and Methods II

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$5.00

Course Fee Purpose: Research software and research participation tracking

Description: This course will focus on the scientific methods of behavioral and psychological research. Specific emphasis will be placed upon research design, study preparation, data collection, and analysis of experiments on human and animal behavior as well as proposal writing and critiques of experimental literature. The course will cover experimental and quasi-experimental approaches and the statistical tools associated with these approaches (e.g., ANOVAs).

Pre-requisite(s): MATH 1010 or equivalent, PSY 1010 and PSY 3615.

PSY 3730 - Perception

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: This course presents an overview of perceptual processes. The course will aim to provide a reasonably deep introduction to several of the key topics and research approaches in the field (e.g., the visual system, auditory systems, speech perception, touch perception).

Pre-requisite(s): PSY 1010 Or NEUR 2950.

PSY 3740 - Neuropsychopharmacology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an in depth analysis of drugs on behavior. Topics include how drugs affect the brain, and consequently behavior, the underlying brain and environmental factors thought to be responsible for drug addiction, tolerance, and sensitivity, pharmacological treatment of major psychological disorders, the classification of common psychoactive drugs, and mechanisms of action of commonly abused drugs.

Pre-requisite(s): NEUR 2950 or PSY 2710 or instructor approval.

PSY 3810 - Experimental Course

Credits: (1-6)

Description: Individual courses offered on an experimental basis, identified by specific name and description. The specific title will appear on student's transcript along with the authorized credit.

May be repeated for a total maximum of 6 credit hours.

PSY 3850 - Forensic Psychology

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course provides a survey course examining the application of fundamental issues in psychology to the criminal justice system.

Pre-requisite(s): PSY 1010.

PSY 4000 - Advanced General

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This capstone course introduces students to the field of educational psychology by exploring the individual and environmental factors that contribute to effective learning. Students will apply educational psychology principles to an in-class teaching demonstration. They will also utilize this knowledge by providing feedback to their peers during their teaching demonstrations. This course also provides an opportunity for students to review what they have learned in their undergraduate coursework, reflect upon this knowledge, and apply what they have learned to their personal life, future career, and academic experience. 24 credit hours of psychology courses and instructor approval required.

Pre-requisite(s): PSY 1010.

PSY 4050 - Evolutionary Psychology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This capstone course examines origins and evolutionary development of early hominid and contemporary human behavior, e.g., competition and cooperation, mating, reproductive and care-giving strategies, and kinship behaviors. Includes ethological, sociobiological, and social psychological perspectives.

Pre-requisite(s): 24 credit hours of psychology courses and instructor approval and PSY 1010.

PSY 4090 - History and Systems of Psychology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This capstone course covers the early philosophical origins and contributions to psychology; critical contrasts of systems and schools on major issues. 24 credit hours of psychology courses and instructor approval.

Pre-requisite(s): PSY 1010.

PSY 4100 - Psychology in the Media

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This capstone course will highlight how psychological concepts, principles, and theories are depicted in the popular media (e.g., film, documentary). Students will watch psychologically relevant media, read classic and contemporary research connected to the concepts depicted in the media, and synthesize what they have learned from these sources in oral and written formats. Students will understand how the discipline of psychology provides a framework for understanding the world as depicted in media.

Pre-requisite(s): 24 credits of Psychology coursework and instructor approval.

PSY 4140 - Theories of Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This capstone course examines current research and theoretical models that focus on human development. Students will read various theories of development to explore 1) the main issues of developmental psychology that theories address, 2) the mechanisms of development, 3) applications, 4) strengths and weaknesses, and 5) contemporary research to highlight how the theory is alive today. Finally, students will synthesize their learning in oral and written formats to address the question, "What is my theory of development?". Students will understand how developmental theory provides a "big picture" framework for understanding the significance of research findings in developmental psychology.

Pre-requisite(s): 24 credits of Psychology coursework and instructor approval.

PSY 4200 - Environmental Psychology

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Environmental psychology examines the interactions between the physical environment and psychological processes. Environmental psychology covers the breadth of psychology, including human development, biopsychology, cognition, health and wellbeing, and social/cultural psychology. This course will cover major areas of intersectionality among environmental science, sustainability, and psychology.

Pre-requisite(s): 24 credit hours of psychology courses including PSY 3616 or PSY 3610 and PSY 1010.

PSY 4310 - Introduction to Counseling Theories

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This capstone course provides an introduction to the major theories of counseling and therapy plus an introduction to the research findings associated with effectiveness of therapy and principles of behavioral change. 24 credit hours of psychology courses and instructor approval required.

Pre-requisite(s): (Required) PSY 1010 and PSY 3010.

PSY 4760 - Tests and Measurements

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course provides a survey of methods, techniques, and instruments for measuring individual differences in behavior, a critical analysis of representative tests, values and limitations of test, methods of test selection, lab experience with tests. 24 credit hours of psychology courses and instructor approval required.

Pre-requisite(s): PSY 1010, PSY 3600 and PSY 3010.

PSY 4800 INT CRE - Projects and Research

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course entails supervised participation in projects and/or primary research with a faculty mentor in various areas of psychology. Limited to advanced students upon consent of psychology mentor and department chair. A paper written in APA style and an oral report are required at the end of the semester.

Pre-requisite(s): PSY 1010, PSY 3600 (Statistics), and PSY 3610 (Research Methods) or equivalent, and faculty mentor permission.

May be repeated 3 times for a maximum of 6 credit hours.

PSY 4805 - Capstone Projects and Research

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course involves supervised participation in projects and/or primary research with a faculty supervisor in various areas of psychology. Limited to advanced students upon consent of psychology supervisor and department chair. A paper written APA style and an oral report are required at the end of the semester. 24 credit hours of psychology courses and instructor approval required.

Pre-requisite(s): PSY 3610 or PSY 3616 or equivalent, and permission of a faculty supervisor and the chair.

PSY 4830 INT CRE - Directed Readings

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course requires independent readings or secondary research on advanced special topics under the direction of a faculty mentor. For each hour of credit in a readings project the student is required to read an appropriate number of primary research journal articles and book chapters. A paper written in APA style and oral report are required at the end of the term.

Pre-requisite(s): PSY 1010, PSY 3600 (Statistics), PSY 3610 (Research Methods) or equivalent, and faculty mentor permission.

Suggested Prerequisite(s): PSY 3610 may be taken concurrently with PSY 4830.

May be repeated 3 times for a maximum of 6 credit hours.

PSY 4860 CEL - Practicum

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This upper-division practicum course involves placement of students in state and community agencies for the purpose of providing supervised practice in application of psychological skills and knowledge.

Pre-requisite(s): 18 credit hours of psychology courses, one of which must be PSY 1010. Other courses will be at the discretion of the supervising instructor. Also, permission of the instructor is required.

May be repeated one time for a maximum of six credit hours.

PSY 4890 INT - Cooperative Work Experience

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This upper-division course provides academic credit for on-the-job learning experience. Learning experiences will be specified in a learning contract. Grade and amount of credit will be determined by the department. Limited to two credit hours per semester and four credit hours counted toward the psychology major and minor from the following courses: PSY 2890, PSY 4890, PSY 4860 and PSY 4390 . Federal regulations restrict all Cooperative Work Experience to no more than six semester hours. Must be employed in a position that uses psychological training. By prior permission of instructor only.

Pre-requisite(s): PSY 1010.

May be repeated 4 times for a maximum of 4 credit hours.

PSY 4900 - Selected Topics in Psychology

Credits: (2-3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an in-depth exploration of selected topics and issues in the discipline, designed as an upper division course.

Pre-requisite(s): PSY 1010.

May be repeated 3 times for a maximum of 9 credit hours.

PSY 4905 - Capstone Selected Topics in Psychology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an in-depth exploration of selected topics and issues in the discipline, which fulfills the goals of a capstone class in the discipline. Students will be expected to read, analyze, and integrate research in a seminar style setting.

Pre-requisite(s): PSY 3610 or PSY 3616 (or equivalent), 24 credit hours of psychology courses, and instructor approval.

PSY 4910 - Senior Thesis

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A research project to be written by a senior student under the supervision of a faculty member. Successful completion of the research project will fulfill the capstone requirement of the major (as an alternative to

PSY 4000 or PSY 4090) and the senior project requirement for honors. The student must apply for acceptance into the course (applications available from the chair), and the research proposal and the final project must be approved by a faculty committee. It is expected that the course will be taken once for the writing and defense of a proposal and repeated for the writing and defense of the final project. 24 credit hours of psychology courses and instructor approval required.

May be repeated once for a maximum of 6 credit hours.

PSY 4950 - Capstone Experience: Promoting Psychological Literacy

Credits: (1)

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Course Fee: \$32.50

Course Fee Purpose: The \$ 32.50-course fee for this course is used to pay for the ETS® Major Field Test. The department pays \$795.00 per year to be able to compare the department data on this exam with national data. This comparative metric provides the department with a benchmark standard to assess our performance.

Description: This course requires graduating seniors to reflect on and integrate the knowledge and skills acquired during their training in psychology. 24 credit hours of psychology courses and instructor approval required.

Pre-requisite(s): PSY 1010.

PTGS 1010 - First Semester Portuguese

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Introductory course assuming no significant previous experience with the language. Beginners and students with less than two years of high school language should register for this class. Emphasis on everyday conversation and exposure to cultural perspectives.

PTGS 1020 - Second Semester Portuguese

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Continuation of PTGS 1010. Basic language skills including listening, speaking, reading, writing and culture.

PTGS 2010 - Third Semester Portuguese

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of PTGS 1020. Assumes completion of first-year or equivalent experience. Students learn to understand and express ideas about their community and the world. Includes listening, speaking, reading, writing and culture.

PTGS 2020 HU - Fourth Semester Portuguese

Credits: (3)**Course Fee:** \$8.00**Course Fee Purpose:** Maintain technology in the FL lab, EH 408, and classroom technology.**Description:** (NH=Novice High) Continuation of PTGS 2010. The learning and application of strategies for acquiring a foreign language. Students also learn how cultural products and practices reflect a culture's attitudes, values, ideas and meaning. The process of language acquisition and the seeking of cross-cultural understanding provide insights into the commonalities of how the human family learns, thinks and communicates.**PTGS 2021 - Second Year II****Credits: (3)****Description:** (NH=Novice High) Continuation of PTGS 2010 without General Education Humanities credit. Offered through examination only.**Pre-requisite(s):** Only available through testing.**PTGS 2030 - Second Year Language Review****Credits: (3)****Course Fee:** \$8.00**Course Fee Purpose:** Maintain technology in the FL lab, EH 408, and classroom technology.**Description:** (NH=Novice High) This course will prepare students who wish to continue language study. Emphasis on conversational skills and a review of language structure and usage.

Note: Check with department for course availability.

PTGS 3060 - Grammar & Composition**Credits: (3)****Course Fee:** \$8.00**Course Fee Purpose:** Maintain technology in the FL lab, EH 408, and classroom technology.**Description:** (IL=Intermediate Low) Students will read examples of writing in various modes (such as description, narration, exposition, and argument), write short compositions in those modes, and review the necessary grammar to write correctly in those modes.

Note: Check with department for course availability.

PTGS 3116 - DLI Bridge Course I**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Description:** Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.**Pre-requisite(s):** PTGS 2020 or AP exam with a score of 4 or better.**PTGS 3117 - DLI Bridge Course II****Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Description:** Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.**Pre-requisite(s):** PTGS 2020 or AP exam with a score of 4 or better.**PTGS 3118 - DLI Bridge Course III**

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 4 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): PTGS 2020 or AP exam with a score of 4 or better.

PTGS 3160 - Introduction to Literature

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Required of all majors and minors. 3160 may be taken concurrently with other literature courses. One sheltered section may be offered to students who have not had extensive in-country experience.

Note: Check with department for course availability.

PTGS 3175 - Business Language II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: (IM=Intermediate High) Advanced Business Language and Practices. Required of all commercial majors.

PTGS 3220 - Phonetics and Phonology

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (IL=Intermediate Low) Analysis of the sounds of language and word formation: practice of native like speech patterns. Required of all teaching majors and minors.

Note: Check with department for course availability.

PTGS 3270 - Special Topics in Linguistics

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) An introduction to linguistic structures and semantic elements. The course provides useful information and practice in the language, its structures and usage. The sub-disciplines of linguistics, other than phonetics and phonology (covered in FL 3220), will be studied. These may include lexical analysis, semantics, morphology, syntax, linguistic change and dialectal variation.

Note: Check with department for course availability.

PTGS 3320 - Applied Language Studies

Credits: (1-3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Minimal proficiency level varies with content).
May be repeated up to 10 times under different titles.

PTGS 3360 - Advanced Grammar

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain and replace equipment in the WLC lab, EH 408, and classroom technology; support for student tutors and online instructional resources.

Description: (IL=Intermediate Low) Analysis and application of syntactic principles and discourse structure.
Note: Check with department for course availability.

PTGS 3540 - Latin American Environment and Cultures

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Med) Studies in culture, history, geography, social customs, fine arts and civilization. May be repeated for other non-English-speaking cultures.

PTGS 3550 - Cultural Heritage I

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and civilization. May be repeated up to 7 times for credit and for other non-English speaking cultures.

PTGS 3560 - Cultural Heritage II

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Med) Studies in culture, history, geography, social customs, fine arts, and civilization. May be repeated 3 times for other non-English speaking cultures.

PTGS 3570 - Special Topics in Culture

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and civilization.

May be repeated up to 7 times for credit and for other non-English speaking cultures.

Note: Check with Department for course availability.

PTGS 3610 - Literature Survey I

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) A survey of the authors and works of a particular period or place. May be repeated under different titles.

PTGS 3620 - Literature Survey II

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) A survey of the authors and works of a particular period or place. May be repeated under different titles.

PTGS 3631 - Literature: Prose

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of works in prose by one or various authors of a particular period or place, or spanning several literary movements and geographical regions. May be taken 3 times up to 9 credits under different titles.

PTGS 3632 - Literature: Drama

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of theater plays by one or various authors of a particular period or place, or spanning several literary movements and geographical regions. May be taken 3 times up to 9 credits under different titles.

PTGS 3680 - Literature: Film

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of film by one or various filmmakers of a particular period or place, or spanning several literary movements and geographical regions.

May be taken 3 times up to 9 credits under different titles.

Note: Check with department for course availability.

PTGS 3710 - Business Language I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) Business Language and Practices. Required of all commercial majors.

PTGS 3715 - Business Language II

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate High) Advanced Business Language and Practices. Required of all commercial majors.

PTGS 3720 - Language for Specific Purposes I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) This course is content, vocabulary and culture-based. The course focuses on practical vocabulary, idiomatic expressions, professional terminology and cultural interactions on a variety of topics such as language for the medical professions, social workers, law enforcement or tourism.

PTGS 3730 - Language for Specific Purposes II

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) This course is content, vocabulary and culture-based. The course focuses on practical vocabulary, idiomatic expressions, professional terminology and cultural interactions on a variety of topics, such as language for medical professions, social work, law enforcement or tourism.

PTGS 3740 - Translation I

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) Introduction to basic techniques and skills needed for bilingual translation of non-fiction texts. Emphasis will be on the translation into English, and on the stylistic, syntactic, cultural, lexical, and terminological problems. Students are given ample opportunity to apply these techniques through a series of written translation assignments, which form the basis for class discussion.

PTGS 3850 - Study Abroad

Credits: (1-6)

Description: (IM=Intermediate Mid) Language and culture studies for students whose language proficiency is Intermediate Low to Intermediate High. All Intermediate and Advanced tasks will be performed in the target language. All Superior tasks may be performed in English. Prior travel experience does not apply. May be repeated up to 10 times for credit.

PTGS 4740 - Translation II

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) Development of techniques and skills needed for bilingual translation of non-fiction texts. Emphasis will be on the translation into the target language. Methods of contrastive linguistics to analyze pertinent aspects of language structure, involving syntax, vocabulary and style, as well as basic theoretical-historical concepts are employed. Students are given ample opportunity to apply these techniques and concepts

through a series of written translation assignments, which form the basis for class discussion. Prerequisite/Co-requisite: PTGS 3740 is strongly advised, but not required.

PTGS 4830 - Directed Readings

Credits: (1-3)

Description: (IH=Intermediate High) Independent readings under the direction of a faculty member.

May be repeated up to 10 times.

Note: Check with Department for course availability.

PTGS 4850 - Study Abroad

Credits: (3)

Description: (A=Advanced) Language and culture studies for students whose language proficiency is Advanced or Superior. All tasks are performed in the target language. Prior travel experience does not apply.

PUBH 2050 - Case Management in Behavioral Health

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem-Online*

Description: This course is an introduction to behavioral health case management and clinical documentation. The role and function of case management in human services will be explored. Students will learn the skills and methods necessary for successful case management for behavioral health clients. Case management through the lens of integrated delivery and whole health service care coordination will be presented. Clinical documentation skills related to case management will be developed, demonstrated, and exercised.

PUBH 3150 - Introduction to Public Health

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: An overview of public and community health including history, management, prevention and epidemiology of disease. Emphasis on the role of community and government health agencies regarding health promotion and disease prevention activities.

PUBH 3200 - Epidemiology and Biostatistics

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The goals and objectives of epidemiology, its policy and procedure, and its foundation and support in health care information are the focus of this course. Investigation of an epidemic, measures of mortality, incidence and prevalence, measures of risk, biological variability, probability, screening, sampling, statistical significance, correlation, multiple regression, retrospective and prospective studies, and survival analysis are discussed. Advanced techniques for the statistical analysis of institutional case-mix and quality improvement data are presented.

Pre-requisite(s): Must meet WSU Quantitative Literacy requirement.

PUBH 3210 - Advanced Epidemiology & Population Health

Credits: (3)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: This course provides an advanced, in-depth, exploration of epidemiology, public health, and global population health. The history, philosophy, core values, concepts, and functions of public health will be discussed at the local, national, and international levels. The concepts and methods needed to track and analyze disease trends will be applied. Students will be able to identify and describe upstream determinants of health including the socioeconomic, behavioral, biological, environmental, and other factors that affect human health and contribute to health disparities. At the conclusion of the course, students will be able to identify public health issues, design a basic intervention, and formulate appropriate internal and external public health communications.

Pre-requisite(s): PUBH 3200 - Epidemiology and Biostatistics.

PUBH 3500 - Biomedical Research Support**Credits: (2)****Typically Taught Fall Semester:** *Online*

Description: Design concepts and information systems used in biomedical research and investigation by drug companies, genetic engineering firms, academic institutions, and individual researchers and the support of same by health information professionals are discussed. The major national research policy-making bodies (NIH, NCHS, CDC) and their research protocols are reviewed. The student also learns what techniques and resources facilitate biomedical literature searches and how to assist a researcher in the pursuit of published information. An overview of the development, structure, and management of a health care institutional medical library is presented.

PUBH 4500 - Grant Writing**Credits: (2)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem Online*

Description: This course is an introduction to the art of grant writing. The general elements of a grant will be outlined and explored. Students will learn about what makes a grant proposal successful. Grant writing and evaluation skills will be developed, demonstrated, and exercised.

PUBH 4700 - Public Health Capstone**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: The Public Health Capstone will provide students in the Public Health program a comprehensive review culminating in an applied project. Public Health concepts including epidemiology, population health, finance, behavior change, communications and marketing among others will be brought together demonstrating their application in real world public health situations. A final project will be used to demonstrate the students understanding of general public health concepts and their applications.

QS 2900 - Topics in Queer Studies**Credits: (3)****Variable Title****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Varied topics as described in the semester schedule. Topics will be drawn from issues related to queer studies.

Pre-requisite(s): WGS 1500.

May be repeated 3 times up to 9 credits with different course content.

QS 3050 - Queer Theories

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an introduction to the study of queer theories. Students will study historical accounts of queer activism and literature, exploring cultural norms and power structures that contribute to the marginalization of those who identify as part of the queer community.

Pre-requisite(s): WGS 1500.

QS 3100 - LGBTQ America Since 1945

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course explores American LGBTQ experience since 1945. Topics include the history of state abuses as well as how LGBTQ people mobilized to overcome such abuses and win recognition, to some degree, of their right to equal treatment and citizenship.

QS 4150 - Research Methods in Queer Studies

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is designed to introduce students to a variety of approaches to research in queer studies. Students will consider some of the assumptions, which underlie research methodologies that may limit our knowledge about research subjects and affect individuals as researchers.

Pre-requisite(s): QS 3050.

QS 4830 - Directed Readings

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed individual readings in the general area of queer studies. Specific topic selected in consultation with instructor; amount of material to be read determined at discretion of instructor, based on level of topic and degree of difficulty of reading and consistent with any existing university and departmental guidelines.

Pre-requisite(s): WGS 1500 and QS 3050 with a grade of 'C' or higher.

May be repeated up to 6 credit hours.

QS 4860 - Internship in Queer Studies

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This internship course is a chance for you to consolidate and enrich your undergraduate learning while building the transition to life beyond college. Queer Studies students learn to think critically and act strategically on issues of gender and sexuality, particularly relating to issues of social justice.

Pre-requisite(s): QS 3050.

QS 4900 - Topics in Queer Studies

Credits: (3)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Varied topics as described in the semester schedule. Topics will be drawn from issues related to queer studies.

Pre-requisite(s): WGS 1500 and QS 3050 with a grade of 'C' or higher.

This course may be taken 2 times for up to 6 credits with different course content.

QS 4949 - The Neuroscience of Sex, Romance, and Sexual Orientation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course will examine three human imperatives (sex, romance, and sexual orientation) from a neuroscience perspective. The neuroscience basis for each of these aspects of human behavior will be examined through directed readings and in-class discussions.

Pre-requisite(s): PSY 1010.

QUAN 2400 - Business Calculus

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: Quantitative Methods Lab is available in Wattis Business Building, Room WB 202. The course fee for this course is used to fund a Quantitative Methods Lab in Room WB202, which provides tutoring and computer equipment.

Description: Emphasis on applications of calculus to problems in business. Topics include functions, limits, differentiation, and integration. Applications include profit maximization, cost functions, demand analysis, and output maximization with budget constraints and resource allocation.

Pre-requisite(s): Earn a "C" or better in MATH 1050, 1080, or 1210 or earn a "C" or better in any math course for which either MATH 1050 or MATH 1080 or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 on Math ACT or; score of 65 or higher on ALEKS.

QUAN 2600 SUS - Business Statistics I

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: Quantitative Methods Lab is available in Wattis Business Building, Room WB 202. The course fee for this course is used to fund a Quantitative Methods Lab in Room WB202, which provides tutoring and computer equipment.

Description: Introduction to concepts and applications of statistics in business and economics. Topics include summary statistics, probability distributions of random variables, sampling, and estimation. Class will include use of computers.

Pre-requisite(s): Earn a "C" or better in MATH 1050, MATH 1080 or MATH 1210 or earn a "C" or better in any math course for which either MATH 1050 or MATH 1080 or MATH 1090 is a prerequisite or; score 3 or higher on AP Calculus exam or; score 70 or higher on ACCUPLACER College Level Math (CLM) or; score of 26 or higher on Math ACT or; score of 65 or higher on ALEKS.

QUAN 3610 - Business Statistics II

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: Quantitative Methods Lab is available in Wattis Business Building, Room WB 202. The course fee for this course is used to fund a Quantitative Methods Lab in Room WB202, which provides tutoring and computer equipment.

Description: Continuation of QUAN 2600. Topics include test of hypotheses, correlation, time series, and multiple regression analysis with specific application to problems in business and economics. Computers will be used extensively in regression analysis.

Pre-requisite(s): QUAN 2600.

RADT 1012 - Cardiographic Technician

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will cover the procedural activities necessary for practical ECG. Students will learn basic heart anatomy, the fundamentals of performing an ECG, stress testing, and ambulatory monitoring. They will also review ECG morphology and appropriate measurements. They will also learn to identify changes in heart rhythm resulting from pharmacological medications. At the conclusion of this course, students will have completed appropriate didactic learning necessary for CCI credentialing as a Certified Cardiac Technician (CCT).

RADT 1013 - Rhythm Analysis

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: All courses will be taught in a hybrid format heavily focused on face-to-face and hands on learning with some online learning components. This course will cover the procedural activities necessary for Telemetry. Students will learn the fundamentals of Telemetry and identify normal and pathological rhythms demonstrated with telemetry analysis. They will also review EKG morphology and appropriate measurements. At the conclusion of this course, students will have completed appropriate didactic learning necessary for CCI credentialing as a Certified Rhythm Analysis Technician (CRAT).

RADT 1014 - Basic Cardiac Imaging

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will cover (1) cardiac and vascular anatomy (2) radiological examinations (3) common pathologies. Course Objectives. By the completion of the semester, each student will demonstrate the ability to discuss and demonstrate application of the following skills and abilities:

1. Identify anatomy of the heart and large vessels within various radiologic sciences modalities.
2. Describe common radiologic sciences examinations in radiography, sonography, computed tomography, magnetic resonance imaging, and nuclear medicine.

3. Identify and describe common cardiac pathologies including: contusion, cardiomyopathy, infarction, dysplasia, tumors, and aneurysm.

RADT 1015 - Patient Care in Cardiology

Credits: (2)

Typically Taught Summer Semester: *Full Sem- Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides students with the essential knowledge and skills required to care for cardiac patients while performing diagnostic procedures. Focusing on the practical aspects of patient interaction, it covers the preparation and monitoring of patients undergoing electrocardiograms (ECGs), echocardiograms, stress tests, and other cardiovascular diagnostic tests. Students will learn about proper patient positioning, monitoring vital signs, and address key areas of patient comfort, communication, and safety, emphasizing the importance of empathy and professionalism in healthcare settings. Additionally, students will be trained to recognize and respond to common cardiac emergencies.

Co-Requisite(s): RADT 1012, RADT 1013, RADT 1014

RADT 1021 - Limited Clinical Simulation

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Limited clinical simulation for the limited radiographer to gain skills in radiographic imaging processes.

Co-Requisite(s): RADT 1023, RADT 1024, RADT 1025.

RADT 1022 - Introduction to Radiologic Technology

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Program orientation, elementary radiation protection and basic darkroom procedures.

RADT 1023 - Limited Radiographic Anatomy & Positioning

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Limited Radiographic Anatomy and Positioning will cover procedures in the limited scope of radiographic examinations, as well as the basics of human anatomy associated with those exams.

Co-Requisite(s): RADT 1024, RADT 1025, and RADT 1021

RADT 1024 - Limited Principles of Radiographic Exposure

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Limited Principles of Radiographic Exposure will cover all radiation safety, exposure factors, and image production concepts.

Co-Requisite(s): RADT 1023, RADT 1025, and RADT 1021

RADT 1025 - Limited Patient Care and Assessment

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: To provide patient care skills that will sustain students in a medical clinic as a limited radiographer.

Co-Requisite(s): RADT 1023, RADT 1024, and RADT 1021

RADT 1303 - Principles of Radiographic Exposure I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Theory of x-ray production; image production and radiographic equipment.

RADT 1502 - Radiographic Anatomy and Positioning I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$12.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Terminology, pathology and radiographic positioning.

RADT 1512 - Radiographic Anatomy and Positioning II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$18.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Continuation of RADT 1502.

Pre-requisite(s): RADT 1502.

RADT 1522 - Radiographic Anatomy and Positioning III

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Course Fee: \$12.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Continuation of RADT 1512.

RADT 1532 - Radiographic Anatomy and Positioning IV

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$18.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Continuation of RADT 1522.

Pre-requisite(s): RADT 1522.

RADT 1542 - Radiographic Anatomy and Positioning V

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$18.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Continuation of RADT 1532 .

RADT 1601 - Clinical Simulation I

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$12.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Patient positioning, darkroom experience and review of radiographic quality.

RADT 1621 - Clinical Simulation II

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$12.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Continuation of RADT 1601.

Pre-requisite(s): RADT 1601.

RADT 1641 - Clinical Simulation III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Course Fee: \$12.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Continuation of RADT 1621.

RADT 1661 - Clinical Simulation IV

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$12.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Continuation of RADT 1641.

RADT 1681 - Clinical Simulation V

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

RADT 1810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

RADT 2042 - Community-Based Patient Care I

Credits: (1-2)

Typically Taught Fall Semester: *Full Sem*

Description: Patient case studies and critical care situations.

May be repeated once for credit.

RADT 2043 - Specialty Based Patient Care

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$12.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Patient care and management in radiology.

RADT 2272 - Basic Sectional Anatomy

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: The anatomical appearance of each organ system and common pathology on sectional medical images.

RADT 2403 - Principles of Radiographic Exposure II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Radiographic imaging, instrumentation, image production and factors affecting radiologic quality.

RADT 2803 - Independent Research

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individualized projects.

May be repeated 3 times for credit.

RADT 2821 - Directed Readings & Research I

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Selecting readings and/or a research project on medical imaging procedures, new technology, patient satisfaction, patient safety, and professional behavior.

RADT 2822 - Directed Readings & Research II

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Selecting readings and/or a research project on medical imaging procedures, new technology, patient satisfaction, patient safety, and professional behavior.

RADT 2823 - Directed Readings & Research III

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Selecting readings and/or a research project on medical imaging procedures, new technology, patient satisfaction, patient safety, and professional behavior.

RADT 2824 - Directed Readings & Research IV

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Selecting readings and/or a research project on medical imaging procedures, new technology, patient satisfaction, patient safety, and professional behavior.

RADT 2825 - Directed Readings & Research V

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Selecting readings and/or a research project on medical imaging procedures, new technology, patient satisfaction, patient safety, and professional behavior.

RADT 2861 INT - Clinical Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Experience gained in a health care facility.

Pre-requisite(s): Acceptance into the program.

RADT 2862 INT - Clinical Education

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Continuation of RADT 2861.

RADT 2863 INT - Clinical Education

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Continuation of RADT 2862.

RADT 2864 INT - Clinical Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Continuation of RADT 2863.

RADT 2865 INT - Clinical Education

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Continuation of RADT 2864.

RADT 2866 INT - Final Competency Evaluation

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Demonstration of competency performing the procedures required by the certification agency.

RADT 2913 - Comprehensive Review

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Review of didactic and clinical applications.

RADT 2921 - Workshop, Conferences and Telecourses

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

May be repeated twice for a maximum of 3 credit hours.

RADT 2942 - Transition to Clinical Practice

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Assistance with career planning and an introduction to specialized imaging procedures and new and future imaging procedures.

RADT 3003 - Psycho-Social Medicine

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Designed to prepare students to better understand their patient and the patient's family through comparison of diverse populations based on their value systems, cultural and ethnic influences, communication styles, socio-economic influences, health risks and life stages. Study of factors that influence the interrelationships with patients and professional peers. Understanding multicultural diversity assists the student in providing better patient care.

RADT 3043 - Medical Ethics and Law

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Medical ethics and law and case studies in medical imaging and radiation therapy.

RADT 3123 - Sectional Anatomy

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Anatomical study of the body in the sagittal, transverse and coronal imaging planes.

RADT 3143 - Imaging Pathophysiology I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Description: Imaging adaptations and alterations in anatomy and physiology with variation outside of the normal range (Unit 1).

RADT 3144 - Imaging Pathophysiology II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Imaging adaptations and alterations in anatomy and physiology with variation outside of the normal range (Unit 2).

Pre-requisite(s): RADT 3143 - Imaging Pathophysiology I.

RADT 3243 - Community-Based Patient Care II

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Advanced level patient care, assessment, and management in the community-based environment.

RADT 3253 - Specialty-Based Patient Care II

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$12.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Advanced level patient care, assessment, and management in the specialty-based environment.

RADT 3263 - Diagnostic Services Pharmacology

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Concepts of pharmacology including modes of action, uses, modes of excretion effects, side effects and patient care required for specific pharmacologic agents.

RADT 3403 - Radiobiology & Health Physics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Effects of ionizing radiation on the human body, patient and personnel protection, exposure monitoring health physics and oncology.

RADT 3423 - Federal Regulations

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Regulations governing health care, equipment and application of ionizing radiation.

RADT 3443 - Quality Assurance in Radiology

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$18.00

Course Fee Purpose: Lab supplies: Lab Equipment/Software upgrade and Maintenance

Description: Development of a quality assurance program and manual to meet accreditation requirements.

RADT 3463 - Computerized Imaging

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Digital radiography, image acquisition, image processing and digital image management.

RADT 3563 - Managing Clinical Information

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Digital and volumetric imaging, emerging technologies, secure computerized management practice, and patient privacy regulations.

RADT 3863 INT - Clinical Internship

Credits: (2-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Experience in a radiology specialty area. Consent of instructor is required.
May be repeated twice for credit.

RADT 4203 - Patient Education in Radiology

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Skills necessary to assess, plan and evaluate a variety of educational programs specific to radiology patients.

RADT 4213 - Supervision and Staff Development

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Federal regulations, developing department protocol, designing departments personnel supervision and quality of care assessment.

RADT 4223 - Promotional Strategies

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Assessment of needs, development and implementation of promotional strategies for Radiology Departments.

RADT 4233 - Fiscal Analysis in Radiology

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Justification, acquisition and leasing of imaging equipment and accessories, staffing formulas and review of maintenance contracts.

RADT 4243 - Quality Management in Radiology

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Concepts and principles of quality management, collection and analysis of data.

RADT 4253 - Risk Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Study of management of risk associated with the delivery of health care in clinical and non-clinical settings.

RADT 4303 - Cardiology

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Detailed study of the heart: anatomy, physiology, pathophysiology, pharmacology, EKGs and imaging modalities.

RADT 4313 - Visceral, Pelvic and Extremity Angiography

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Anatomy, pathology, protocols and interventional procedures of abdominal viscera, extremities and pelvis.

RADT 4333 - Head and Neck Angiography

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Anatomy, pathology, protocols and interventional procedures of the aortic arch, brachiocephalic, thyroid and other facial and neck arteries.

RADT 4343 - Thoracic and Venous Procedures

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Anatomy, pathology, protocols and interventional procedures of the venous and cardiac systems.

RADT 4403 - Imaging Pathology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Radiographic presentation of pathological conditions, abnormalities and anomalies.

RADT 4413 - Forensic Radiology

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides a comprehensive study of medical imaging's role in forensic medicine. Forensic Radiology is used to determine identity of remains, evaluate injury or cause of death and assist in the detection of abuse. Junior or Senior standing required.

RADT 4433 - PACS Administration

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Digital imaging and communication standards, PACS administration, image quality, and emerging technology standards.

RADT 4443 - Imaging Informatics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Analyzing system needed, project management, quality improvement, bioinformatics, clinical informatics, and medical informatics.

RADT 4453 - Advanced Imaging: 3D Visualization and 3D Printing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course will be composed of three credit hours of lecture content and includes one additional session of lab participation. Students will learn the advanced operation and manipulation of software to reconstruct two-dimensional (2D) radiology images into three-dimensional (3D) images. The lecture portion of the course will instruct the students on the different 3D rendering techniques and segmentation processes involved with creating digital and printed images. The lab portion of the course will provide the students an opportunity to compile acquired slices from different imaging modalities (MRI, CT, PET, etc.) using advanced 3D rendering and segmentation techniques to create a 3D digital image from their home.

RADT 4543 - Bone Densitometry

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: This course comprehensively covers the methods of bone density measurement (bone densitometry, DEXA), the pathogenesis of osteoporosis, quality management issues, therapies for osteoporosis and a review of additional analysis methods.

RADT 4553 - Breast Anatomy, Physiology and Pathology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Normal breast anatomy and physiology compared to pathological conditions.

RADT 4563 - Mammographic Positioning/Imaging Techniques

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Routine positions, risk versus benefit; tissue variations, specialized procedures and imaging modalities.

RADT 4572 - Advanced Breast Imaging

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will highlight advanced breast imaging and correlate findings between modalities; discuss associated patient education and medicolegal considerations; and highlight best practice in relation to pathology and patient history.

RADT 4573 - The Female Patient and Medical Imaging

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course will familiarize the student to disease processes specific to the female patient and the imaging methods that may be used in diagnosis and treatment. The clinical pathways that are commonly used, involving all radiologic imaging modalities, will be explored. Students who enroll in this course must be certified by the American Registry of Radiologic Technologists.

RADT 4583 - Mammographic Equipment and Quality Assurance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Equipment operation, technical factors and quality assurance procedures in mammography.

RADT 4601 - MRI Entry Level-Patient Care and Safety

Credits: (2)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Description: This course is designed for non-RT MRI applicants choosing the Primary Pathway. The course will focus on helping non-RT and non-healthcare applicants understand the following areas: MRI safety, sectional anatomy, patient care, and venipuncture.

RADT 4603 - Magnetic Resonance Imaging Physics, Instrumentation & Safety

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Physical principles and theories of magnetic resonance, instrumentation, safety, imaging sequences and methods in normal and abnormal tissue, and computer parameters of magnetic resonance.

RADT 4610 - Clinical Simulation I

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Clinical Simulation in the Radiology and Computer Labs.

RADT 4611 - Clinical Simulation II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Clinical Simulation in the Radiology and Computer Labs.

RADT 4612 - Clinical Simulation III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Clinical Simulation in the Radiology and Computer Labs.

RADT 4613 - Computed Tomography of the Torso and Limbs

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Sectional anatomy, pathology and imaging protocols of the abdominal viscera, pelvis, thorax and

extremities.

Pre-requisite(s): Same as is previously noted for this course

RADT 4623 - Advanced MRI Procedures

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Evaluation of organ function and diagnosis of disease process using advanced MRI procedures with emphasis on spectroscopy and functional MR.

RADT 4630 - MRI Simulation 1

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: MRI course using simulation software to practice MRI protocols and scanning as if the student was in the clinical setting.

Pre-requisite(s): Acceptance into the MRI program.

RADT 4631 - MRI Simulation 2

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: MRI course using simulation software to practice MRI protocols and scanning as if the student was in the clinical setting.

Pre-requisite(s): Acceptance into the MRI program.

RADT 4632 - MRI Simulation 3

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Description: MRI course using simulation software to practice MRI protocols and scanning as if the student was in the clinical setting.

RADT 4633 - Magnetic Resonance Imaging of the Central Nervous System

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Sectional anatomy, pathology and imaging protocol of the head, spine and central nervous system.

RADT 4643 - Magnetic Resonance of the Torso and Limbs

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Sectional anatomy, pathology and imaging protocols of the abdominal viscera, pelvis, thorax and extremities.

RADT 4653 - Computed Tomography of the Central Nervous System

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Sectional anatomy, pathology and imaging protocols of the head, spine and central nervous system.

RADT 4663 - Computed Tomography Physics, Instrumentation & Safety

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Description: Interactions of electromagnetic waves, instrumentation, imaging sequences, computer parameters, and safety of computerized tomography imaging.

Pre-requisite(s): Same as already listed

Co-Requisite(s): Same as already listed

RADT 4803 - Individual Research

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Research projects developed for district, state, regional or national presentation.

May be repeated for a maximum of 3 credit hours.

RADT 4833 - Directed Readings and Research

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Synthesis and analysis of journal articles resulting in a research paper for the purpose of publication.

RADT 4850 - Study Abroad

Credits: (1-6)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Description: The purpose of this course is to provide opportunities for students in health professions to experience a study abroad program that is designed to explore healthcare, culture, and clinical experience.

May be repeated 5 times with a maximum of 6 credit hours.

RADT 4861 - Clinical Internship

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Experience in a radiology specialty area. Consent of instructor is needed.

RADT 4862 - Clinical Internship

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Experience in a radiology specialty area. Consent of instructor is needed.

RADT 4863 INT - Clinical Internship

Credits: (2-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Description: Experience in a radiology specialty area. Consent of instructor is needed.
May be repeated twice for credit.

RADT 4911 - Comprehensive Review/CT

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Description: Preparation for advanced certification examination.

RADT 4912 - Comprehensive Review/MRI

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Description: Preparation for advanced certification examination.

RADT 4913 - Comprehensive Review/CIT

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Description: Preparation for advanced certification examination.

RADT 4914 - Comprehensive Review/M

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Description: Preparation for advanced certification examination.

RADT 4915 - Comprehensive Review/QM

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Preparation for advanced certification examination.

RADT 4922 - Workshop, Conferences and Telecourses

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

RADT 4933 - Research Methods

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Apply research strategies in health care and clinical practice, obtain certificate for human subject research, formulate a research proposal, and complete an institutional review board application.

RADT 4942 - Transition to Specialty Practice

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Description: Review of the program educational requirements. Professional responsibilities and requirements as the student transitions into the healthcare marketplace.

May be repeated twice for a maximum of four credit hours.

RADT 4943 - Baccalaureate Thesis

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Research in health professions utilizing the scientific inquiry method.

RADT 4945 - Fundamentals in MRI Certification

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Description: Review of the MRI program educational requirements in preparation for the national certification exam.

Pre-requisite(s): RADT 4603, RADT 4623, RADT 4633, RADT 4643.

RADT 4992 - Seminar

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: New developments and procedures in imaging and therapy and preparing for the future.

May be repeated for a maximum of 2 credit hours.

RADT 5864G - Clinical Preceptorship

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Continuation of RADT 6863 .

RADT 5867G - Competency Assessment/Residency

Credits: (3)

Description: Assessment of competency knowledge and skills in the clinical setting.

Note: This course is offered as needed.

RATH 4330 - Radiation Therapy Physics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An overview of the profession of radiation therapy. Radiation therapy physics, dosimetry, isodose distribution for isotopes and electrically-produced beams. Mechanics of Linear accelerators and Cobalt.

RATH 4342 - Introduction to Treatment Planning

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Basic quantities and concepts in radiotherapeutic dosimetry. Current aspects of the anatomical and physical consideration involved in planning and delivery of the therapy prescription.

RATH 4410 - Radiation Oncology I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Pathology of cancer; combined therapy and surgery; chemotherapy and radiation therapy; clinical application of treatment techniques; and case studies.

RATH 4412 - Radiation Oncology II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Pathology of cancer; combined therapy and surgery; chemotherapy and radiation therapy; clinical application of treatment techniques; and case studies.

RATH 4414 - Radiation Oncology III

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Pathology of cancer; combined therapy and surgery; chemotherapy and radiation therapy; clinical application of treatment techniques; and case studies.

RATH 4444 - Advanced Treatment Planning/Brachytherapy

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Prescription interpretation, nuclide implants, brachytherapy and treatment techniques involving hyperthermia. Beam modification devices and theory of beam placement will be discussed.

RATH 4446 - Quality Assurance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Establishment of a quality assurance program for linear accelerators, simulators and therapeutic isotopes.

RATH 4448 - New Technology in Radiation Therapy

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Exploration of the emerging technology and new equipment used in radiation therapy.

Pre-requisite(s): Graduate of an approved Radiography Program or equivalent.

RATH 4861 INT - Clinical Education I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Clinical education designed to facilitate transference of didactic instruction to practical clinical practice.

RATH 4862 INT - Clinical Education II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Clinical education designed to facilitate transference of didactic instruction to practical clinical practice.

RATH 4863 INT - Clinical Education III

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Clinical education designed to facilitate transference of didactic instruction to practical clinical practice.

RATH 4913 - Comprehensive Review

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: Review of all didactic and clinical courses and competencies. Guest lecturer and multiple mock registry examinations will be presented.

REC 1241 - Mountain Biking, Level I

Credits: (1)

Typically Taught Summer Semester: *1st Blk; 2nd Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Course Fee: \$81.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include mountain bikes parts and maintenance, transportation, first aid supplies, and permit fees.

Description: This physical activity course introduces students to mountain biking and trail riding. This course is designed for beginner riders. No prior experience is required or expected. (Riders with more experience should consider REC 1242.) Students will explore and apply topics to enable safe, independent bike travel over a variety of terrain and surfaces. Course content will focus on trail awareness and selection, choosing appropriate equipment, and basic bike maintenance and repair.

May be repeated twice and up to 3 credits.

REC 1242 - Mountain Biking, Level II

Credits: (1)

Typically Taught Summer Semester: *1st Blk; 2nd Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Course Fee: \$81.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include mountain bikes parts and maintenance, transportation, first aid supplies, and permit fees.

Description: This physical activity course introduces students to mountain biking and trail riding. Students will explore and apply topics to enable safe, independent bike travel over a variety of terrain and surfaces. Course content will focus on trail awareness and selection, choosing appropriate equipment, and basic bike maintenance and repair. May be repeated twice and up to 3 credits.

REC 1243 - Mountain Biking, Level III

Credits: (1)

Typically Taught Summer Semester: *1st Blk; 2nd Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Course Fee: \$81.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include mountain bikes parts and maintenance, transportation, first aid supplies, and permit fees.

Description: This physical activity course introduces students to mountain biking and trail riding. Students will explore and apply topics to enable safe, independent bike travel over a variety of terrain and surfaces. Course content will focus on trail awareness and selection, choosing appropriate equipment, and basic bike maintenance and repair. May be repeated twice and up to 3 credits.

REC 1304 - Backcountry Touring, Level I

Credits: (1)

Typically Taught Spring Semester: *1st Blk*

Course Fee: \$70.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include equipment such as avalanche beacons, avalanche probes, collapsible shovels, avalanche airbags, ski helmets, first aid supplies, spare batteries, and ski wax.

Description: This physical activity course introduces students to skiing and/or snowboarding safely in the backcountry, outside of resort boundaries where avalanche control and ski patrol are not present. The course covers basic avalanche hazard recognition, evaluation, and mitigation, single-burial avalanche companion rescue, uphill snow travel, and downhill skiing and/or snowboarding techniques for variable snow conditions and hazards. May be repeated three times for a maximum of three credit hours.

REC 1305 - Backcountry Touring, Level II

Credits: (1)

Typically Taught Spring Semester: *1st Blk*

Course Fee: \$70.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include equipment such as avalanche beacons, avalanche probes, collapsible shovels, avalanche airbags, ski helmets, first aid supplies, spare batteries, and ski wax.

Description: This physical activity course introduces students to skiing and/or snowboarding safely in the backcountry, outside of resort boundaries where avalanche control and ski patrol are not present. The course covers basic avalanche hazard recognition, evaluation, and mitigation, single-burial avalanche companion rescue, uphill snow travel, and downhill skiing and/or snowboarding techniques for variable snow conditions and hazards. May be repeated three times for a maximum of three credit hours.

REC 1306 - Backcountry Touring, Level III

Credits: (1)

Typically Taught Spring Semester: *1st Blk*

Course Fee: \$76.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include equipment such as avalanche beacons, avalanche probes, collapsible shovels, avalanche airbags, ski helmets, first aid supplies, camping equipment, and mountaineering equipment.

Description: This physical activity course introduces students to skiing and/or snowboarding safely in the backcountry, outside of resort boundaries where avalanche control and ski patrol are not present. The course covers basic avalanche hazard recognition, evaluation, and mitigation, single-burial avalanche companion rescue, uphill snow travel, and downhill skiing and/or snowboarding techniques for variable snow conditions and hazards. May be repeated three times for a maximum of three credit hours.

REC 1307 - Avalanche Level I

Credits: (1)

Typically Taught Spring Semester: *1st Blk*

Course Fee: \$100.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include equipment such as avalanche beacons, avalanche probes, collapsible shovels, avalanche airbags, ski helmets, first aid supplies, spare batteries, and ski wax.

Description: This course is intended for individuals wishing to pursue travel in avalanche terrain, whether backcountry skiing and snowboarding, snowshoeing, or mountaineering. Different sections of this course may be appropriate for various modes of travel, for example, skiing and snowboarding vs. snowshoeing. Instruction will take place predominantly at local backcountry mountainous areas through practical skills sessions. The course also includes relevant lecture, discussion, group decision making, and travel plan exercises. Emphasis will be placed on development of skills and knowledge to select appropriate terrain to avoid avalanches.

REC 1308 - Avalanche Rescue

Credits: (1)

Typically Taught Spring Semester: *1st Block*

Course Fee: \$64.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance,

consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include equipment such as avalanche beacons, avalanche probes, collapsible shovels, avalanche airbags, ski helmets, first aid supplies, spare batteries, and ski wax.

Description: This course is intended for individuals wishing to learn rescue skills in avalanche terrain, whether backcountry skiing and snowboarding, snowshoeing, or mountaineering.

Suggested Requisite(s): REC 1307.

REC 1309 - Avalanche Level 2

Credits: (1)

Typically Taught Spring Semester: *1st Block*

Course Fee: \$100.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include equipment such as avalanche beacons, avalanche probes, collapsible shovels, avalanche airbags, ski helmets, first aid supplies, spare batteries, and ski wax.

Description: This course is intended for individuals wishing to expand their understanding of avalanche problem types and group risk management systems for travel in avalanche terrain, whether backcountry skiing and snowboarding, snowshoeing, or mountaineering.

Suggested Requisite(s): REC 1307 and REC 1308.

REC 1310 - Whitewater Paddling, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Course Fee: \$168.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include equipment such as rafts, paddles/oars, PFDs, helmets, camping equipment, and first aid supplies as well as permit fees, camping fees, and supplemental course assistance to meet state law for supervision on the water.

Description: This physical activity course introduces students to the basic skills required for whitewater paddling in a number of potential watercraft such as rafts, kayaks, paddleboards, and canoes. Skills taught include boat maneuvering, reading rapids, and basic rescue skills.

May be repeated twice and up to 3 credits.

REC 1311 - Whitewater Paddling, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Course Fee: \$168.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include equipment such as rafts, paddles/oars, PFDs, helmets, camping equipment, and first aid supplies as well as permit fees, camping fees, and supplemental course assistance to meet state law for supervision on the water.

Description: This physical activity course introduces students to the basic skills required for whitewater paddling in

a number of potential watercraft such as rafts, kayaks, paddleboards, and canoes. Skills taught include boat maneuvering, reading rapids, and basic rescue skills.
May be repeated twice and up to 3 credits.

REC 1312 - Whitewater Paddling, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Course Fee: \$170.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include equipment such as rafts, paddles/oars, PFDs, helmets, camping equipment, and first aid supplies as well as permit fees, camping fees, and supplemental course assistance to meet state law for supervision on the water.

Description: This physical activity course introduces students to the basic skills required for whitewater paddling in a number of potential watercraft such as rafts, kayaks, paddleboards, and canoes. Skills taught include boat maneuvering, reading rapids, and basic rescue skills.

May be repeated twice and up to 3 credits.

REC 1313 - Swiftwater Rescue

Credits: (1)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Typically Taught Spring Semester: *2nd Blk*

Course Fee: \$100.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include river craft, paddles, PFDs, helmets, wet suits, and other paddling equipment, and first aid supplies.

Description: This course combines classroom and on-river instruction in avoidance and rapid resolution of accidents and injuries in swiftly moving whitewater. The course emphasizes skill demonstration and practice on or near the river and in-water. The course teaches effective rope based and/or rescue PFD based techniques that minimize rescuer risk in these complex systems. The course also includes relevant lecture, discussion, and group management exercises.

REC 1316 - Stand-Up Paddleboard

Credits: (1)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *1st Blk*

Course Fee: \$141.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include equipment such as paddleboards, paddles, PFDs, and first aid supplies as well as supplemental course assistance to meet state law for supervision on the water.

Description: This physical activity course is intended to introduce students to the fundamental skills and knowledge necessary to enjoy Stand Up Paddleboarding (SUP). The course will cover: 1) technical knowledge (i.e., history, terminology, equipment, regulations, safety); 2) technical skills (i.e., carrying, launching, landing, balance, stances, strokes, maneuvers, equipment maintenance); and) 3) rescue/safety (i.e. self-rescues).

REC 1350 - Scuba Diving, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk, 2nd Blk*

Course Fee: \$55.00

Course Fee Purpose: This course has a fee attached. The course fee covers facilities and instruction from the scuba provider.

Description: A beginner level physical activity course that allows students to learn and develop the skills and knowledge needed to safely engage in the underwater activity of scuba diving.

Note: This course is offered through Continuing Education only.

REC 1351 - Scuba Diving, Level II

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$55.00

Course Fee Purpose: This course has a fee attached. The course fees covers facilities and instruction from the scuba provider.

Description: A physical activity that engages students in the underwater activity of scuba diving. This Level II course allows students to build on skills developed in Level I.

Pre-requisite(s): REC 1350.

REC 1404 - Mountaineering, Level I

Credits: (1)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk, 2nd Blk*

Course Fee: \$100.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include climbing hardware, harnesses, helmets, crampons, ice axes, avalanche beacons, avalanche probes, collapsible shovels, tents, sleeping bags, packs, and first aid supplies.

Description: This physical activity course introduces students to the basic skills required for mountaineering, including snow climbing and descending, ice climbing, ice axe use, basic avalanche hazard identification, and technical rope systems in these environments. Course offering dependent on weather and snow pack expectations and conditions.

May be repeated twice and up to 3 credits.

REC 1405 - Mountaineering, Level II

Credits: (1)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk, 2nd Blk*

Course Fee: \$100.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include climbing hardware, harnesses, helmets, crampons, ice axes, avalanche beacons, avalanche probes, collapsible shovels, tents, sleeping bags, packs, and first aid supplies.

Description: This physical activity course introduces students to the basic skills required for mountaineering, including snow climbing and descending, ice climbing, ice axe use, basic avalanche hazard identification, and technical rope systems in these environments. Course offering dependent on weather and snow pack expectations and conditions.

May be repeated twice and up to 3 credits.

REC 1406 - Mountaineering, Level III

Credits: (1)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk, 2nd Blk*

Course Fee: \$105.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include climbing hardware, harnesses, helmets, crampons, ice axes, avalanche beacons, avalanche probes, collapsible shovels, tents, sleeping bags, packs, and first aid supplies.

Description: This physical activity course introduces students to the basic skills required for mountaineering, including snow climbing and descending, ice climbing, ice axe use, basic avalanche hazard identification, and technical rope systems in these environments. Course offering dependent on weather and snow pack expectations and conditions.

May be repeated twice and up to 3 credits.

REC 1505 - Kayaking, Level I

Credits: (1)

Typically Taught Spring Semester: *2nd Blk*

Description: A physical activity course that introduces students to the outdoor activity of kayaking. The fundamental skills of kayaking will be addressed for both beginning and recreational paddlers.

REC 1510 - Fishing, Level I

Credits: (1)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Course Fee: \$50.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include first aid supplies, repair/maintenance items, permits, fishing rods/reels, leader/tippet, and flies.

Description: A physical activity course that allows students to learn and develop the skills needed to practice fishing.

REC 1511 - Fishing, Level II

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee

expenditures for this course include first aid supplies, repair/maintenance items, permits, fishing rods/reels, leader/tippet, and flies.

Description: A physical activity course that allows students to learn and develop the skills needed to practice fishing.

REC 1512 - Fishing, Level III

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Description: A physical activity course that allows students to learn and develop the skills needed to practice fishing.

REC 1520 - Hiking, Level I

Credits: (1)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Description: A physical activity course that allows students to learn and develop the skills needed to safely enjoy hiking through the use of trail resources, environmental conscientiousness, planning, and conduct.

REC 1521 - Hiking, Level II

Credits: (1)

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Description: A physical activity course that allows students to learn and develop the skills needed to safely enjoy hiking through the use of trail resources, environmental conscientiousness, planning, and conduct.

REC 1522 - Hiking, Level III

Credits: (1)

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Description: A physical activity course that allows students to learn and develop the skills needed to safely enjoy hiking through the use of trail resources, environmental conscientiousness, planning, and conduct.

REC 1527 - Rock Climbing, Level I

Credits: (1)

Typically Taught Summer Semester: *Full Sem, 1st Blk*

Typically Taught Fall Semester: *Full Sem, 1st Blk*

Typically Taught Spring Semester: *Full Sem, 2nd Blk*

Course Fee: \$50.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include climbing shoes, harnesses, helmets, climbing rope, and climbing holds.

Description: A beginner level physical activity course that allows students to learn and develop the skills and knowledge needed to safely enjoy rock climbing.

REC 1528 - Rock Climbing, Level II

Credits: (1)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *2nd Blk*

Course Fee: \$55.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include climbing shoes, harnesses, helmets, ropes, and climbing hardware.

Description: An intermediate level physical activity course that allows students to learn and develop the skills and knowledge needed to safely enjoy rock climbing.

REC 1529 - Rock Climbing, Level III

Credits: (1)

Typically Taught Fall Semester: *1st Blk*

Course Fee: \$55.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include climbing shoes, harnesses, helmets, ropes, and climbing hardware.

Description: An advanced level physical activity course that allows students to learn and develop the skills and knowledge needed to safely enjoy rock climbing.

REC 1530 - Rock Climbing for Instructors, Level I

Credits: (1)

Typically Taught Fall Semester: *1st Blk*

Course Fee: \$162.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include rock climbing equipment and AMGA licensing fees.

Description: This course is intended for individuals pursuing work as climbing instructors or guides and covers the curriculum of the American Mountain Guides Association (AMGA) Single Pitch Instructor Course. Instruction will take place predominantly at local outdoor climbing areas through practical skills sessions. The course also includes relevant lecture, discussion, and teaching exercises. Emphasis will be placed on development of skills and knowledge base for rock climbing instructors.

REC 1531 - Rock Climbing for Instructors, Level II

Credits: (1)

Typically Taught Fall Semester: *1st Blk*

Course Fee: \$162.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include rock climbing equipment and AMGA licensing fees.

Description: This course is intended for individuals pursuing work as climbing instructors or guides and covers the curriculum of the American Mountain Guides Association (AMGA) Single Pitch Instructor Course. Instruction will take place predominantly at local outdoor climbing areas through practical skills sessions. The course also includes relevant lecture, discussion, and teaching exercises. Emphasis will be placed on development of skills and knowledge base for rock climbing instructors.

REC 1535 - Leave No Trace Trainer

Credits: (1)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *1st Blk*

Course Fee: \$50.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include camping equipment, transportation, first aid supplies, and camping/permit fees.

Description: The Leave No Trace (LNT) Trainer course is designed to train current and future outdoor recreation leaders on the principles of Leave No Trace. Participants will gain an in-depth understanding of the seven LNT principles and how to provide LNT awareness workshops in a variety of settings including camps, schools, parks, and backcountry areas. Students who successfully complete this course will be recognized as Leave No Trace Trainers by the Leave No Trace Center for Outdoor Ethics.

REC 1610 - Skiing, Level I

Credits: (1)

Typically Taught Fall Semester: *1st Blk*

Course Fee: \$200.00

Course Fee Purpose: All skiers/snowboarders are assessed a lab fee of \$180 which covers instruction and lift tickets from Powder Mountain.

Description: A physical activity course that allows students to learn and develop the skills and technique needed to safely enjoy skiing and advance through specified skill levels. (CR/NC).

REC 1611 - Skiing, Level II

Credits: (1)

Typically Taught Fall Semester: *2nd Blk*

Course Fee: \$200.00

Course Fee Purpose: All skiers/snowboarders are assessed a lab fee of \$180 which covers instruction and lift tickets from Powder Mountain.

Description: A physical activity course that allows students to learn and develop the skills and technique needed to safely enjoy skiing and advance through specified skill levels. (CR/NC).

REC 1612 - Skiing, Level III

Credits: (1)

Typically Taught Fall Semester: *3rd Blk*

Course Fee: \$200.00

Course Fee Purpose: All skiers/snowboarders are assessed a lab fee of \$180 which covers instruction and lift tickets from Powder Mountain.

Description: A physical activity course that allows students to learn and develop the skills and technique needed to safely enjoy skiing and advance through specified skill levels. (CR/NC).

REC 1620 - Snowboarding, Level I

Credits: (1)

Typically Taught Fall Semester: *4th Blk*

Course Fee: \$200.00

Course Fee Purpose: All skiers/snowboarders are assessed a lab fee of \$180 which covers instruction and lift tickets from Powder Mountain.

Description: A physical activity course that allows students to learn and develop the skills and technique needed to safely enjoy snowboarding and advance through specified skill levels. (CR/NC).

REC 1621 - Snowboarding, Level II

Credits: (1)

Typically Taught Fall Semester: *5th Blk*

Course Fee: \$200.00

Course Fee Purpose: All skiers/snowboarders are assessed a lab fee of \$180 which covers instruction and lift tickets from Powder Mountain.

Description: A physical activity course that allows students to learn and develop the skills and technique needed to safely enjoy snowboarding and advance through specified skill levels. (CR/NC).

REC 1622 - Snowboarding, Level III

Credits: (1)

Typically Taught Fall Semester: *6th Blk*

Course Fee: \$200.00

Course Fee Purpose: All skiers/snowboarders are assessed a lab fee of \$180 which covers instruction and lift tickets from Powder Mountain.

Description: A physical activity course that allows students to learn and develop the skills and technique needed to safely enjoy snowboarding and advance through specified skill levels. (CR/NC).

REC 1630 - Cross-Country Skiing, Level I

Credits: (1)

Typically Taught Fall Semester: *7th Blk*

Course Fee: \$120.00

Course Fee Purpose: This course has a fee attached. The course fee covers facilities and instruction through Ogden Nordic.

Description: A physical activity course that allows students to learn and develop the skills and technique needed to safely enjoy cross-country skiing. (CR/NC).

REC 1631 - Cross-Country Skiing, Level II

Credits: (1)

Description: A physical activity course that allows students to learn and develop the skills and technique needed to safely enjoy cross-country skiing. (CR/NC).

REC 1632 - Cross-Country Skiing, Level III

Credits: (1)

Description: A physical activity course that allows students to learn and develop the skills and technique needed to safely enjoy cross-country skiing. (CR/NC).

REC 1640 - Skiing for Instructors

Credits: (1)

Typically Taught Fall Semester: *2nd Blk*

Description: This course is intended for individuals pursuing work as skiing instructors. Instruction will take place at Powder Mountain ski resort. The course includes relevant lecture, discussion, and teaching exercises. Emphasis

will be placed on development of skills and knowledge base for skiing instructors through practical demonstrations and exercise on the snow.

REC 1641 - Skiing for Instructors II

Credits: (1)

Typically Taught Fall Semester: *2nd Blk*

Description: This course is intended for individuals pursuing work as skiing instructors. Instruction will take place at Powder Mountain ski resort. The course includes relevant lecture, discussion, and teaching exercises. Emphasis will be placed on development of skills and knowledge base for skiing instructors through practical demonstrations and exercise on the snow.

REC 1642 - Skiing for Instructions III

Credits: (1)

Typically Taught Fall Semester: *2nd Blk*

Description: This course is intended for individuals pursuing work as skiing instructors. Instruction will take place at Powder Mountain ski resort. The course includes relevant lecture, discussion, and teaching exercises. Emphasis will be placed on development of skills and knowledge base for skiing instructors through practical demonstrations and exercise on the snow.

REC 1650 - Snowboarding for Instructors, Level I

Credits: (1)

Typically Taught Fall Semester: *2nd Blk*

Description: This course is intended for individuals pursuing work as snowboarding instructors. Instruction will take place at Powder Mountain ski resort. The course includes relevant lecture, discussion, and teaching exercises. Emphasis will be placed on development of skills and knowledge base for snowboarding instructors through practical demonstrations and exercise on the snow.

REC 1651 - Snowboarding for Instructors, Level II

Credits: (1)

Typically Taught Fall Semester: *2nd Blk*

Description: This course is intended for individuals pursuing work as snowboarding instructors. Instruction will take place at Powder Mountain ski resort. The course includes relevant lecture, discussion, and teaching exercises. Emphasis will be placed on development of skills and knowledge base for snowboarding instructors through practical demonstrations and exercise on the snow.

REC 1652 - Snowboarding for Instructors, Level III

Credits: (1)

Typically Taught Fall Semester: *2nd Blk*

Description: This course is intended for individuals pursuing work as snowboarding instructors. Instruction will take place at Powder Mountain ski resort. The course includes relevant lecture, discussion, and teaching exercises. Emphasis will be placed on development of skills and knowledge base for snowboarding instructors through practical demonstrations and exercise on the snow.

REC 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

REST 1540 - Survey of Respiratory Therapy

Credits: (1)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: This course is designed to introduce allied health and other students to the profession of respiratory therapy. It includes field trips, group discussions, lecture/demonstrations and limited lab activities. Open to all students.

REST 1560 - Multi-Skilled Health Care Worker

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course prepares students from different health care disciplines to understand the hospital environment, patient needs, and perform basic skills of patient care. Topics include the patient's right to privacy, confidentiality, ethical, legal, and cultural issues, documentation, team building, age related concerns, medical terminology, and death and dying. Patient skills include vital signs, oxygen administration, specimen collection, personal care and cleanliness, environmental cleanliness, nutrition and diet, elimination, positioning and ambulating, patient safety and comfort, and OSHA guidelines for healthcare worker safety.

REST 2140 - Introduction to Basic Therapeutic Modalities Lab

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: Sterile gloves, cannula, O2 masks, non-rebreathers, Venturi masks, 11mm/22mm adapters, sylastic connectors, ABG syringes, mannequins, incentive spirometers, O2 analyzers, saturation monitors, wright's respirometers, artificial arms [arterial puncture], postural drainage

Description: Introductory Laboratory course emphasizing basic patient interaction and assessment skills. Includes infection control, the administration of medical gases, humidity and aerosol, pharmacologic agents, hyperinflation therapy, airway clearance techniques and methods of care, and artificial ventilation.

REST 2160 - Equipment Management Lab

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$200.00

Course Fee Purpose: Mechanical ventilators [Drager, Avelo, Puritan-Bennett, Siemons] CPAP equip., hospital gurneys, oxygen quick connects, laryngoscopes, adult ET tubes, bronchoscopy equip,

Description: Laboratory course emphasizing patient assessment skills relating to ventilation techniques and equipment. Includes equipment used by the respiratory care practitioner in initiating, troubleshooting, monitoring, and weaning from mechanical ventilation.

REST 2210 - Elementary Cardiopulmonary Anatomy and Physiology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Cardiopulmonary anatomy and physiology specifically for the entry-level respiratory care practitioner. Includes physics of respiration, oxygen and carbon dioxide transport, and control of ventilation.

REST 2230 - Cardiopulmonary Pathophysiology

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A synopsis of medical and surgical cardiopulmonary disorders for the entry-level practitioner. Etiology, symptomatology, pathology, diagnosis, treatment, and prognosis of these disorders are presented.

REST 2250 - Basic Patient Assessment

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A basic orientation to patient assessment techniques used to obtain a patient medical history and physical examination. Discussion of pulmonary disease integrates assessment information with laboratory and radiographic data.

REST 2270 - Application of Cardiopulmonary Diagnostics

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introduction to theory and clinical application of basic cardiopulmonary diagnostic studies, including simple spirometry, arterial and mixed venous blood gases, and electrocardiograms. Course emphasizes critical thinking skills in the application of diagnostic findings and utilizes case studies, class discussions, and extensive study guides.

Pre-requisite(s): Program acceptance required.

REST 2300 - Basic Modalities in Respiratory Care I

Credits: (3)

Typically Taught Fall Semester: *Full Sem, 1st Blk*

Typically Taught Spring Semester: *Full Sem, 1st Blk*

Description: Theory and clinical application of basic therapies. Course includes indications, complications, hazards, equipment needed, side effects, and assessment for medical gases, humidity, aerosols, airway clearance, hyperinflation therapy, and pharmacologic agents. Course emphasizes patient assessment and critical thinking skills.

Co-Requisite(s): Concurrent enrollment in REST 2140.

REST 2310 - Basic Modalities in Respiratory Care II

Credits: (3)

Typically Taught Fall Semester: *Full Sem, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, 2nd Blk*

Description: Theory and clinical applications of airway management and artificial ventilation, including IPPB and introduction to modes of mechanical ventilation. Also includes the theory of invasive and non-invasive monitoring technology, and equipment decontamination.

REST 2320 - Essentials of Mechanical Ventilation

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Course provides a basic understanding of essentials for mechanical ventilation. Includes determining the need for ventilatory support, the associated physiology and how ventilatory support is initiated, maintained, monitored, and discontinued.

Pre-requisite(s): Program acceptance required.

REST 2330 - Entry Level Respiratory Therapy Review

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: Course is a comprehensive review intended to prepare the student for the entry-level certification/licensure examination. The material covered is based on the examination matrix provided by the National Board for Respiratory Care (N.B.R.C.).

REST 2500 - Survey of Polysomnography

Credits: (1)

Typically Taught Summer Semester: *1st Blk*

Description: Introduction to polysomnography as a profession. Course includes an overview of the polysomnogram, sleep disorders as they affect the general population, typical employment in the field, and employment opportunities. Also includes an introduction to the professional organization of sleep and requirements to become a registered polysomnographic technologist (R.PSG.T). Students taking REST 3500 are required to write a 6-10 page paper outlining the assessment of sleep disorders or neurodiagnostics. Students taking REST 2500 cannot take REST 3500 for credit.

Pre-requisite(s): Medical terminology, anatomy, and physiology or completion of respiratory therapy program or C.R.T., R.R.T., or R.N. credential.

REST 2501 - Anatomy and Physiology of Sleep

Credits: (3)

Description: Introduction to the anatomy and physiology of the neurologic, cardiac, and respiratory systems during sleep. Basic anatomy and physiology of wake-sleep cycles are studied, with emphasis on changes that occur during varying stages of sleep and during common sleep disorders. Introduction to the EEG, EOG, EKG, EMG, and other polysomnography data recorders. Students taking REST 3501 are required to write a 6-10 page paper outlining physiologic components affecting quality of sleep. Students taking REST 2501 cannot take REST 3501 for credit.

Pre-requisite(s): medical terminology, anatomy, and physiology or completion of respiratory therapy program or C.R.T., R.R.T., or R.N. credential.

REST 2502 - Introduction to Sleep Disorders

Credits: (2)

Typically Taught Summer Semester: *1st Blk*

Description: Course provides an overview of the history of sleep medicine, normal sleep physiology, effects of the sleep-wake stage, sleep disorders and abnormal sleep physiology, and an introduction to polysomnography (including patient interaction, sensor and lead placements, and instrumentation). Course also introduces the fundamentals of therapeutic interventions utilized to treat sleep disorders. Students taking REST 3502 are required to write a 6-10 page paper outlining the implications for assisted ventilation to sleep disorders. Students taking REST 2502 cannot take REST 3502 for credit.

Pre-requisite(s): medical terminology, anatomy, and physiology or completion of respiratory therapy program or C.R.T., R.R.T., or R.N. credential.

REST 2503 - Instrumentation and Computers in Polysomnography

Credits: (2)

Description: Course provides study of equipment, instrumentation, and recording devices utilized in polysomnography. Includes EEG waves, signal pathway and derivation of waves, impedance, sensitivity, time constants, amplifiers, filters, calibration, electrodes, artifacts (both equipment and patient-generated), computer basics, and monitoring devices. Students taking REST 3503 are required to write a 6-10 page paper outlining specific instrumentation in polysomnography assessing sleep disorders. Students taking REST 2503 cannot take REST 3503 for credit.

Pre-requisite(s): REST 2500/REST 3500 and REST 2502/REST 3502 or medical terminology, human anatomy and human physiology.

REST 2505 - Therapeutics of Managing Sleep Apnea

Credits: (2)

Description: Course provides current therapies and interventions for treatment of sleep apneas. Interventions include positive airway pressure therapy (nocturnal CPAP and bi-level CPAP), surgery, and dental devices. Patient compliance and outcomes of these treatments are included. Students taking REST 3505 are required to write a 6-10 page paper outlining strategies managing sleep apnea. Students taking REST 2505 cannot take REST 3505 for credit.

Pre-requisite(s): REST 2501/REST 3501 and REST 2502/REST 3502 or medical terminology, human anatomy and human physiology.

REST 2520 - Principles of Pharmacology

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introduction to pharmacology, including general principles, autonomic and central nervous system agents, and cardiovascular agents. Also includes drugs used in managing renal, GI tract, endocrine, and infectious or neoplastic diseases and disorders.

REST 2700 INT - Clinical Applications

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Clinical rotations in various medical settings performing skills learned and practiced in REST 2140. Recommending and modifying basic therapies will be emphasized utilizing patient assessment skills and review of patient medical history.

Suggested Requisite(s): Concurrent enrollment in REST 2140.

REST 2710 INT - Specialty Clinical Experiences

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Clinical rotations in various medical settings providing the opportunity to observe and participate in various specialty areas within the profession, including PFTs, cardiac testing, EKGs, ABGs, and longterm artificial

airway care.

Suggested Requisite(s): Concurrent enrollment in REST 2160.

REST 2720 INT - Clinical Applications

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Clinical rotations in various medical settings performing skills learned and practiced in REST 2140. Initiating, monitoring, and weaning from mechanical ventilation will be emphasized utilizing patient assessment skills. Case studies will be used to practice critical thinking skills in the management of ICU patients.

Suggested Requisite(s): Concurrent enrollment in REST 2160.

REST 2800 - Independent Projects

Credits: (1-3)

Description: Projects must meet departmental and professional goals and standards and must have instructor approval prior to beginning project; enrollment by permission only.

May be repeated twice for a maximum of 3 credit hours.

REST 2830 - Directed Readings

Credits: (1-2)

Typically Taught Spring Semester: *Full Sem*

Description: Readings must meet departmental and professional goals and standards and must have instructor approval prior to beginning; enrollment by permission only.

May be repeated twice for a maximum of 3 credit hours.

REST 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult semester schedule for the current offering under this number. The specific title and credit authorized will appear on student transcript.

May be repeated for a total maximum of 6 credit hours.

REST 3210 - Advanced Cardiopulmonary Anatomy and Physiology

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Cardiopulmonary anatomy and physiology specifically for the therapist-level practitioner. Includes advanced anatomical considerations for the cardiac, pulmonary and renal systems in neonates and adults. Includes developing abstracts from evidence-based research.

Pre-requisite(s): Enrollment in baccalaureate respiratory therapy program, CRT credential, or equivalent.

REST 3220 - Advanced Cardiopulmonary Pathophysiology

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Pathology and prognosis of coronary artery disease, interpreting 12-lead ECG's, fungal lung diseases,

bronchogenic carcinomas, ARDS, chest injuries, shock in relation to the care of the trauma patient, and differentiation of intracellular and extracellular fluid compartments with renal pathology are presented. Includes developing abstracts from evidence-based research.

Pre-requisite(s): Enrollment in baccalaureate respiratory therapy program, CRT credential, or equivalent.

REST 3230 - Advanced Cardiopulmonary Technology

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Advanced diagnostic procedures and interpretive skills in cardiopulmonary function, lung dynamics, specialty gases, blood gas analysis, and metabolic assessment.

REST 3260 - Neonatal/Pediatric Respiratory Care

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$137.18

Course Fee Purpose: Neonatal sx equip., neonatal ventilators, infant ET tubes, holders, isolettes, headwalls, O2 blenders, infant Miller/MacIntosh blades, intubation mannequin.

Description: Pediatric and neonatal respiratory care with emphasis on intensive care activities, therapeutic procedures, life support modalities and fetal, neonatal, pediatric pathophysiology.

Pre-requisite(s): Enrollment in baccalaureate respiratory care program, CRT credential, or equivalent.

REST 3270 - Adult Critical Care

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$137.18

Course Fee Purpose: Adult monitoring systems, chest tube evacuation, bronchoscope & light source, bariatric stretcher, laryngoscopes and endotracheal tubes

Description: Advanced adult respiratory intensive care, including hemodynamic monitoring, ventilation/perfusion monitoring, pulmonary assessment and airway management.

REST 3280 - Patient Care Continuum/ Quality Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Theory and principles of pulmonary and spinal cord rehabilitation, polysomnography, discharge planning, patient education, quality management, home and self care, legal, ethical, and moral considerations of chronic and extended care.

REST 3500 - Survey of Polysomnography

Credits: (1)

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Description: Introduction to polysomnography as a profession. Course includes an overview of the polysomnogram, sleep disorders as they affect the general population, typical employment in the field, and employment opportunities.

Also includes an introduction to the professional organization of sleep and requirements to become a registered polysomnographic technologist (R.PSG.T). Students taking REST 3500 are required to write a 6-10 page paper outlining the assessment of sleep disorders or neurodiagnostics. Students taking REST 2500 cannot take REST 3500 for credit.

Pre-requisite(s): Medical terminology, anatomy, and physiology or completion of respiratory therapy program or C.R.T., R.R.T., or R.N. credential.

REST 3501 - Anatomy and Physiology of Sleep

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Description: Introduction to the anatomy and physiology of the neurologic, cardiac, and respiratory systems during sleep. Basic anatomy and physiology of wake-sleep cycles are studied, with emphasis on changes that occur during varying stages of sleep and during common sleep disorders. Introduction to the EEG, EOG, EKG, EMG, and other polysomnography data recorders. Students taking REST 3501 are required to write a 6-10 page paper outlining physiologic components affecting quality of sleep. Students taking REST 2501 cannot take REST 3501 for credit.

Pre-requisite(s): medical terminology, anatomy, and physiology or completion of respiratory therapy program or C.R.T., R.R.T., or R.N. credential.

REST 3502 - Introduction to Sleep Disorders

Credits: (2)

Description: Course provides an overview of the history of sleep medicine, normal sleep physiology, effects of the sleep-wake stage, sleep disorders and abnormal sleep physiology, and an introduction to polysomnography (including patient interaction, sensor and lead placements, and instrumentation). Course also introduces the fundamentals of therapeutic interventions utilized to treat sleep disorders. Students taking REST 3502 are required to write a 6-10 page paper outlining the implications for assisted ventilation to sleep disorders. Students taking REST 2505 cannot take REST 3502 for credit.

Pre-requisite(s): medical terminology, anatomy, and physiology or completion of respiratory therapy program or C.R.T., R.R.T., or R.N. credential.

REST 3503 - Instrumentation and Computers in Polysomnography

Credits: (2)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *1st Blk*

Typically Taught Spring Semester: *1st Blk*

Description: Course provides study of equipment, instrumentation, and recording devices utilized in polysomnography. Includes EEG waves, signal pathway and derivation of waves, impedance, sensitivity, time constants, amplifiers, filters, calibration, electrodes, artifacts (both equipment and patient-generated), computer basics, and monitoring devices. Students taking 3503 are required to write a 6-10 page paper outlining specific instrumentation in polysomnography assessing sleep disorders. Students taking REST 2503 cannot take REST 3503 for credit.

Pre-requisite(s): REST 2500/REST 3500 and REST 2502/REST 3502 or medical terminology, human anatomy and human physiology.

May be repeated twice with a maximum of 6 credit hours.

REST 3504 - Laboratory Practice of Instrumentation in Polysomnography

Credits: (1)

Description: Course provides practice and application of operating principles of equipment, instrumentation, and recording devices utilized in polysomnography. Includes EEG waves, signal pathway and derivation of waves, impedance, sensitivity, time constants, amplifiers, filters, calibration, electrodes, artifacts (both equipment and

patient generated), computer basics, and monitoring devices.

Pre-requisite(s): REST 3502/REST 2502 or medical terminology, human anatomy and human physiology

Co-Requisite(s): Concurrent enrollment with REST 3503.

REST 3505 - Therapeutics of Managing Sleep Apnea

Credits: (2)

Description: Course provides current therapies and interventions for treatment of sleep apneas. Interventions include positive airway pressure therapy (nocturnal CPAP and bi-level CPAP), surgery, and dental devices. Patient compliance and outcomes of these treatments are included. Students taking REST 3505 are required to write a 6-10 page paper outlining strategies managing sleep apnea. Students taking REST 2505 cannot take REST 3505 for credit.

Pre-requisite(s): REST 2501/REST 3501 and REST 2502/REST 3502 or medical terminology, human anatomy and human physiology.

May be repeated once for a maximum of 4 credit hours.

REST 3506 - Advanced Technical Procedures

Credits: (3)

Description: Course provides detailed description and discussion of specific diagnostic procedures in PSG, including multiple sleep latency tests, maintenance of wakefulness test, REM behavior disorder studies, MMPI, movement disorders, TCM, nocturnal seizure disorders, esophageal balloon procedures, and others.

Pre-requisite(s): REST 3502 and REST 3503.

May be repeated once for a maximum of 6 credit hours.

REST 3507 - Event Recognition and Polysomnography Scoring

Credits: (3)

Description: Course provides advanced study of sleep stages and recognition of EEG characteristics of each stage. Multi-channel recording of breathing events, leg movements, ocular movements, cardiac and oxygenation monitoring, parasomnias, and interictal and ictal epileptic events are also presented. Course will include review and scoring of 12-hour polysomnography records to determine the overall sleep score.

Pre-requisite(s): REST 3501 and REST 3502.

REST 3508 - Sleep Center Management

Credits: (1)

Description: Course is designed to prepare students for sleep center management in hospitals and independent facilities. Course includes sleep laboratory requirements for accreditation, personnel requirements and training, PSG study documentation, technician manuals, quality assurance, policies and procedures, and lab protocols. REST 3500 or credentialed as C.R.T., R.R.T., or R.N.

REST 3509 - Cases in Sleep Medicine

Credits: (2)

Typically Taught Summer Semester: 1st Blk

Typically Taught Spring Semester: 1st Blk

Description: Course will include physician presentations or case studies of patients with a variety of sleep disorders. Case-based learning is applied in the context of patient presentation and initial interview and diagnostic findings, determination of appropriate sleep medicine studies, interpretation of patient findings, recommendation for patient therapy, and follow-up of patient compliance and outcome(s) of therapeutic intervention.

Pre-requisite(s): REST 3502 and REST 3505.

May be repeated once for a maximum of 4 credit hours.

REST 3510 - Clinical Practice I in Polysomnography

Credits: (2)

Description: Introduction to the sleep laboratory and the set-up, monitoring, and therapeutic interventions associated with polysomnography. Students will be oriented to patient interviewing and selection, OSHA standards, sleep laboratory standards, and confidentiality. Competency is demonstrated in patient set-up, producing a reliable PSG, recognizing artifact, and basic therapeutic interventions for common sleep disorders.

Pre-requisite(s): REST 3502.

Co-Requisite(s): Concurrent enrollment in REST 3503 and REST 3504.

May be repeated twice for credit.

REST 3511 - Clinical Practice II in Polysomnography

Credits: (2)

Description: Case-based clinical applications course. Course requires competency in complete patient management (patient referral and interview, physician consult, patient study[ies], therapeutic intervention and follow-up of patient compliance). Students will develop the patient history and physical, perform the study, score the patient record, interpret the report, apply therapy, and follow-up patient compliance.

Pre-requisite(s): REST 3502 and REST 3510.

Co-Requisite(s): Concurrent enrollment in REST 3505.

May be repeated once for a maximum of 4 credit hours.

REST 3512 - Clinical Practice III in Polysomnography

Credits: (4)

Description: Clinical applications course providing experience in performing advanced technical procedures, including multiple sleep latency tests, maintenance of wakefulness tests, REM behavior disorders studies, MMPI, movement disorders, TCM, nocturnal seizure disorders, esophageal balloon procedures, and others.

Pre-requisite(s): REST 3502, REST 3510, and REST 3511.

Co-Requisite(s): Concurrent enrollment in REST 3506.

May be repeated once for a maximum of 8 credit hours.

REST 3760 INT - Clinical Applications of Neonatal/Pediatric Respiratory Care

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: The clinical application of pediatric and neonatal assessments as they relate to selection and use of respiratory care procedures and equipment specific for this patient population.

REST 3770 INT - Clinical Applications of Adult Critical Care

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: Adult respiratory care in the intensive care setting [shock-trauma, thoracic, burn ICUs] with emphasis on hemodynamic monitoring, ventilation/perfusion monitoring, pulmonary assessment and airway management.

Co-Requisite(s): To be taken concurrently with REST 3270.

REST 3780 INT - Clinical Applications

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Clinical experiences related to REST 3280: rehabilitation, extended care, home care agencies,

polysomnography, patient assessment and planning for discharge, and quality management.

Co-Requisite(s): To be taken concurrently with REST 3280.

REST 3800 - Respiratory Care Certifications

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Best practice for advanced resuscitation skills for neonates, children, and adults are demonstrated and effective team-based care for health professionals presented. Advanced life-support skills are presented and practiced prior to entry into the workforce.

REST 3900 - Clinical Simulation Seminar

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Problem-based clinical concepts course: comprehensive program review including written and clinical simulation examinations.

Pre-requisite(s): Enrollment in baccalaureate respiratory therapy program; CRT credential, or equivalent.

REST 4600 - Patient Education and Disease Management

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Quality of care issues arise in a variety of management roles throughout the spectrum of care. Practitioners are increasingly serving as supervisors, managers, and clinical preceptors in their roles involving case management, disease navigation, and home management in chronic respiratory patients. This course focuses on improving communication and coordination of care to educate patients and reduce readmissions, understand reimbursement systems, and quality outcomes for patients in our care.

Pre-requisite(s): AAS in Respiratory Therapy

REST 4610 - Advanced Patient Assessment

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The advanced patient assessment project is designed to be a physician intensive, interactive experience that emphasizes an understanding of diagnostic processes involved in assessing, evaluating, and treating patients with cardiopulmonary diseases. Enrollment by permission only.

REST 4620 - Health Promotion

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The health promotion project addresses the growing role of the Respiratory Care Practitioner (RCP) in patient education, public education, and health promotion in general. Enrollment by permission only.

REST 4630 - Continuous Quality Improvement

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The continuous quality improvement project enhances an understanding of how to construct and conduct a quality improvement (quality assurance) project in the workplace. Enrollment by permission only.

REST 4800 - Independent Projects

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Student designed, instructor approved projects which will further develop cognitive or psychomotor skills for the baccalaureate level respiratory care practitioner. Projects must meet departmental and professional goals and standards and must have instructor approval prior to beginning project. Enrollment by permission only. May be repeated for a maximum of 6 credit hours.

REST 4830 - Directed Readings

Credits: (1-3)

Typically Taught Spring Semester: *Full Sem*

Description: Student designed, instructor approved readings which will further develop professional knowledge or understanding for the baccalaureate level respiratory care practitioner. Readings must meet departmental and professional goals and standards and must have instructor approval prior to beginning. Enrollment by permission only.

May be repeated twice with a maximum of 3 credit hours.

REST 4850 - Study Abroad

Credits: (1-6)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Description: The purpose of this course is to provide opportunities for students in health professions to experience a study abroad program that is designed to explore healthcare, culture, and clinical experience.

May be repeated 5 times with a maximum of 6 credit hours.

REST 4990 - Senior Seminar

Credits: (2)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Moderated discussion and/or laboratory experiences relating to current events in healthcare, legislative, credentialing, and licensing issues as well as emergent technologies and advanced educational opportunities in the field.

RGAF 6000 - Introduction to Regulatory Affairs

Credits: (3)**Typically Taught Fall Semester:** *1st Block Online*

Description: This course is designed to present an introduction to the regulations, documents and processes necessary for FDA approval of new medical products. The course covers an overview of critical scientific, technical, engineering design, manufacturing, and operational drivers for national and global regulatory compliance. This course also discusses the historical context in which the FDA evolved, its structure and relationship with other US regulatory agencies. The course will provide an overview of market clearance pathways for various medical products and devices that ensure the development and delivery of safe and effective healthcare products to consumers.

RGAF 6100 - Biostatistics Applied to Research**Credits: (3)****Typically Taught Fall Semester:** *2nd Block Online*

Description: Advanced biostatistics as applied to research. The concepts of populations, samples, distributions, variables, hypothesis formulation and testing, t-test, ANOVA, and chi-square are presented through the lens of translational research. The course includes a detailed exploration of the application and interpretation of data from clinical trials and medical studies. The written and oral communication of study results is also covered.

RGAF 6200 - Regulatory Drugs & Biologics**Credits: (2)****Typically Taught Spring Semester:** *1st Block Online*

Description: This course focuses on the development and evaluation of regulatory practices related to drugs and biologics. This course provides an overview of laws and regulations governing development, manufacturing and distribution of drugs and biologic and how they relate to the regulatory affairs strategy. Approaches for integrating regulatory and business needs are reviewed. The role of post-marketing efforts in shaping regulatory strategy are evaluated.

Pre-requisite(s): RGAF 6000.

RGAF 6230 - Regulatory Devices and Diagnostics**Credits: (2)****Typically Taught Spring Semester:** *1st Block Online*

Description: An in-depth exploration of the origins and application of regulations relevant to medical devices and diagnostics. Medical device and diagnostic product development is covered through an organizational strategy and regulatory compliance lens. The course analyzes the design and application of clinical trial data related to the medical device and diagnostic regulatory process. Post-marketing strategy and device labeling are also covered.

Pre-requisite(s): RGAF 6000.

RGAF 6250 - Regulatory Clinical Evidence**Credits: (2)****Typically Taught Spring Semester:** *2nd Block Online*

Description: The evaluation and assessment of regulatory strategies that include protocol development, study design, post-marketing surveillance, evaluation and, assessment of regulatory submissions. Utilizing clinical trial design, participants will evaluate and assess strategies for achieving regulatory goals. Students are introduced to requirements of planning and conducting clinical trials. Clinical trial terminology and design are discussed including planning and carrying out a study.

Pre-requisite(s): RGAF 6000

RGAF 6300 - Compliance in Regulatory Affairs

Credits: (3)**Typically Taught Spring Semester:** *Full Sem - Online*

Description: This course focuses on regulatory affairs compliance strategies and guidelines. Topics included are regulatory compliance, risk management, bioethics, quality assurance, and required reporting. Students will identify and assess regulatory requirements, policies and guidelines associated with good practice (GXP) regulatory compliance issues. Students are required to critically analyze regulatory compliance issues and develop implementation strategies for ensuring regulatory affairs compliance in medical product manufacturing, development, and marketing. Students will need to demonstrate effective written communication skills required to develop regulatory communications using root cause analysis and corrective and preventive actions (CAPAs).

Pre-requisite(s): RGAF 6000.

RGAF 6500 - Internship**Credits: (3)****Typically Taught Summer Semester:** *Full Sem - Online*

Description: The internship course will focus on research and application of regulatory issues in the organizational agency of their choice. Application of knowledge and skills of regulatory science through participation in a part or full time internship with a biomedical related industry or agency. Internship competencies will be determined by the student and preceptor based on organization focus and student need. The internship is arranged by the student, faculty, and participating institution by mutual consent.

Pre-requisite(s): RGAF 6000.

RHS 1300 - First Aid: Responding to Emergencies**Credits: (2)****Typically Taught Summer Semester:** *1st Blk***Typically Taught Fall Semester:** *1st Blk***Typically Taught Spring Semester:** *1st Blk*

Course Fee: \$35.00

Course Fee Purpose: Alcohol prep pads, gloves, disposable masks, CPR manikins, AED trainers.

Description: Trains the lay person to respond correctly in emergencies and act as the first link in the emergency medical service system. Course leads to American Heart Association Basic Life Support (BLS) and Heartsaver First Aid OR American Red Cross certification in Adult, Infant and Child CPR with AED and First Aid: Responding to Emergencies.

Cross-listed with HLTH 1300.

RHS 1550 - Introduction to Rehabilitation Sciences**Credits: (2)****Typically Taught Fall Semester:** *Full Sem, Full Sem - Online***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online*

Description: This course is designed to introduce students to health care professions that the majority of athletic therapy majors pursue. These health care professions include: athletic training (AT), physical therapy (PT), occupational therapy (OT), physician assistant (PA), and medicine (MD or DO). Through lectures, assignments, and guest speaker presentations, students will be introduced to a variety of health care professions, learn about the application process for various graduate programs, use resources to prepare their graduate program applications, and develop/revise their degree plans for their Bachelor's degree and graduate program prerequisites.

RHS 2175 - Introduction to Sports Medicine**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Presents the duties, functions, and collaboration of sports medicine professionals in the care and supervision of athletes. The course will focus on the prevention, diagnosis, and treatment of common musculoskeletal injuries/illnesses, strength and conditioning of athletes, environmental factors and guidelines, and management and administration of the sports medicine team.

RHS 2300 - Emergency Response

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$64.00

Course Fee Purpose: Alcohol prep pads, gloves, disposable masks, CPR manikins, AED trainers, nasal/oral airways, oxygen tanks and regulators.

Description: Meets the needs of the non-health care professional who has a duty to respond in an emergency. Provides more skills and in-depth training than the First Aid: Responding to Emergencies course. Course leads to American Red Cross certification in Emergency Response and CPR for the Professional Rescuer. Cross-listed with HLTH 2300.

RHS 2431 - Taping, Wrapping, Bracing, Padding, and Splinting

Credits: (1)

Typically Taught Fall Semester: *Full Sem, 1st Blk, 2nd Blk*

Description: This course is designed to give a basic understanding of athletic training taping, wrapping, bracing, padding, and splinting techniques. Students will apply a variety of techniques to support all areas of the body.

RHS 2890 - Introduction to Cooperative Work Experience

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides academic credit for shadowing experience of a health care professional. The purpose of this course is to introduce students to the health care industry early in their major by shadowing a health care professional for a minimum of 60 hours within a given semester. Once accepted to the Rehabilitation Sciences (BS) program, students will take the expanded version of this course (RHS 4890), which requires students to complete a full internship instead of a shadowing experience.

Students have the option to request RHS 2890 to be waived as a required course for the Rehabilitation Sciences (BS) program. Students must submit a waiver form to the program director, which verifies that they have previously completed at least 60 hours of shadowing experience with a health care professional. Experiential credit is not an option for this course.

RHS 3080 - Evidence Based Practice for Rehabilitation Sciences

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 2nd Blk, 1st Blk*

Typically Taught Spring Semester: *Full Sem*

Description: This course explores the concepts necessary to ensure future allied health professionals are well prepared to utilize an evidence-based practice approach to treatment. Students will gain familiarity with the major elements of evidenced-based practice, such as developing a clinically-relevant research question, research design, evaluation, statistical analysis, presentation of data, and ethical considerations. This course also provides an overview of descriptive and inferential statistics. Students should have a basic understanding of conducting library and Internet

information searches prior to taking this course.

Pre-requisite(s): MATH 1010 or higher; or Math ACT score of 23 or higher.

RHS 3200 - Psychology of Sport, Injury & Rehabilitation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to provide a basic understanding of the psychology of sport, injury, and rehabilitation. Topics covered include: emotion, motivation, psychosocial skills training and application, psychological antecedents of injury, psychology of injury and rehabilitation including individual response and effect on self-identity and physical function, and outcomes topics related to rehabilitation and exercise adherence, eating disorders, alcohol and drug/substance abuse, cultural competence, and research methods within the area of sport, injury, and rehabilitation psychology.

RHS 3300 - Evaluation and Care of Musculoskeletal Injuries: Lower Extremities

Credits: (3)

Typically Taught Summer Semester: *1st Blk Online*

Typically Taught Fall Semester: *Full Sem, 1st Blk Online*

Typically Taught Spring Semester: *1st Blk Online*

Course Fee: \$15.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include tools/instruments such as tape measures, goniometers, pinwheels, reflex hammers, 2-point discriminators, and anatomical models.

Description: Content of this course addresses evaluation techniques and care for musculoskeletal injuries to the trunk and lower extremities. The student must integrate knowledge of anatomical structures, physiology principles and evaluative techniques to provide a basis for critical decision-making in an injury management environment.

Pre-requisite(s): ZOOL 2320 or HTHS 2110.

RHS 3301 - Evaluation and Care of Musculoskeletal Injuries: Upper Extremities

Credits: (3)

Typically Taught Summer Semester: *2nd Blk Online*

Typically Taught Fall Semester: *2nd Blk Online*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: This course has a fee attached. Course fees are established in order to benefit the students in this course and may, among other things, be used to cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this specific course include tools/instruments such as goniometers, pinwheels, reflex hammers, 2-point discriminators, bubble inclinometers, penlights, and anatomical models.

Description: Content of this course addresses evaluation techniques and care for musculoskeletal injuries to the head, face and upper extremities. The student must integrate knowledge of anatomical structures, physiology principles and evaluative techniques to provide a basis for critical decision-making in an injury management environment.

Pre-requisite(s): ZOOL 2320 or HTHS 2110.

RHS 3505 - Standardized Patient Training

Credits: (3)**Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: The purpose of this course is to provide experiential learning for WSU health professions students by training them to act as standardized patients for simulated exam experiences in different health professions courses. Students will learn to respond to health professions students with consistent, reliable, professional responses to a variety of simulated scenarios. In this course, students will be introduced to orthopedic evaluation and assessment, the role of a patient, basic acting skills, training on how to portray patients, case simulations, and instructions on how to provide constructive feedback to health professions students.

RHS 3600 - Ergonomics for Health and Safety**Credits: (2)**

Description: Examines and analyzes the effects of the workplace on employees and adaptations of the work environment to suit the individual. The focus is on the interaction of work and people, i.e., physiological and environmental stresses with the primary intent to establish ways to reduce injuries, accidents, and fatigue and to improve human performance at work.

Pre-requisite(s): ESS 3500 or consent of instructor.

Note: This course is not currently offered.

RHS 4150 - Therapeutic Modalities for Rehabilitation Sciences majors**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$45.00

Course Fee Purpose: Modality equipment such as massage lotion, Ethyl Chloride spray, ice bags, paraffin wax beads, compression stockinets, electrical stimulation electrodes, biofeedback electrodes, lonto-patch system, ultrasound gel pads, ultrasound gel, treatment towels.

Description: Specifically designed for the pre-professional student, the course will introduce the student to contemporary usage and basic foundation of therapeutic modalities. Through lecture, discussion, and laboratory experience, the scientific basis of musculoskeletal rehabilitation involving therapeutic modalities will be examined. Emphasis will be placed on fundamental concepts of tissue healing and pain control techniques, as well as an introduction to cryo/thermotherapy, massage, traction, ultrasound and electrical stimulation.

Pre-requisite(s): RHS 3300, RHS 3301.

Note: Must be admitted to the Rehabilitation Sciences (formerly Athletic Therapy) program in order to register for this course.

RHS 4250 - Rehabilitation for Rehabilitation Sciences majors**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$45.00

Course Fee Purpose: Goniometers, inclinometers, hand sanitizer, Theratubing, Theraband, pool chemicals.

Description: This course provides an overview of therapeutic exercise as it relates to the rehabilitation process of musculoskeletal injuries for Rehabilitation Sciences majors. This course provides instruction and hands-on techniques in basic therapeutic rehabilitation techniques.

Pre-requisite(s): RHS 3300, RHS 3301, ESS 3450.

Note: Must be admitted to the Rehabilitation Sciences (formerly Athletic Therapy) program in order to register for this course.

RHS 4650 - Management for Rehabilitation Sciences Majors

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online, 1st Blk Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides an overview of the necessary policies, procedures, maintenance, and daily operation of healthcare facilities. Applies principles of facility design and planning, information management, legal and ethical considerations in healthcare, and professional development as it relates to future healthcare professionals.

RHS 4800 CRE - Individual Projects

Credits: (1-4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A comprehensive study or project in the field of Athletic Training. Hours to be arranged for seniors only.

May be repeated 3 times up to 16 credit hours.

RHS 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title will appear on student's transcript along with the authorized credit.

May be repeated for a total maximum of 6 credit hours.

RHS 4890 INT - Cooperative Work Experience

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides academic credit for on-the-job experience.

May be repeated 5 times and up to 6 credit hours.

Note: Must be admitted to the Rehabilitation Sciences program to register for this course.

RHS 4999 - Special Topics in Rehabilitation Sciences

Credits: (3)

Typically Taught Summer Semester: *2nd Blk, 2nd Blk Online, 1st Blk, 1st Blk Online*

Typically Taught Fall Semester: *2nd Blk, 2nd Blk Online, 1st Blk, 1st Blk Online*

Typically Taught Spring Semester: *2nd Blk, 2nd Blk Online, 1st Blk, 1st Blk Online*

Description: This course will focus on introducing students to special topics which may include but are not limited to: women's health, instrument assisted soft tissue mobilization, or sacroiliac joint conditions.

SAFE 3610 - Occupational Safety Regulatory and Legal Compliance

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an in-depth exploration of occupational safety regulations and legal requirements. Students will gain a comprehensive understanding of the regulatory framework governing workplace

safety, compliance strategies, and the legal implications of non-compliance. The course will cover key legislation, standards, and enforcement agencies, equipping students with the knowledge to ensure workplace safety and navigate legal challenges.

Pre-requisite(s): OEHS 3520.

SAFE 3620 - Occupational Safety Incident Investigation and Analysis

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course focuses on the systematic process of investigating occupational incidents to identify root causes and contributing factors. Through a combination of theoretical principles and practical applications, students will develop the skills necessary to conduct thorough incident investigations, analyze findings, and propose effective corrective actions. The course also covers reporting requirements, communication strategies, and the integration of incident investigation into an overall safety management system.

Pre-requisite(s): OEHS 3520.

Pre-requisite/Co-requisite: SAFE 3610.

SAFE 3630 - Environmental Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Review of regulatory requirements for practicing Occupational Safety and Health Professionals: Covers various environmental laws and acts including: the Clean Water Act, the Safe Drinking Water Act, and the Clean Air Act. Reviews the Toxic Substances Control Act, the Resource Conservation and Recovery Act, the Superfund law, DOT regulations, and OSHA regulations.

SAFE 3640 - Construction Safety

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Construction workers sustain frequent injuries/deaths at their workplace for multiple reasons. These circumstances occur due to intrinsic and extrinsic causes. While their overall health, diseases, and fatigue level can be considered intrinsic factors, task/s at hand, hazards at the workplace, and lack of/improper use of personal protective equipment (PPE) can be considered extrinsic factors. These injuries/deaths affect the worker and their families, while the employer gets affected due to poor productivity and increased costs, such as medical compensation and hiring replacement workers. Preventing these injuries/deaths is mandatory, starting with recognizing and evaluating the risk factors while making society aware. Therefore, this course is focused on identifying, evaluating, and managing the risk factors related to construction safety.

Pre-requisite/Co-requisite: OEHS 3520.

SAFE 3650 - Fire Safety and Emergency Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides students with the essential knowledge and skills to effectively manage fire safety and emergencies in various settings. Students will explore fire prevention, detection, and suppression techniques, as well as emergency response planning and management. The course integrates theoretical concepts with practical applications, equipping students to assess, plan, and implement strategies to mitigate the impact of fires and

emergencies on individuals and property.

Pre-requisite(s): OEHS 3520.

SAFE 3660 - Hazardous Materials Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides a comprehensive understanding of the principles and practices involved in the management of hazardous materials. Students will explore the identification, handling, storage, transportation, and disposal of hazardous materials, with an emphasis on regulatory compliance, risk assessment, and emergency response planning. Through theoretical instruction, case studies, and practical exercises, students will develop the knowledge and skills necessary for effective hazardous materials management in various industries.

Pre-requisite(s): OEHS 3520 and SAFE 3610.

SBS 1050 - Introduction to Social & Behavioral Sciences Bridge

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Description: This is a course designed for high school students and entering freshman students interested in people, politics, society and the environment. It covers an introduction to the disciplines, methods, and programs in social and behavioral sciences and methods, strategies and resources to be successful in college. The course combines traditional lectures and seminars with on- and off-campus activities designed to see the influence of social and behavioral sciences in the real world.

SBS 1100 - Introduction to Social & Behavioral Sciences

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Description: An introduction to the disciplines, methods, and programs in social and behavioral sciences. The course also reviews college success resources available to students. The course serves as a starting point for students interested in people, politics, society and the environment but do not know what major they should pursue.

Suggested Requisite(s): FYE 1105 and/or UNIV 2900 recommended as corequisite.

SBS 1550 HU/CC - Introduction to World Religions

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Introduction to religious studies with a focus on religious literacy; methodologies and theories of religion; and the histories, philosophies, beliefs and practices, and internal diversity of major world religions including Judaism, Christianity, Islam, Hinduism, Buddhism, and Indigenous traditions. The course also explores the intersections between religion and politics, magic, gender and sexuality, and art.

SBS 1810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

SBS 2810 - Experimental Course

Credits: (1-6)**Experimental**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

SBS 2920 - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

SBS 2950 - SBS Capstone: A Current Events View**Credits: (1)****Typically Taught Spring Semester: Full Sem**

Description: This discussion-based seminar practices applying the concepts, methods and disciplines of the social and behavioral sciences. Students perform evidence-based analysis of current events under the direction of guest lecturers. Students also assist with planning the activities for an upcoming SBS Bridge course. The course also serves as a capstone and assessment experience for 2-year SBS program.

Pre-requisite(s): SBS 1050 or SBS 1100.

SCIE 5110 - Nature of Science and Engineering for Teachers**Credits: (3)****Typically Taught Summer Semester: 1st Blk**

Description: An introduction to the natures of science and engineering, how these compare and interact with one another for the purpose of elementary education. Students engage in interactive, phenomena and problem based learning centered around crosscutting concepts and practices of science and engineering in order to develop ideas for how elementary learners can develop student centered, conceptual understandings. For K-6 teachers in the Elementary Science Endorsement series.

SCIE 5120 - Systems in Science for Teachers**Credits: (3)****Typically Taught Fall Semester: Full Sem**

Description: Investigations of systems in science at all scales, from the atomic to the astronomical, for the purpose of creating experiences for elementary learners. Students engage in interactive phenomena and problem based learning centered around crosscutting concepts and practices of science and engineering in order to develop curriculum and pedagogies appropriate for elementary school. For K-6 teachers in the Elementary Science Endorsement series.

SCIE 5130 - Energy and Matter in Science for Teachers**Credits: (3)****Typically Taught Spring Semester: Full Sem**

Description: Holistic study of energy and matter across all disciplines of science and the connection to real-world situations for the purpose of creating experiences for elementary learners. Students engage in interactive phenomena and problem based learning centered around crosscutting concepts and practices of science and engineering in order to develop curriculum and pedagogies appropriate for elementary school. For K-6 teachers in the Elementary Science Endorsement series.

SCIE 5140 - Cause and Effect in Science for Teachers

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Description: Investigations of cause and effect across a wide range of physical and biological systems for the purpose of creating experiences for elementary learners. Students engage in interactive phenomena and problem based learning centered around crosscutting concepts and practices of science and engineering in order to develop curriculum and pedagogies appropriate for elementary school. For K-6 teachers in the Elementary Science Endorsement series.

SCIE 5150 - Stability and Change in Science for Teachers

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Description: A study of stability and change in systems in order to develop deep understanding of conserved quantities throughout nature for the purpose of creating experiences for elementary learners. Students engage in interactive phenomena and problem based learning centered around crosscutting concepts and practices of science and engineering in order to develop curriculum and pedagogies appropriate for elementary school. For K-6 teachers in the Elementary Science Endorsement series.

SCIE 5160 - Elementary Classroom Practices in Science

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A capstone experience for students in an elementary science endorsement cohort, this class compiles curriculum and pedagogical strategies to apply directly to elementary classrooms. Requires collaborative coursework and practice in elementary classroom environments. For K-6 teachers in the Elementary Science Endorsement series.

SCIE 5320 - Chemistry Principles and Pedagogy I

Credits: (5)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Description: This course is designed for teachers to understand the principles of chemistry as well as the pedagogical content knowledge to teach the material. This is the first in a two course series designed to examine the principles of general chemistry. Course topics include structure and properties of matter, chemical reactions, definitions of energy, conservation of energy and energy transfer, and electromagnetic radiation. The laboratory emphasizes qualitative and quantitative methods of analysis. This class has a required lab component.

SCIE 5920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offerings under this number. The specific title and credit authorized will appear on the student transcript.

SCIE 5930 - Teaching Residency Reflection

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Science and mathematics preservice and inservice teachers reflect on experiences in mathematics and

science classrooms and consider relevant teaching philosophies and methodologies. The class provides oversight specifically for Propel Scholarship recipients in completing the state-mandated time spent in classrooms observing and teaching prior to receiving a teaching license. The class also provides support for teacher candidates building evidence of satisfying the STER competencies required for licensure.

SCIE 5940 - Teaching Residency

Credits: (1-6)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The class documents the hours spent by Propel Scholarship recipients completing the state-mandated time in classrooms observing and teaching prior to receiving a teaching license. The class also provides support for teacher candidates building evidence of satisfying the STER competencies required for licensure.

SCM 2050 - Introduction to Operations and Supply Chain Management

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Supply chain management is the value creation engine of every organization. The focus of this course is to acquaint students with the core elements of supply chain management: 1) customer value, 2) collaborative value creation, and 3) systems thinking. The course introduces and defines the three primary functions that compose supply chain activities- 1) purchasing, 2) operations, and 3) logistics-and shows how they need to work together to create the high-quality, low-cost, and innovative products and services that customers expect to find in today's marketplace. Important analytical tools are introduced.

SCM 2400 - Fundamentals of Project Management

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Provides practical knowledge and skills for managing a project from inception to completion to meet time, cost, and performance objectives. Prepares students from all backgrounds to successfully perform the role of a project manager in any profit or non-profit context, including business, government, engineering, healthcare, arts, humanities, or education. Topics include management of project teams, stakeholders, communications, schedule, cost, scope, performance and risk for achieving project success.

SCM 2890 - Cooperative Work Experience

Credits: (1-3)

Description: Open to students meeting criteria established by the SCM program. Provides academic credit for selected on-the job experience. Grade and amount of credit will be determined by the department.

Pre-requisite(s): Instructor Approval.

SCM 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title with the credit authorized will appear on the student transcript. May be repeated for a total maximum of 6 credit hours.

SCM 3200 - Supply Chain Relational Skills

Credits: (3)

Description: This course focuses on developing the relational and communication skills necessary for success as a supply chain professional. Key elements of the course include perspectives on supply chain strategic relationships, managing communication and conflict, building trust and collaboration with work groups and teams, managing change processes, and ethical negotiation, all with emphasis on supply chain contexts. Students build critical skills for developing strategic relationships and effectively communicating information and decisions. The course equips students with practical skills in critical thinking, perspective taking, change management, negotiation, and written and oral communication

Pre-requisite(s): SCM 2050

SCM 3300 - Purchasing & Strategic Sourcing**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides students an introduction to the supply management discipline, focusing on the development of category management skills and the purchasing process. Companies have always sourced a large percent of their COGS--up to 50-80%. However, today's emphasis on core competencies and increased use of outsourcing makes sourcing even more strategic. Sourcing managers are responsible for managing supplier capacity and capabilities. The course emphasizes costing and relationship management tools. This course builds the foundation for students to pass the Certified Profession in Supply Management (CPSM) exam.

Pre-requisite(s): SCM 2050.

SCM 3400 - Quality Management and Process Improvement**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introduces principles and practices for achieving quality, customer satisfaction, and performance excellence. Emphasis on process improvement, problem-solving, variation and statistical thinking, customer and supplier relationships, service quality, employee involvement, project management, and quality management frameworks. Presents tools and methods for analyzing and improving business processes, including Six Sigma, lean, and theory of constraints. This course builds the foundation for students to pass the ASQ Certified Quality Process Analyst exam.

Pre-requisite(s): QUAN 2600; SCM 2050; or Instructor Permission.

SCM 3500 - Spreadsheet Modeling for Prescriptive Analytics**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Spreadsheet software enables business people to model and analyze quantitative problems in a wide variety of business contexts. This course covers spreadsheet modeling in terms of optimization models for deciding the best set of decisions to meet constraints and performance objectives; simulation models for considering uncertainty in business operations and decisions; and other decision models and tools. Through conceptual and applied topics, this course will enhance one's problems solving and modeling capabilities as well as Excel spreadsheet skills.

Pre-requisite(s): MIS 2010 and (MATH 1050 or MATH 1090).

SCM 3600 - Logistics & Transportation**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course incorporates readings, site visits, and case analysis to convey state-of-the-art and emerging business logistics practices. The focus of this course is on forecasting, inventory management, transportation, distribution and warehousing, with an introduction to contemporary issues in logistics such as HADR and sustainability. Development of leading-edge strategies, which promote a firm's ability to differentiate itself in terms of its supply chain performance is emphasized.

Pre-requisite(s): SCM 2050 and QUAN 2600.

Pre-requisite/Co-requisite: SCM 3500.

SCM 4400 GLB - Global Supply Chain Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Globalization has changed the rules of competition. Globalization also raises complex and controversial issues such as job displacement and worker exploitation. Winning companies now use worldwide resources to meet the needs of global consumers. This course introduces and is built around a scanning model. Students are expected to actively scan, using emerging information to identify inflection points and determine their strategic and tactical implication. From this analysis, strategic objectives are renewed to guide the design of a global supply chain. Effective communication and teamwork are emphasized via the in class activities and projects.

Pre-requisite(s): BSAD 2899 and SCM 2050.

SCM 4550 - Strategic Supply Chain Management

Credits: (3)

Description: Supply chain management (SCM) is integrative in nature, requiring a systems approach to the design and management of supply chain processes across functions and organizational boundaries. This capstone SCM course provides a summative learning experience in which students integrate and apply their knowledge and skills in simulations, real-world cases, and large-scale data sets. The course emphasizes the conceptual and analytical skills needed to plan, source, make and deliver distinctive customer value in collaboration with supply chain partners. The course also covers current events and emerging topics in today's supply chains.

Pre-requisite(s): SCM 3600 and SCM 3300 and BSAD 2899.

Pre-requisite/Co-requisite: SCM 3400.

SCM 4700 - Supply Chain Case Analysis, Logic, and Presentation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed around the case analysis methodology and has the explicit goal of preparing student teams for participation in specific competitive supply chain case competitions (both regionally and nationally). Preparation time will be extensive and students must possess an advanced level of SCM mastery prior to enrollment in this class. Class meetings will be scheduled with the students throughout the semester for presentation and preparation. Please see the instructor for information on enrollment eligibility. Credit/no credit grading.

Pre-requisite(s): SCM 2050, instructor approval.

SCM 4800 - Independent Research

Credits: (1-3)

Description: Independent undergraduate research under the direction of a faculty member.

Pre-requisite(s): Advanced Standing; Instructor Approval.

May be repeated until a total of 4 hours credit is accumulated.

SCM 4805 - Directed Study

Credits: (1-3)

Description: Independent readings and learning activities on advanced special topics under the direction of a faculty mentor.

Pre-requisite(s): Advanced Standing; Instructor Approval.

SCM 4840 - Operations & Supply Chain Industry Projects**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: Early in their careers, many choose to work for a management consulting company or get involved in rotations within a company. These jobs and programs expose the worker to a wide variety of job types and functions and prepare the worker for whatever opportunities the future may bring. In this course, students are exposed to operations and supply chain management consulting projects typical of what they could expect in a full-time consulting position or in a company's early-career leadership rotation program.

Pre-requisite(s): SCM 3500.

Pre-requisite/Co-requisite: SCM 3600 and SCM 3300.

May be repeated up to two times for a total of 6 hours of credit.

SCM 4850 - Supply Chain Management Study Abroad**Credits: (1-3)**

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed for students who wish to explore supply chain management theory and practice in countries other than the U.S. Students will study global supply chain management as offered through a partner university (or other university with department chair approval).

Pre-requisite(s): BSAD 2899.

Can be repeated once up to 6 credits.

SCM 4860 INT - Supply Chain Management Internship**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A structured professional-level field experience. The student will be counseled and supervised as he/she applies and integrates the knowledge and skills obtained through operations management and logistics courses.

Pre-requisite(s): BSAD 2899; Senior Standing; Instructor approval.

SCM 4920 - Short Courses, Workshops, Institutes, and Special Programs**Credits: (1-6)****Workshop**

Description: Consult the semester class schedule for the current offering under this number. The specific title with the credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

SE 6010 - Foundation of Systems Engineering**Credits: (3)**

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.

Description: The Foundations of Systems Engineering course is an introductory overview of the systems engineering perspective and is presented to set the conceptual and practical framework of the entire systems engineering graduate program. The course covers the foundational components of systems engineering, from the concept development stage through the process steps of engineering development. Several issues related to post-development, disposal, and special topics areas are also presented. Students have the opportunity prove their knowledge of the INCOSE Systems Engineering Handbook without taking the INCOSE knowledge exam, to become a certified Systems Engineering Professional (SEP).

SE 6020 - Engineering Project and Program Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.

Description: The Engineering Project and Program Management course provides participants the opportunity to gain skills and experience applying the framework, processes, and knowledge areas of the *Project Management Body of Knowledge (PMBOK)* as defined by the Project Management Institute (PMI). Students apply methods and tools through in-class lab work, deliverables, and portfolio generation.

Pre-requisite(s): SE 6130 and SE 6380.

SE 6120 - System Design and Operational Analysis

Credits: (3)

Typically Taught Summer Semester: *Full Sem-Online*

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.

Description: This course targets systems engineering professionals. It will prepare you to take the International Requirements Engineering Board's certification exam, to elicit and analyze requirements, document and validate requirements, create UML and SysML use cases, manage requirements, and demonstrate systems requirements for a development project.

Suggested Requisite(s): Calculus and Basic Statistics.

SE 6130 - Overview of Systems Engineering Processes

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.

Description: An overview of system life-cycle design processes and the associated analysis techniques. Approaches to system reliability, maintainability and failure analysis are also explored.

Pre-requisite(s): SE 6010 and SE 6370.

SE 6140 - Design for Operational Feasibility

Credits: (3)**Typically Taught Fall Semester:** *Full Sem, Full Sem - Online***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online***Course Fee:** \$25.00**Course Fee Purpose:** Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.**Description:** This course will introduce the application of engineering efforts to maximize the likelihood that the resulting system design will be operationally feasible and perform as intended in an effective and efficient manner. The objective of the course is to study the characteristics (the 'ilities') that are known to have a significant impact on the success of a system and the customer's need. Topics include Design for reliability, maintainability, human factors, logistics, producibility, and affordability. Software used will include MATLAB, Excel, and CAMEO No Magic.**Pre-requisite(s):** SE 6130 and SE 6380.**SE 6150 - Research Methods and Experimentation****Credits: (3)****Typically Taught Fall Semester:** *Full Sem, Full Sem - Online***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online***Course Fee:** \$25.00**Course Fee Purpose:** Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.**Description:** The course introduces the participant to research methods and experimentation, including surveys, case studies, stratification, comparative experiments, regression, and design of experiments. The course emphasizes practical decision-making processes, both intuitive and logical; qualitative and quantitative. A review of practical descriptive, comparative, and relational statistics is leveraged to explore and apply advanced methods.**SE 6260 - Reliability Engineering and Risk Analysis****Credits: (3)****Typically Taught Spring Semester:** *Full Sem - Online***Course Fee:** \$25.00**Course Fee Purpose:** Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.**Description:** An introduction to reliability engineering and risk analysis, including its role in Systems Engineering. Approaches to risk identification, quantification, and reduction will be discussed. Tools, techniques, and methodologies for use in system design, reliability engineering, and project management are emphasized.**Pre-requisite(s):** MATH 1040 or MFET 2410 or MATH 3410; and MATH 1210.**SE 6320 - Simulation Modeling and Engineering Optimization: Methods/Applications****Credits: (3)****Typically Taught Fall Semester:** *Full Sem, Full Sem - Online***Typically Taught Spring Semester:** *Full Sem, Full Sem - Online***Course Fee:** \$25.00**Course Fee Purpose:** Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.**Description:** This course will introduce methods of optimization, simulation, solution neutral concepts, architecture as a decision making process, the pareto frontier, and data science. The objective of the course is to study the processes and methods used to make decisions amid chaos and to maximize the likelihood of a successful system. Emphasis is placed on decision making for real-world applications. Software used will include SQL, Excel, MATLAB, Simulink, Simscape, and CAMEO No Magic.**Pre-requisite(s):** SE 6140.

SE 6330 - Weaponneering and Weapon Effectiveness

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: System Engineering course fees partially offset costs including enterprise software used in foundational courses and the program's INCOSE Academic Equivalency.

Description: This course will introduce physics and statistics-based methods and commonly used damage functions for weapon lethality, probability of successfully attacking targets, target vulnerability, and arrival conditions of weapons. Topics include, deterministic methods, Monte Carlo simulations, the Carleton damage function, the cookie cutter function, blast damage function, weapon trajectory, and the limitations of lethality of a particular target/weapon pairing.

SE 6340 - Systems Thinking and Dynamics

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Typically Taught Spring Semester: *Full Sem-Online*

Course Fee: \$25.00

Course Fee Purpose: Systems Engineering course fees partially offset costs including enterprise software used in foundational courses and the program's INCOSE Academic Equivalency.

Description: Systems thinking deals with understanding the higher-level behavior and issues that emerge from interaction between components in complex socio-technical systems. Most of the complex and wicked problems in the real world are not purely technical, are usually dynamic, and are often an unintended consequence of a prior solution. One method to approach system thinking is with System Dynamics.

System Dynamics is not new in a purely technical sense. However, applying this type of model-based systems thinking to solve Complex Engineering Systems (that fall into the full socio-technical spectrum) is relatively new. This course emphasizes Systems thinking, dynamic cause and effect relationships, and the higher-level emergent behavior that results from the interaction of many smaller effects that are individually well understood, but more difficult to grasp at the higher emergent or integrated level. Software tools are used in this class but developing the intuition and skills to solve real world complex system type problems is the major take away for the students. This course will benefit engineers who want to gain an appreciation for the associated Socio-Technical problems that arise in the real world in developing complex engineering systems.

Computer tools will be introduced to provide hands-on practical skills with the above topics. Mastery of the concepts introduced in this course should give students a significant competitive advantage in the marketplace.

Students apply methods and tools through in-class lab work and deliverables. The objective of the course is to study the application of systems thinking to enhance proven systems engineering practices to increase the success of meeting societal needs for the development of complex systems.

Pre-requisite(s): SE 6010.

SE 6350 - Organizational Systems

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.

Description: Organizational Systems provides engineers with organizational-level skills to recognize, develop, analyze, improve, and sustain organizational subsystems. The course blends the most useful mental models from

organizational theory and design, industrial psychology, and organizational behavior. Participants complete multiple applied deliverables to connect theory and application. Open systems thinking, structural design, internal design elements, and managing dynamic processes frame the content.

SE 6360 - System Logistics: Ensuring a System of Systems Approach

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *2nd Block Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.

Description: System of systems is a collection of task-oriented or dedicated systems that pool their resources and capabilities together to create a new, more complex system which offers more functionality and performance than simply the sum of the constituent systems. This course will introduce the subsequent sustaining maintenance & support of the system throughout its entire life cycle, including end of life/disposal. It will also include different DoD tailorable concepts to effectively manage and field product. Topics include: Reliability Growth, Initial Contractor Support (ICS), and Performance-Based Logistics (PBL) Systems of Systems (SoS) or Federation of Systems (FoS).

Suggested Requisite(s): Calculus and Basic Statistics.

SE 6370 - Requirement Engineering

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.

Description: This course targets systems engineering professional. It will prepare you to take the International Requirements Engineering Board's certification exam, to elicit and analyze requirements, document and validate requirements, create UML and SysML use cases, manage requirements, and demonstrate systems requirements for a development project.

SE 6380 - Model Based Systems Engineering (MBSE) and SysML

Credits: (3)

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$130.00

Course Fee Purpose: Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.

Description: Introduction to formal system architecture methods using the Systems Modeling Language (SysML) and Model-Based Systems Engineering (MBSE) with detailed case studies. Students will apply the methodology to build architecture models, analyze internal and external interactions, and plan appropriate approaches for implementation. Topics include digital engineering, iterative MBSE techniques, model structure interactions and behaviors based on requirements and constraints, and creating key diagrams (such as use-case, sequence, and activity)

Pre-requisite(s): SE 6010 and SE 6370.

SE 6385 - Architecting Proposal

Credits: (1)

Typically Taught Spring Semester: *Full Sem-Online*

Course Fee: \$25.00

Course Fee Purpose: Per class registration, allocated partially to computer lab refurbishment, lab aids and software licenses.

Description: Students will develop and submit a proposal for a system to architect and model for course SE 6390. The instructor will provide guidance in selecting and scoping of the system.

Pre-requisite(s): SE 6010.

Co-Requisite(s): SE 6380.

SE 6390 - Model Based Systems Engineering (MBSE) II

Credits: (3)

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Course Fee: \$130.00

Course Fee Purpose: Per class registration, allocated partially to computer lab refurbishment, lab aids and software licenses.

Description: Students will apply advanced enterprise and system modeling techniques, using state-of-the-art modeling tools, methodologies, architecture frameworks, and languages as well as performing model-based reviews and audits, in the context of enterprises and systems from both supplier and acquirer perspectives.

Pre-requisite(s): SE 6380 or equivalent.

SE 6400 - Model-based Systems Engineering III

Credits: (3)

Typically Taught Fall Semester: *Full Sem-Online*

Course Fee: \$25.00

Course Fee Purpose: Per class registration, allocated partially to computer lab refurbishment, lab aids and software licenses.

Description: This course is a continuation of SE 6380 MBSE 1. Students will use their project artifacts from MBSE 1 and apply and explore more advanced capabilities of the Magic Systems of Systems Architect (MSOSA) modeling tool. Additionally, this course will cover the importance of governing a system architecture model and MBSE project. Students will develop a governance plan and have an opportunity to explore modeling.

This course will cover the basics of the system modeling language (SysML) managed by the Object Management Group (OMG) and build upon the basics from the MBSE 1 course.

Computer tools will be introduced to provide hands-on practical skills with the above topics. Mastery of the concepts introduced in this course should give students a significant competitive advantage in the marketplace.

Students apply methods and tools through in-class lab work and deliverables. The objective of the course is to study the application of MBSE to enhance proven systems engineering practices to increase the success of meeting customer needs for the development of complex systems.

Pre-requisite(s): SE 6380.

SE 6500 - Systems Engineering Project Overview

Credits: (1)

Typically Taught Fall Semester: *Full Sem-Online*

Description: This course will provide the foundation for the senior systems engineering project course. This course will include the project plan (mission, vision, values, strategy, and goals) and charter for the selected complex system

Pre-requisite(s): SE 6010 and SE 6020 and SE 6130 and SE 6140 and SE 6370.

SE 6510 - Design Project

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$25.00

Course Fee Purpose: Course fees for this course are designed to cover computer labs, paper usage, software, equipment maintenance and replacement, supplies and instructional resources.

Description: MSSE Students are required to complete a system engineering design project that demonstrates proficiency in research, design, analysis, implementation, testing and documentation. The project is an in-depth study selected by the student or course instructor to showcase the student's skills and knowledge.

Pre-requisite(s): SE 6500.

SE 6520 - System Design and Operational Analysis

Credits: (3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: This course targets systems engineering professionals. It will prepare you to take the International Requirements Engineering Board's certification exam, to elicit and analyze requirements, document and validate requirements, create UML and SysML use cases, manage requirements, and demonstrate systems requirements for a development project.

Suggested Requisite(s): Calculus and Basic Statistics.

SE 6900 - Special Topics

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: A one-time special study course designed to introduce a new relevant topic that is not covered in the Systems Engineering programs. Lecture or lecture and lab combination. Laboratory activities support the selected course topic.

Pre-requisite(s): Permission from the department.

May be repeated 10 times and up to 12 credit hours.

SE 6910 - Individual Research

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem - Online*

Typically Taught Fall Semester: *Full Sem - Online*

Typically Taught Spring Semester: *Full Sem - Online*

Description: Students taking this course will receive credit for approved, mentored studies in the Master of Science in Systems Engineering (MSSE). A maximum of three credits may be counted toward graduation.

Pre-requisite(s): Permission from the department.

SOC 1010 SS/CC - Introduction to Sociology

Credits: (3)

Typically Taught Summer Semester: *1st Blk, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: An introduction to the study of Sociology through the concepts and principles used to understand and

evaluate society. It focuses on all aspects of society: culture; social interaction; institutions; group processes; deviance and social control; stratification, diversity, and inequality based on race, ethnicity, class, gender, etc.; and social stability and change.

SOC 1020 SS/CC - Contemporary Social Issues

Credits: (3)

Typically Taught Summer Semester: *2nd Blk, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: A study of major social problems in contemporary society, including issues of age, gender, family, race, ethnicity, wealth and poverty, politics, education, public safety, health care, substance abuse, and environment. Special emphasis is given to these issues and their consequences for today's global and diverse society.

SOC 2370 - Gender and Society

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course examines gender as an organizing principle of social life and the ways in which gender influences individuals' identities, behaviors, and life experiences. Students will study gender within a variety of contexts, such as the workplace, family, politics, athletics, education, health, media, and religion. Attention will also be given to sociological theories of gender, gender socialization, and the intersection of gender, race, class, and sexuality.

SOC 2400 SS/CC - Introduction to Ethnic Studies

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem - Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course is an introduction to the study of race and ethnicity, especially through the experiences of ethnic minority groups in the United States. We will explore the main perspectives, theories, findings, and other features, focusing especially on how social systems define and shape racial understandings and outcomes as well as continuing efforts to dismantle racial oppression.

SOC 2600 - Families in Society

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: The course analyzes family arrangements and structures, changes in such arrangements over time, and contemporary issues facing families. Emphasis is placed on variations in family experiences with regard to race, gender, social class, and sexual orientation. Students examine the relationship between families and other social institutions such as politics, religion, and the economy.

SOC 2660 - Data Visualization

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Seeing patterns is an important part of interpreting data. This course is about how to create better, more effective visualizations of data to help researchers see data patterns. This course aims to increase students' data visualization literacy and skills. Students will learn to choose the visualization that best fits their data to most effectively communicate the message.

SOC 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed. Please check with the department for availability.

SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed. Please check with the department for availability.

SOC 3000 - Self and Society

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: Sociological Social Psychology is the study of individual, group, and social behavior through analysis of the relationship between individuals and social institutions. Individuals actively create social structure while they are simultaneously shaped by it. Students will analyze how social interaction, processes, roles, and statuses are created and maintained by individuals. Students will also analyze how these same processes, roles, and statuses shape their individual behavior. Social Psychological theories and methodologies are also addressed.

Pre-requisite(s): SOC 1010 or SOC 1020.

SOC 3010 - Social Inequality

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: The study of social stratification and inequality in the United States and globally. The course focuses on economic class and status groups, such as gender, race and ethnicity, age, sexuality, and physical ability.

Pre-requisite(s): SOC 1010 or SOC 1020.

SOC 3250 - Deviance and Social Control

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: Introduces the student to the various sociological concepts of deviance and social control. Deviance and social control are examined in their positive and negative forms. The benefits and contributions as well as the consequences and disruptions of these forms are considered in the context of the formal and informal socialization processes and the internalization of social norms.

Pre-requisite(s): SOC 1010 or SOC 1020.

SOC 3270 - Criminology

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: Study of the nature, extent, causes, and treatment of crime.

Pre-requisite(s): SOC 1010 or SOC 1020.

SOC 3300 SUS - Environment and Society

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: An in-depth study of societal-environmental interactions including population, technology and organization impacts of human societies on the physical environment, and environmental impacts on human behavior and social organization.

SOC 3400 - Social Change

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: The factors which change society and how society changes, emphasizing technological innovations and its implications, social movements, and the role of individuals.

Pre-requisite(s): SOC 1010 or SOC 1020.

SOC 3410 - Sociology of Religion

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: Examination of religion and religious activities globally from the theoretical perspectives of Sociology.

SOC 3420 - Sociology of Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: Analysis of the structure and function of education as a central social institution in contemporary society.

SOC 3430 - Medicine and Healthcare in Society

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: Utilizes the Sociological perspective to explore the Institution of Medicine and the Medical Healthcare Delivery System; its function as a social institution and its capability, accessibility, and the related issues of providing Healthcare. The various organizational system structures, and their economic and political dimensions are also examined. Further emphasis is placed on the various professional roles, supporting roles, and patient behaviors. Additional focus is placed upon selected international comparisons, as well as medical research, ethical considerations, and international health issues.

SOC 3500 - Sociological Theories

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An overview of classical and contemporary sociological theories. Includes the the classical theory "canon" (Marx, Weber, and Durkheim) which forms the groundwork for sociological thinking and sociology as a discipline. Contemporary theories include the macro theories of structural functionalism and conflict theory and the micro level, interactional theories of everyday life. Course also introduces theorizing on gender and race-ethnicity as well as ideas from the postmodern and globalization theorists.

Pre-requisite(s): SOC 1010 for majors/minor or SOC 1020 for minors only.

SOC 3600 - Social Statistics

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Introduction to descriptive and inferential statistical analysis techniques and the presentation of results.

Pre-requisite(s): MATH 1010 or equivalent.

SOC 3660 - Sociological Research

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Examines the scientific foundations of Sociology and methods of Sociological Research.

Pre-requisite(s): SOC 1010 or SOC 1020.

SOC 3840 - Cities and Urban Life

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: In-depth analysis of the urbanization, modernization, and development of the system of cities. The relationship between cities and culture, mental illness, and social problems are examined.

SOC 3850 - Race & Ethnicity

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: Examines the social construction of race and ethnicity and the conditions of racial and ethnic groups in the United States and globally, based on statistical and ethnographic data. Includes a survey of theories of the origins, causes, and dynamics of ethnic and race relations.

SOC 4050 - Sociology of Work and Organizations

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem, Full Sem-ONL*

Typically Taught Spring Semester: *Full Sem, Full Sem-ONL*

Description: Work and organizations are two prominent features in modern societies. Our occupations in the organizations are our social identities for most of the individuals. Success or failure at work in the organizations reflects individual performance, but also influenced by coworkers, social interaction, set of skills, values, and bureaucratic structures of organizations. Many aspects of working life in organizations are also shaped by the structure of a society, such as age composition, racial, ethnic, gender and class division; and the distribution of power and authority in organizations. Technology and even social networking impact how work is done and how to and who get a job. This course will make these connections between micro and macro factors of work and organizations.

Pre-requisite(s): SOC 1010.

SOC 4220 - Life in a Consumer Society

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Description: Examination of consumption, consumerism, and the increasing commercialization of contemporary life. Students study the history of consumerism and advertising; explore how consumer culture influences their own consumption choices; and analyze the relationship between consumerism and social inequality.

SOC 4270 - Law and Society

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Description: A study of the interchange between law and society, where society creates the law, yet law regulates society.

Pre-requisite(s): SOC 1010 or SOC 1020.

SOC 4300 - Qualitative Methods

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course provides students with a practical introduction to qualitative research methods, focusing on ethnography, interviewing, and content analysis. Framing qualitative research in the context of contemporary theory and ethical concerns, it provides hands-on exposure to qualitative research's unique logic, design, practice, analysis, and writing in a variety of research and applied contexts.

Pre-requisite(s): Junior or Senior standing.

SOC 4410 SUS - Sociology of Globalization

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: Study of economic, political, and cultural globalization in the late 20th and early 21st century. The course examines the history, theories and critiques of globalization, the key actors in global political-economy, the institutions and events that shape global processes, and globalization's impact on local economies, politics, culture, and the natural environment.

SOC 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed. Please check with the department for availability.

SOC 4830 INT - Readings and/or Projects

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Individual readings and/or projects for sociology majors or minors. (Maximum of 5 hours applied toward graduation, 3 of which can be applied toward the sociology major or minor.)

Pre-requisite(s): SOC 1010, senior standing, permission of instructor, approval of program coordinator.

May be repeated 4 times up to 5 credit hours.

SOC 4890 INT - Internship

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Qualified juniors and seniors may apply for internships among federal, state and private agencies. Internships are anticipated to provide the student with both practical and research experiences. A student may complete up to 9 hours, but not more than 6 hours in any one type of internship. A maximum of 3 hours may be applied towards the sociological major or sociological minor.

Pre-requisite(s): SOC 1010, junior or senior status, approval of program coordinator.

May be repeated 8 times up to 9 credit hours.

SOC 4900 CRE - Senior Capstone Course

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A course designed to organize all of the knowledge that the student has gleaned from his/her major into an integrated whole. This course will help the student make relevant the knowledge that he/ she has learned. This will be accomplished by having the student write a senior thesis as well as attend lectures.

Pre-requisite(s): SOC 1010, SOC 3600, SOC 3660, senior standing.

SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed. Please check with the department for availability.

SOC 4930 INT - Community Engaged Capstone

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A course designed to organize all of the knowledge that the student has gleaned from his/her major into an integrated whole. This course will help the student make relevant the knowledge that he/ she has learned. This will be accomplished by having the student prepare a project based on a previously completed internship as well as attend lectures. Prerequisite: SOC 1010, SOC 3600, SOC 3660, 3 credit hours minimum of SOC 4890, senior standing.

SOC 4990 - Seminar in Sociology

Credits: (3)

Variable Title

Typically Taught Spring Semester: *Full Sem*

Description: An advanced course allowing in-depth study of selected topics in Sociology. When the course number is used, it will be accompanied by a specific title with the credit authorized, which will appear on the student transcript.

Pre-requisite(s): SOC 1010 or consent of instructor.

May be repeated 3 times up to 9 credit hours.
Note: (Formerly Contemporary Issues.)

SPAN 1010 - First Semester Spanish

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Introductory course assuming no significant previous experience with the language. Beginners and students with less than two years of high school language should register for this class. Emphasis on everyday conversation and exposure to cultural perspectives.

SPAN 1020 - Second Semester Spanish

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (N=Novice) Continuation of SPAN 1010. Basic language skills including listening, speaking, reading, writing and culture.

SPAN 1700 - Conversational Skills

Credits: (1-3)

Course Fee: \$8.00

Course Fee Purpose: Course fees for World Languages & Cultures courses are designed to cover the costs of classroom equipment maintenance and replacement such as desktops, projectors, projector screens, and software, including the tutoring suite (EH 244) and the language lab (EH 408); consumable materials and supplies; and support for student tutors, and online instructional resources.

Description: Specific vocabulary and speaking skills in one semester (e.g., nursing, law enforcement, medical, tourism, family language courses, etc.). May be repeated for credit under different titles.

SPAN 1852 - Study Abroad

Credits: (1-3)

Description: (N=Novice) Language and culture studies for students with no previous experience in the target language and culture. Most assignments are performed in English. Prior travel experience does not apply.

May be repeated twice with a maximum of 3 credit hours.

Note: Check with Department for course availability.

SPAN 2000 - Proficiency Development

Credits: (1-2)

Description: (NH=Novice High) (CR/NC) Non-graded courses for second-year students to augment foreign language instruction in stress-free activities appropriate to the linguistic level of second-year students. May be repeated under different titles. Note: Course not currently being offered.

SPAN 2010 - Third Semester Spanish

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of FL 1020. Assumes completion of first-year or equivalent experience. Students learn to understand and express ideas about their community and the world. Includes listening, speaking, reading, writing and culture.

SPAN 2020 HU - Fourth Semester Spanish

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) Continuation of SPAN 2010. The learning and application of strategies for acquiring a foreign language. Students also learn how cultural products and practices reflect a culture's attitudes, values, ideas and meaning. The process of language acquisition and the seeking of cross-cultural understanding provide insights into the commonalities of how the human family learns, thinks and communicates.

SPAN 2021 - Second Year II

Credits: (3)

Description: (NH=Novice High) Continuation of FL 2010 without General Education Humanities credit. Offered through examination only.

Pre-requisite(s): Only available through testing.

SPAN 2030 - Second Year Language Review

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (NH=Novice High) This course will prepare students who wish to continue language study. Emphasis on conversational skills and a review of language structure and usage.

Note: Check with department for course availability.

SPAN 2600 HU - Introduction to Cultural and Literary Studies in Translation

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: May be offered under any of the languages taught in the department. All Foreign Language HU2600 courses are taught in English and all texts are read in English translation in order to make some of the literature we normally would teach in a foreign language accessible to all students. These courses may introduce students to specific literary periods, literary themes or some prominent authors in specific areas of the world where languages other than English are spoken.

May be repeated up to 10 times for credit under different titles.

Note: Check with Department for course availability.

SPAN 2851 HU - Study Abroad

Credits: (3)

Description: (NH=Novice High) Language and culture studies for students whose minimal proficiency is Novice High. Language assignments at the Novice or Intermediate-Low levels are performed in the target language. All other assignments are performed in English. Prior travel experience does not apply.

Note: Check with Department for course availability.

SPAN 2852 - Study Abroad

Credits: (1-3)

Description: (NH=Novice High) Language and culture studies for students whose minimal proficiency is at Novice High. Language assignments at the Novice or Intermediate-Low levels are performed in the target language. All other assignments are performed in English. Prior travel experience does not apply.

Twice with a maximum of 3 credit hours.

Note: Check with Department for course availability.

SPAN 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

SPAN 2960 - Introduction to World Languages and Cultures

Credits: (1)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Required of all majors during their first year. This course provides guidance to help the student successfully navigate their academic career in WSU Department of World Languages & Cultures and its programs. It provides an overview of what it is like to study a second language, as well as an overview of the U.S. language industry and language careers. The course is also designed to help students develop a clearer focus on their educational and occupational goals, as well as creating a sense of belonging in our department, college, and community.

Co-Requisite(s): SPAN 3060.

SPAN 3000 - Proficiency Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) This is a transition course to upper division. The course focuses on oral proficiency development. Students will learn a variety of techniques and strategies to increase their oral proficiency in a variety of social, educational and cultural settings. Native-speaking students or those who have acquired proficiency through residence in the target language community are not eligible to take this class.

SPAN 3050 - Spanish for Heritage Speakers

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Course fees contribute to the maintenance and enhancement of technology in the active learning classroom (EH 408), the World Languages and Cultures (WLC) tutoring space, and other regular classrooms, ensuring a high-quality learning environment for students.

Description: (IL=Intermediate Low). This is a course for students who are heritage language learners of Spanish (grew up speaking Spanish in the home, but received most of their education in English). Students will read examples of writing in various modes (such as description, narration, exposition, and argument), write short compositions in those modes. This course builds on students' existing language foundation to enhance both their written and oral skills.

SPAN 3060 - Grammar & Composition

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Students will read examples of writing in various modes (such as description, narration, exposition, and argument), write short compositions in those modes, and review the necessary grammar to write correctly in those modes.

SPAN 3116 - DLI Bridge Course I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 3 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): SPAN 2020 or AP exam with a score of 3 or better

SPAN 3117 - DLI Bridge Course II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 3 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): SPAN 2020 or AP exam with a score of 3 or better

SPAN 3118 - DLI Bridge Course III

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Taught in DLI High Schools for students who have passed the AP Exam with a 3 or higher. Although this is a three credit-hour class, it will meet over the course of a full academic year. Credit will count toward a major or minor in the language.

Pre-requisite(s): SPAN 2020 or AP exam with a score of 3 or better

SPAN 3160 - Introduction to Literature

Credits: (3)

Typically Taught Summer Semester: *1st Block*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Required of all majors and minors. 3160 may be taken concurrently with other literature courses. One sheltered section may be offered to students who have not had extensive in-country experience.

Pre-requisite(s): SPAN 3060 Grammar and Composition

Note: Check with department for course availability.

SPAN 3220 - Phonetics and Phonology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Analysis of the sounds of language and word formation: practice of native like speech patterns. Required of all teaching majors and minors.

Pre-requisite(s): SPAN 3060

Note: Check with department for course availability.

SPAN 3270 - Special Topics in Linguistics

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) An introduction to linguistic structures and semantic elements. The course provides useful information and practice in the language, its structures and usage. The sub-disciplines of linguistics, other than phonetics and phonology (covered in SPAN 3220), will be studied. These may include lexical analysis, semantics, morphology, syntax, linguistic change and dialectal variation.

Pre-requisite(s): SPAN 3060

Note: Check with department for course availability.

SPAN 3320 - Applied Language Studies

Credits: (1-3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Minimal proficiency level varies with content).

Pre-requisite(s): SPAN 3060

May be repeated up to 10 times under different titles.

SPAN 3360 - Advanced Grammar

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) Analysis and application of syntactic principles and discourse structure.
Pre-requisite(s): SPAN 3060

SPAN 3540 - Latin American Environment and Cultures

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: In order to provide an interdisciplinary introduction to Latin America, this course presents the region's history, its peoples, their culture and their political and natural environments. Other content to be discussed includes issues of migration, US Latinos and the region's relationship with the US.

Pre-requisite(s): SPAN 3060

SPAN 3550 GLB - Cultural Heritage of Spain

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) Studies of cultural products and practices throughout the history of Spain.

Pre-requisite(s): SPAN 3060

SPAN 3560 - Cultural Heritage of Latin America

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) Studies of past and present cultural products and practices of Latin America.

Pre-requisite(s): SPAN 3060

SPAN 3570 GLB - Special Topics in Culture

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and civilization.

Pre-requisite(s): SPAN 3060

May be repeated up to 7 times for credit and for other non-English speaking cultures.

Note: Check with Department for course availability.

SPAN 3610 - Peninsular Literature I

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) Studies of major trends, authors and works of Spanish literature from its beginnings to 1700.

Pre-requisite(s): SPAN 3060

SPAN 3615 - Latin American Literature I

Credits: (3)

Typically Taught Summer Semester: *1st Blk-Online, 2nd Blk-Online*

Typically Taught Fall Semester: *Full Sem, Full Sem-Online*

Course Fee: \$8.00

Course Fee Purpose: Course fees contribute to the maintenance and enhancement of technology in the active learning classroom (EH 408), the World Languages and Cultures (WLC) tutoring space, and other regular classrooms, ensuring a high-quality learning environment for students.

Description: (IH=Intermediate High) Studies of major trends, authors and works of Latin American literature from the Pre-Colombian period to 1900.

Pre-requisite(s): SPAN 3060.

SPAN 3620 - Peninsular Literature II

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) Studies of major trends, authors and works of Spanish literature from 1700 to the contemporary period.

Pre-requisite(s): SPAN 3060

SPAN 3625 - Latin American Literature II

Credits: (3)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Typically Taught Spring Semester: *Full Sem, Full Sem-Online*

Course Fee: \$8.00

Course Fee Purpose: Course fees contribute to the maintenance and enhancement of technology in the active learning classroom (EH 408), the World Languages and Cultures (WLC) tutoring space, and other regular classrooms, ensuring a high-quality learning environment for students.

Description: (IH=Intermediate High) Studies of major trends, authors and works of Latin American literature from 1900 to the contemporary period.

Pre-requisite(s): SPAN 3060.

SPAN 3630 - Literature Poetry

Credits: (3)

Variable Title

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM= Intermediate Mid) One literature course is required for regular and teaching majors. May be taken concurrently with FL 3160. May be repeated under different titles.

Pre-requisite(s): SPAN 3060

SPAN 3631 - Literature: Prose

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of works in prose by one or various authors of a particular period or place, or spanning several literary movements and geographical regions. May be taken 3 times up to 9 credits under different titles.

Pre-requisite(s): SPAN 3060

SPAN 3632 - Literature: Drama

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of theater plays by one or various authors of a particular period or place, or spanning several literary movements and geographical regions.

SPAN 3650 - Literature Periods

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with SPAN 3160.

Pre-requisite(s): SPAN 3060

SPAN 3670 - Literature Authors

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IN=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors.

Pre-requisite(s): SPAN 3060

Suggested Requisite(s): May be taken concurrently with SPAN 3160.

Note: Check with Department for course availability.

SPAN 3680 - Literature: Film

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid). A survey of film by one or various filmmakers of a particular period or place, or spanning several literary movements and geographical regions. May be taken 3 times up to 9 credits under different titles.

Pre-requisite(s): SPAN 3060

SPAN 3690 - Special Topics in Literature

Credits: (1-3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors.

Pre-requisite(s): SPAN 3060

Suggested Requisite(s): May be taken concurrently with SPAN 3160.

Note: Check with Department for course availability.

SPAN 3710 - Business Language I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) Business Language and Practices. Required of all commercial majors.

Pre-requisite(s): SPAN 3060

SPAN 3720 CEL - Medical Spanish I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) This course is content, vocabulary and culture-based. The course focuses on practical vocabulary, idiomatic expressions, professional terminology and cultural interactions for the medical professions.

Pre-requisite(s): SPAN 3060

SPAN 3730 CEL - Spanish for Specific Purposes

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) This course is content, vocabulary and culture-based. The course focuses on practical vocabulary, idiomatic expressions, professional terminology and cultural interactions on a variety of topics, such as Spanish for social work, law enforcement or tourism.

Pre-requisite(s): SPAN 3060

SPAN 3740 - Translation I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) Introduction to basic techniques and skills needed for bilingual translation of non-fiction texts. Emphasis will be on the translation into English, and on the stylistic, syntactic, cultural, lexical, and terminological problems. Students are given ample opportunity to apply these techniques through a series of written translation assignments, which form the basis for class discussion.

Pre-requisite(s): SPAN 3060

SPAN 3750 - Healthcare Interpreting

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: Introduction to techniques and skills needed for bilingual interpretation in the healthcare professional setting. The course includes an overview and history of the interpreting industry and work of interpreters, certification and licensure, and the variety of consumers and modalities with which interpreters work. Ethics, standards of practice, and terminology for healthcare interpreters are explored.

Pre-requisite(s): SPAN 3060

SPAN 3760 - Special Topics in Translation

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: This is a specialized course that offers in-depth studies in selected topics, current developments or recent trends in the fields of Translation and Translation Studies.

Pre-requisite(s): SPAN 3060

SPAN 3850 - Study Abroad

Credits: (1-6)

Description: (IM=Intermediate Mid) Language and culture studies for students whose language proficiency is Intermediate Low to Intermediate High. All Intermediate and Advanced tasks will be performed in the target language. All Superior tasks may be performed in English. Prior travel experience does not apply. May be repeated up to 10 times for credit.

Pre-requisite(s): SPAN 3060

SPAN 4190 - Foreign Language Journal

Credits: (3)

Course Fee: \$2.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) For foreign language students in the fourth year who work on publishing the foreign language literary journal. Includes selecting articles, editing and preparing journal layout.

Pre-requisite(s): SPAN 3060

SPAN 4570 - Special Topics in Culture

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Course fees contribute to the maintenance and enhancement of technology in the active learning classroom (EH 408), the World Languages and Cultures (WLC) tutoring space, and other regular classrooms, ensuring a high-quality learning environment for students.

Description: (Intermediate High-Advanced Low) Course content may vary depending on the selected special focus. In-depth studies in areas such as culture, history, geography, social customs, fine arts, and civilization.

Pre-requisite(s): SPAN 3060.

SPAN 4690 - Special Topics in Literature

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) Detailed analysis of a particular body of literature. For students whose proficiency in the target language is at least Intermediate High. Prerequisite: SPAN 3160 May be repeated up to 10 times under different titles.

Pre-requisite(s): SPAN 3060

SPAN 4710 - Business Language II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate High) Advanced Business Language and Practices.

Pre-requisite(s): SPAN 3060

SPAN 4720 - Medical Spanish II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Course fees contribute to the maintenance and enhancement of technology in the active learning classroom (EH 408), the World Languages and Cultures (WLC) tutoring space, and other regular classrooms, ensuring a high-quality learning environment for students.

Description: This course is a continuation of SPAN 3720. It focuses on practical vocabulary, idiomatic expressions, professional terminology, and cultural interactions for the medical professions.

Pre-requisite(s): SPAN 3060 and SPAN 3720.

SPAN 4740 - Translation II

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) Development of techniques and skills needed for bilingual translation of non-fiction texts. Emphasis will be on the translation into the target language. Methods of contrastive linguistics to analyze pertinent aspects of language structure, involving syntax, vocabulary and style, as well as basic theoretical-historical concepts are employed. Students are given ample opportunity to apply these techniques and concepts through a series of written translation assignments, which form the basis for class discussion. Prerequisite/Co-requisite: FL 3740 is strongly advised, but not required.

Pre-requisite(s): SPAN 3060

SPAN 4770 - Medical Translation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Course fees contribute to the maintenance and enhancement of technology in the active learning classroom (EH 408), the World Languages and Cultures (WLC) tutoring space, and other regular classrooms, ensuring a high-quality learning environment for students.

Description: This is a specialized course that offers in-depth studies in the current developments and recent trends in the field of medical translation.

Pre-requisite(s): SPAN 3060.

SPAN 4830 - Directed Readings

Credits: (1-3)

Description: (IH=Intermediate High) Independent readings under the direction of a faculty member.

Pre-requisite(s): SPAN 3060

May be repeated up to 10 times.

Note: Check with Department for course availability.

SPAN 4850 - Study Abroad

Credits: (3)

Description: (A=Advanced) Language and culture studies for students whose language proficiency is Advanced or Superior. All tasks are performed in the target language. Prior travel experience does not apply.

Pre-requisite(s): SPAN 3060

SPAN 4960 - Senior Project

Credits: (3)

Course Fee: \$6.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IH=Intermediate High) For students completing a major with Departmental Honors. Before registration in this course, students must work with a faculty advisor to define the project, create a contract and schedule, and determine the appropriate number of credit hours.

Pre-requisite(s): SPAN 3060

SPAN 5740 - Advanced Principles of Translation Theory and Practice

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course studies the theoretical foundations and practices of translation over the past twenty centuries. The course examines the major ideas that have informed the practice of translation, as well as the notions of originality, authorship, and linguistic and cultural boundaries.

SPAN 5750 - Advanced Healthcare Interpreting

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course provides an advanced focus on the techniques and skills needed for bilingual interpretation in the healthcare professional setting, including specialized medical interpreting sub-fields and their respective terminologies. The course studies the code of ethics and the standards of practice, as well as an overview and history of the interpreting industry and work of interpreters, certification, and the variety of consumers and modalities with which interpreters work.

SPAN 5760 - Advanced Topics in Translation

Credits: (3)

Typically Taught Spring Semester: *Full Sem-Online*

Description: This is a graduate specialized course that offers advanced studies in selected topics, current developments or recent trends in the fields of Translation and Translation Studies.

SPAN 5920 - Advanced Translation Workshop

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem-Online*

Description: This course provides an advanced focus on the practice and evaluation of translation. Students will get hands-on experience with translation strategies and techniques, different text types, diverse genres and topics, and post-editing procedures. Students will complete interlingual translation exercises workshopped in small groups and will develop quality control competencies through peer reviews.

SW 1010 SS CEL - Introduction to Generalist Social Work

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, 1st Blk, Online*

Typically Taught Spring Semester: *Full Sem, 1st Blk, Online*

Description: A generalist introduction to the relationships between social systems (individuals, groups, and communities) and the social welfare networks which impact them, including the role of the social work profession. Open to all Weber State University students.

SW 2100 SS - Human Behavior and the Social Environment I

Credits: (3)

Typically Taught Summer Semester: *1st Blk Online*

Typically Taught Fall Semester: *Full Sem, 2nd Blk, Online*

Typically Taught Spring Semester: *Full Sem, 2nd Blk, Online*

Description: This is the first course in the Human Behavior and the Social Environment sequence. It identifies the relationships between human developmental stages (from conception to death) and the problems associated with environmental interactions. Systems and theory are examined in the biological, psychological, and sociological arenas.

Pre-requisite(s): (It is recommended for Social Work Majors that SW 1010 be taken before or concurrently with SW 2100. It is also suggested that ZOOL 1020 be taken before or concurrently with SW 2100.)

SW 2200 SS/CC - Issues in Diversity

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A study of diversity among individuals, groups, communities, and of issues social workers will need to understand when interfacing with diverse populations.

SW 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed. Please check with the department for availability.

SW 3000 - Death and Dying

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An in-depth study of death, death-related issues and social institutions and practices dealing with death in American society, with special emphasis on the social processes surrounding death and constructive responses to death and dying.

Cross-listed with GERT 3000.

SW 3100 - Human Behavior and the Social Environment II

Credits: (2)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This second course in the Human Behavior and the Social Environment sequence is designed to present basic principles and fundamental concepts necessary for acquiring and organizing knowledge for practice with individuals, families, groups, organizations, and communities and on the interaction among these systems. Alternative paradigms on human behavior and the social environment are also explored.

Pre-requisite(s): SW 1010, SW 2100 and formal admittance to the Social Work Program.

SW 3120 - Aging: Adaptation and Behavior

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An examination of the physical and psychological processes of aging. The emphasis is upon behavioral and social adaptation to these processes.

Cross-listed with GERT 3120.

SW 3200 - Child and Family Welfare

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A historical and contemporary examination of child and family welfare issues, and social work intervention strategies.

Pre-requisite(s): SW 1010.

SW 3320 - Ethnicity and Older Women in the American Society

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: The importance of special populations (ethnic, racial and women) as they relate to the aging process.

Cross-listed with GERT 3320.

SW 3500 - Social Welfare & Gerontological Policy Development and Service

Credits: (3)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: The history, mission, philosophy and human service aspects used in the development of social work/gerontology as a profession will be covered. Examples of social, public and social welfare policy will be identified and studied. Knowledge of local, state, and federal legislation, professional organizations, and membership organizations will assist in review of lobby, funding and implementation practices used in meeting human service needs. Methods for the political and organizational analysis of processes and policy will be covered.

Pre-requisite(s): SW 1010 or GERT 1010. (SW/GERT 3500 must be completed before entering Field Practice.)

SW 3600 - Social Statistics**Credits: (3)****Typically Taught Summer Semester:** *Online***Typically Taught Fall Semester:** *Full Sem, 1st Blk, Online***Typically Taught Spring Semester:** *Full Sem, 2nd Blk, Online*

Description: Introduction to analysis and presentation of data.

Pre-requisite(s): Meet WSU Quantitative Literacy requirement.

Cross-listed with GERT 3600.

SW 3700 - Social Work Research**Credits: (3)****Typically Taught Fall Semester:** *Full Sem, 2nd blk***Typically Taught Spring Semester:** *Full Sem, 1st Blk*

Description: Social work research and its relationship to social work theory and practice. The class will include content on qualitative, quantitative and single system research methodologies; analysis of data, including statistical procedures; systematic evaluation of practice; analysis and evaluation of theoretical bases, research questions, methodologies, statistical procedures, and conclusions of research reports; and relevant technological advances. The course will also identify how the research curriculum contributes to the student's use of scientific knowledge for practice.

Pre-requisite(s): SW 1010. (Must be completed before entering SW 4861.) Recommended prerequisite: completion of social statistics class.

SW 3800 - Writing in Social Work**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: This course is designed to help students develop and sharpen professional writing skills and become more effective in various forms of written communication in social work and the broader social welfare delivery system. The course will offer an in-depth overview of APA writing style guidelines and apply these, as appropriate, in the preparation of written documents common in professional practice in social and behavioral sciences.

Pre-requisite(s): University Composition (ENGL 2010 or equivalent).

Suggested Requisite(s): (It is recommended that this course be taken concurrently with SW 3700 and/or SW 4860.)

SW 3900 - Social Work Methods, Values, and Ethics**Credits: (3)****Typically Taught Summer Semester:** *1st Blk***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: An ecological system and generalist approach to social work practice methods. Content is germane to

various systems and subsystems typically implicated in problems encountered by social workers. A study of values and ethics will assist the social worker to understand the proprieties of professional practice.

Pre-requisite(s): SW 1010, SW 2100, SW 2200 and formal admittance to the social work program. (May be taken prior to or concurrently with SW 3910.)

SW 3910 - Social Work Practice I

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An intensive knowledge-based generalist course concentrating on micro social work intervention skills combining lecture and hands-on experiences.

Pre-requisite(s): Formal admittance to the social work program.

Suggested Requisite(s): (May be taken prior to or concurrently with SW 3900.)

SW 3920 - Social Work Practice II

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A generalist course directed at understanding and demonstrating the principles, concepts and techniques of planned change in mezzo settings including families and small groups.

Pre-requisite(s): SW 3910.

Co-Requisite(s): SW 3930 and SW 4860.

SW 3930 - Social Work Practice III

Credits: (3)

Typically Taught Summer Semester: *2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A generalist course designed to illustrate the principles, concepts and techniques of planned change in macro settings including institutions, organizations, and communities.

Co-Requisite(s): Must be taken concurrently with SW 3920 and SW 4860.

SW 4140 - Perspectives on Drug Use and Substance Abuse

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course examines drug use and substance abuse across the lifespan and addresses issues such as prevention, treatment, and public policy as they affect and relate to individuals, groups, families, organizations, and communities. Course material draws on current research, theory, and practice experience.

SW 4150 - DSM-5

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This elective course is designed to familiarize the student with the Diagnostic Statistical Manual of

Mental Disorders (DSM-5 classification). The DSM-5 provides the practitioner with a systematic diagnostic tool for practice and research.

SW 4220 - Societal Responses to Aging

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course is designed to cover aspects of retirement relating to job change or discontinuance. The processes, events, social roles, and phases of life will be presented.

Cross-listed with GERT 4220.

SW 4240 - Introduction to TeleMental-Health

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course explores technology-based mental health, substance abuse treatment, and social service delivery. The course addresses the topic broadly, covering topics such as online tools and technologies, professional ethics, legal considerations, diversity and access, quality assurance, etc. The purpose is to introduce students to the current status and future outlook of web-based mental health and social service delivery.

SW 4250 - Medical Social Work

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This elective course explores the process and dynamics of the provision of social work services within the medical service delivery system.

SW 4265 - Crisis Intervention and Trauma

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is designed to prepare students to develop assessment, diagnostic, and evidenced-based interventions to assist those in critical need during and after a crisis or trauma. A crisis is defined as an event that exceeds and overwhelms an individual's coping skills to the point where equilibrium is disrupted. Successful completion of this course qualifies for the Crisis Worker Certificate through the state of Utah.

Pre-requisite(s): Junior or senior status and at least one of the following: CHF 1500, GERT 1010, HLTH 1030, NRSW 2200, PSY 1010, SOC 1010, SW 1010; OR instructor permission.

SW 4500 - Interventions for Populations at Risk

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: A course designed to study populations at risk with an emphasis on women and people of color. Interventions to alleviate conditions of human suffering are stressed.

Pre-requisite(s): SW 3910, SW 4860.

SW 4600 - Social Work in Special Settings

Credits: (2-4)**Variable Title**

Description: This elective course is designed to accommodate special topic areas in Social Work practice.

May be repeated once for a maximum of 4 credits.

Note: This course is offered as needed. Please check with the department for availability.

SW 4650 - Retirement: Adjustment/Planning**Credits: (3)**

Typically Taught Summer Semester: *Full Sem*

Description: This course is designed to cover aspects of retirement relating to job change or discontinuance. The processes, events, social roles, and phases of life will be presented.

Cross-listed with GERT 4650.

SW 4800 - Projects and Research**Credits: (1-3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This elective course allows for supervised projects and primary research in various areas of social work. Limited to senior students.

Pre-requisite(s): Consent of department chair.

May be repeated up to 2 times for a maximum of 3 credits.

Note: Check with department for course availability.

SW 4810 - Experimental Course**Credits: (1-6)****Experimental**

Description: Consult the semester schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed. Please check with the department for availability.

SW 4830 - Directed Readings**Credits: (1-3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This elective course is an individual readings for seniors who are majoring in social work. Permission must be obtained from the instructor. Students are required to complete a minimum of 1000 pages of selected readings per class hour requested for credit.

Pre-requisite(s): Consent of department chair.

May be repeated up to 2 times for a maximum of 3 credits.

Note: Check with department for course availability.

SW 4850 - Social Work Study Abroad**Credits: (1-4)**

Description: The purpose of this course is to provide opportunities for undergraduate students in social work to experience study abroad or study away programs that are designed to explore issues relevant to undergraduate-level

social work theory and practice with individuals, families, groups, communities, and organizations.

Pre-requisite(s): SW 1010 or instructor approval.

SW 4860 INT - Social Service Field Experience I

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This field practice course requires a minimum of 200 hours of supervised field service in an approved social service agency. The emphasis is to include micro, mezzo, and macro practice opportunities.

Pre-requisite(s): SW 2200, SW 3100, SW 3200, SW 3500, SW 3900 and SW 3910. Formal admittance to Field Experience required.

Suggested Requisite(s): (Must be taken concurrently with SW 3920 and SW 3930.)

SW 4861 INT - Social Service Field Experience II

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This field practice course requires a minimum of 200 hours of supervised field service in an approved social service agency. The emphasis is to include micro, mezzo, and macro practice opportunities.

Pre-requisite(s): SW 3700, SW 4860, SW/GERT 3600 (or equivalent).

Co-Requisite(s): (To be taken concurrently with SW 4990).

SW 4920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed. Please check with the department for availability.

SW 4990 - Social Work Senior Seminar

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course requires preparation and discussion of social work concepts and topics, and information and techniques in obtaining a job and selecting a graduate school.

Pre-requisite(s): SW 4860. (Must be taken concurrently with SW 4861.)

SW 5010 - Professional Development: Human Development in the Social Environment

Credits: (3)

Description: This professional development course is designed for non-social work majors who have or wish to have experience in the delivery of social services. The course explores human development in the context of the broader social environment. It identifies the relationship between human developmental stages (from conception to death) and the problems associated with environmental interactions. Systems and theory are examined in the biological,

psychological, sociological, and spiritual arenas. *Credit/No credit.*

Note: This course is offered as needed. Please check with the department for availability.

SW 5020 - Professional Development: Social Welfare Policy

Credits: (3)

Typically Taught Spring Semester: *1st Blk*

Description: This professional development course is designed for non-social work majors who have or wish to have experience in the delivery of social services. The history, mission, philosophy and human service aspects used in the development of social welfare policy will be covered. Examples of social, public, and social welfare policy will be identified and studied. Knowledge of local, state, and federal legislation, professional organizations, and membership organizations will assist in review of lobbying, funding, and implementation practices used in meeting human service needs. Methods for the political and organizational analysis of processes and policy will be covered. *Credit/No credit.*

SW 5030 - Professional Development: Social Work Ethics and Practice Methods

Credits: (3)

Typically Taught Spring Semester: *2nd Blk*

Description: This professional development course is designed for non-social work majors who have or wish to have experience in the delivery of social services. Using an ecological and generalist approach to social work practice at the individual, family, group, organization, and community levels, this course provides training in a planned client change process and considers social work roles at various levels. A significant focus of this course is the study of the application of key values and ethical principles, as defined by the National Association of Social Workers (NASW), to professional practice and the resolution of ethical dilemmas. The course also includes content on the evaluation of practice and programs. *Credit/No credit.*

THEA 1013 CA - Introduction to Theatre

Credits: (3)

Typically Taught Summer Semester: *Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: An introduction to live theatre and drama and the creative heritage of theatre. Students will develop critical awareness of dramatic theory and performance practice through reading and evaluating historical and contemporary drama, and through applied creative activities. Students are expected to attend theatre performances outside of regularly scheduled class time. Note: Theatre majors are required to enroll in the face-to-face class, not the online section.

THEA 1023 CA - Introduction to Film

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: Examination and analysis of film and film techniques. Students will develop critical awareness of film as an artistic, social, and cultural phenomenon. Students may be required to attend film screenings outside of the

regularly scheduled class time.
Note: A lab fee is required for this class.

THEA 1030 - Voice and Movement for the Actor

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: Natural resources of the human voice and body are studied as artistic resources for the performing artist. The course is designed to examine both the process and products of vocal and physical dynamics. The goal of this course is to integrate vocal and physical skills into the working process of the actor.

THEA 1033 CA - Introduction to Acting

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: This is an introductory class where students learn basic acting skills through class participation in improvisation, monologue work, and scene study. Students learn a basic understanding of theories and methodologies. Skills demonstrated in areas of body movement, diction, observation, imagination and "action". (For non-theatre majors).

Note: Note: Theatre majors are strongly encouraged to enroll in the "majors only section" offered spring semester and concurrently enroll in THEA 1713.

THEA 1043 CA - Introduction to American Musical Theatre

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: An introduction to American Musical Theatre, its history and creative elements. Students will develop critical awareness of the differences between traditional and musical theatre by becoming actively involved in reading, observing, and analyzing musical theatre.

Note: Note: Musical Theatre majors are strongly encouraged to enroll in this class fall semester.

THEA 1051 - Freshman (New Student) Seminar

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: An introduction to the Theatre Arts Area devoted to the needs of incoming majors, including: faculty and staff introductions and theatrical personnel responsibilities, audition notices and practices, production and

Practicum assignments, and opportunities available within the facility. Includes detailed academic advice for majors and minors, and practical methods of library research for theatre topics at WSU.

THEA 1053 - Introduction to Technical Production

Credits: (3)

Description: An introduction to the production components of live theatre in which students will develop an awareness of technical aspects including scenery, lighting, costume, properties and sound. Students are expected to attend theatre performances outside of regularly scheduled class time. This course is recommended for non-theatre majors and minors.

THEA 1063 - Theatre Foundations

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: An introduction to live theatre and drama and the creative heritage of theatre. Students will develop critical awareness of dramatic theory and performance practice through reading and evaluating historical and contemporary drama, and through applied creative activities. This course serves as an introduction to the Theatre area of the Department of Performing Arts, the requirements, and the curriculum. Students are expected to attend theatre performances outside of regularly scheduled class time.

THEA 1075 - Class Voice for Musical Theatre

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: This course will serve as a preparation for private vocal instruction, departmental production auditions, and the application audition in the musical theatre program. While all theatre majors are welcome to take the course, it's geared specifically for incoming freshman musical theatre applicants. The instruction will cover basic singing technique and an introduction to acting a musical theatre song.

Pre-requisite(s): Must be a theatre major or minor.

May be repeated once up to 2 credit hours.

THEA 1143 - Musical Theatre Musicianship I

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: This course is an introduction to musicianship for Musical Theatre artists. It focuses directly on the skills necessary for success in live musical theatre, namely, note and rhythm recognition, keyboard skills, chords, and basic theory.

Pre-requisite(s): THEA 1063.

THEA 1220 - Acting I

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: Required for Theatre Performance and Teaching Majors. Non-majors should enroll in THEA CA

1033. Students in this course will demonstrate a knowledge of and an ability to integrate fundamental acting principles and analysis skills into performance. Students will develop professional work habits of dependability, promptness, cooperation, a sense of ensemble, and the ability to make independent choices.

Pre-requisite(s): THEA 1030, THEA 1063.

THEA 1223 - Stage Makeup

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$16.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology. The course fee associated with this class pays for demonstration supplies and some of the material needed for makeup applications.

Description: A practical investigation of stage makeup techniques and skills of design and application.

Note: A lab fee is required for this class.

THEA 1513 - Stagecraft

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$36.00

Description: Introduction to stage scenery: lecture/demonstration of basic materials, shop and stage equipment, construction principles, and elementary technical drawing and design procedures.

THEA 1713 - Script Analysis

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: An introductory course focusing on plot, character, language, and thematic analysis of varied historical and modern performance texts in the context of contemporary staging practice. This course teaches play analysis from a practical perspective. For students who intend to perform, direct, and design within the collaborative production process.

THEA 1810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

THEA 2022 - Costume Fundamentals

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$36.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology. The course fee associated with this course pays for the basic sewing materials needed, such as muslin, thread, scissors, fabric dye, millinery supplies, pattern making supplies, and weaving supplies.

Description: Introduction to stage costume: with lectures, demonstrations and projects to introduce the basic

materials, fabrics, costume construction methods, costume history, and design principles and procedures for theatrical costumes. A lab fee is required for this class for costume studio materials.

THEA 2033 - Acting II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: For the intermediate and advanced student actor, this course places primary emphasis on the development of characterization techniques through participation in physical and vocal exercises. Focus will be on a variety of stylistic scene work including Greek Theatre and Shakespeare.

Pre-requisite(s): THEA 1030, THEA 1220, and by audition.

THEA 2203 - Costume Technology

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$36.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology. The course fee associated with this course pays for the basic sewing materials needed, such as muslin, thread, scissors, fabric dye, millinery supplies and pattern making supplies.

Description: A practical exploration of the research and construction techniques used to create contemporary and historic costumes for the stage. A lab fee is required for this class for costume studio materials.

Suggested Requisite(s): THEA 2022.

Note: Typically Taught Spring of even years.

THEA 2330 - Dramaturgy and Criticism

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: This course will be a practical study of the role and duties of a dramaturg in a production as well as a critic reviewing a finished work. Work will include all facets of dramaturgy: historical research, script analysis, audience outreach, and lobby displays. A completed Dramaturgy workbook for a proposed play or practical work on a department play will be the final assignment.

This course may be repeated once up to 6 credit hours.

THEA 2403 - Stage Management

Credits: (3)

Typically Taught Fall Semester: *Full Sem Odd Years*

Course Fee: \$6.00

Course Fee Purpose: The course fee for this class will be used to pay for the IAVM Crowd Manager Training Course for each student. This training is part of an update in the curriculum of the class and is used to help train students who will be managing crowds during their time working on shows at Weber State and in their future carriers. It is also required for some of their responsibilities relating to course assignments.

Description: A practical study of stage management techniques necessary for efficient theatre production. A conceptual overview of the rehearsal and performance process will be stressed, including an overview of management

techniques as applied to the performing arts in general. Front of house management and company management will be studied.

THEA 2443 - Acting for Musical Theatre

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: A practical study of acting methods unique to the discipline of musical theatre. Emphasis will be placed on the interpretation of modern musical theatre, literature through imagery, action, characterization, and analysis of the score and libretto.

Pre-requisite(s): THEA 2033 and admittance to the Musical Theatre program.

THEA 2450 - Lighting Fundamentals

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$21.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the lighting lab including replacing gels, gobos, software updates for the lighting consoles, bulbs, and lighting instruments.

Description: This introductory course gives students a foundation in lighting design for the stage. Students will develop an ability to "see" light in new ways, both natural and artificial, and the role light plays in storytelling and on the overall composition of the visual world of the performing arts. Students will also learn technical aspects of lighting equipment, control systems, and computer drafting.

THEA 2515 - Rendering and Modeling

Credits: (3)

Typically Taught Spring Semester: *Even Years Full Sem*

Description: An introduction to the tools and techniques used in drawing, rendering and modeling for theatrical designers, covering both traditional and modern techniques for scenic, costume and light renderings.

THEA 2574 - Drafting for Theatre

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: An introduction to AutoCAD and its use in the design and building of theatrical productions. Students will use tools for laser cutting and 3D printing to create production materials, props, and pieces.

THEA 2580 - Creative Computing for Theatre Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: The class provides an introduction to several important computer programs used in the performing arts industry. Skills learned are applicable across various design, technical, and educational fields, and each student develops their own individual capstone project tailored to their specific learning goals. Programs learned may include the following: Vectorworks, Lightwright, Qlab, Isadora, and Adobe Suite.

THEA 2581 - Adobe Suite for Theatre Design

Credits: (3)

Typically Taught Spring Semester: *Even Years Full Sem*

Description: In this class students learn Photoshop, Illustrator and InDesign for theatre-relevant applications like creating paper props, editing photos for promotional materials, creating custom fabric patterns, producing photo-realistic rendering of sets and costumes, creating social media posts, portfolios, programs, and other applications.

THEA 2713 INT - Teaching Theatre in the Secondary School

Credits: (3)

Typically Taught Fall Semester: *Full Sem even years*

Description: Application of pedagogy to teaching theatre arts in secondary schools. Requires field experiences supervised by Theatre Arts Faculty.

THEA 2821 HU - Period Styles in Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A survey of the history of Western Art, including architecture, clothing, music, art, and decorative arts for the theatre.

THEA 2851 - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a design, technical, or management production position relating to: Stage Management, Lighting Design, Costume Design, Scenic Design, Props Design, Sound Design, Dramaturgy, Technical Direction, Choreography, House Management. May be repeated up to 3 times for credit.

THEA 2852 - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a design, technical, or management production position relating to: Stage Management, Lighting Design, Costume Design, Scenic Design, Props Design, Sound Design, Dramaturgy, Technical Direction, Choreography, House Management. May be repeated up to 3 times for credit.

THEA 2853 - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory.

The student will develop skills and abilities for the theatre through supervised experience in a design, technical, or management production position relating to: Stage Management, Lighting Design, Costume Design, Scenic Design, Props Design, Sound Design, Dramaturgy, Technical Direction, Choreography, House Management.
May be repeated up to 3 times for credit.

THEA 2854 - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a design, technical, or management production position relating to: Stage Management, Lighting Design, Costume Design, Scenic Design, Props Design, Sound Design, Dramaturgy, Technical Direction, Choreography, House Management.
May be repeated up to 3 times for credit.

THEA 2855 - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a design, technical, or management production position relating to: Stage Management, Lighting Design, Costume Design, Scenic Design, Props Design, Sound Design, Dramaturgy, Technical Direction, Choreography, House Management.
May be repeated up to 3 times for credit.

THEA 2856 - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a design, technical, or management production position relating to: Stage Management, Lighting Design, Costume Design, Scenic Design, Props Design, Sound Design, Dramaturgy, Technical Direction, Choreography, House Management.
May be repeated up to 3 times for credit.

THEA 2857 - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a design, technical, or management production position relating to: Stage Management, Lighting Design, Costume Design, Scenic Design, Props Design, Sound Design, Dramaturgy, Technical Direction, Choreography, House Management.
May be repeated up to 3 times for credit.

THEA 2858 - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a design, technical, or management production position relating to: Stage Management, Lighting Design, Costume Design, Scenic Design, Props Design, Sound Design, Dramaturgy, Technical Direction, Choreography, House Management. May be repeated up to 3 times for credit.

THEA 2859 - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a design, technical, or management production position relating to: Stage Management, Lighting Design, Costume Design, Scenic Design, Props Design, Sound Design, Dramaturgy, Technical Direction, Choreography, House Management. May be repeated up to 3 times for credit.

THEA 2920 INT - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

THEA 3033 - Advanced Acting

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: Introduces students to the techniques required to perform in various styles encountered in contemporary theatre, from Greek tragedy to the most modern forms. Includes two arranged studio hours per week.

Pre-requisite(s): THEA 2033, and by audition.

THEA 3070 - Voice and Movement for the Actor II

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: An intermediate continuation of intensive voice and movement training for the actor, strong focus in movement and voice for extension of range and availability and for character development. Intermediate development and conditioning of the actor's voice and body with emphasis on dialect work and stylized movement.

Pre-requisite(s): THEA 1030.

This course may be repeated once up to 6 credit hours.

THEA 3100 - Projection Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Description: This course is a practical application of the tools and processes essential to creating projection designs for theatre, dance, and live events. This course also examines the history of projection design in theatre performance leading up to current practices. Students will learn script analysis and storytelling as well as the tools and technology used in the industry today. Programs learned include QLab, Isadora, and Lightform.

Note: Typically Taught Spring of odd years.

THEA 3103 INT - Directing I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: This course explores the process of directing plays for the stage. Studio exercises and discussions develop skills in key areas: interpretation of form and artistic intent; perception and sensibility in rehearsal, effective communication with actors, and balancing the interplay between action and text.

Pre-requisite(s): THEA 1063, THEA 1713, and THEA 1033 or THEA 1220.

Suggested Requisite(s): At least one Theatre Design Course is recommended prior to taking this course.

THEA 3113 - Acting for the Camera

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: This course introduces students to the foundational skills of acting specifically for the camera. Students will develop techniques in concentration, relaxation, sensory awareness, voice, and movement, adapting stage performance for an on-camera context. Script analysis, audition techniques, and on-camera rehearsal methods will be covered.

THEA 3116 - Auditioning

Credits: (2)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Description: Allows for the advanced study of a changing series of pertinent theatre topics. All Special Studies in Theatre courses are half-semester.

The maximum time a student can repeat this class for credit is four times.

THEA 3143 - Musical Theatre Musicianship II

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: This course builds on the skills learned in THEA 1143 - Musical Theatre Musicianship I and further teaches sight-singing, music notation, chord structure, music terminology/vocabulary, and performance skills.

Pre-requisite(s): THEA 1143.

THEA 3203 - Costume Technology II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: The course fee associated with this course pays for the basic sewing materials needed, such as muslin, thread, scissors, fabric dye, millinery supplies, pattern-making supplies, and weaving supplies.

Description: An advanced exploration of the research and construction techniques used to create contemporary and historic costumes for the stage.

Pre-requisite(s): THEA 2203 and THEA 2022.

THEA 3212 - Scenic Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$36.00

Course Fee Purpose: The course fee associated with this course pays for the basic scenic materials needed, such as foam core, bristol board, balsa, paint, and other supplies associated with theatrical model making.

Description: Scenic Design will provide a practical exploration of the methods and materials of scenic design for the theatre. The course includes instruction in script analysis for design, visual research, conceptual sketching, rendering, and modeling of scenic concepts for a variety of production types and styles.

Note: Class meets the 2nd block of spring semester every even-numbered year.

THEA 3222 - Lighting Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Course Fee: \$21.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the lighting lab including replacing gels, gobos, software updates for the lighting consoles, bulbs, and lighting instruments.

Description: This course will be an advanced exploration of lighting design for theater. This course is a practical exploration of the equipment, materials, and design processes of stage lighting and stage lighting design.

Pre-requisite(s): THEA 2450.

May be repeated twice with a maximum of 6 credit hours.

THEA 3232 - Scenic Art and Painting

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$36.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: An introduction to the role of the scenic artist in the theatrical process, as well as applied training in basic scene painting/scenic artist techniques for theatre. Texture, faux finishes, and detailing lessons are applied in a variety of scenic projects including wallpaper, bricks, rocks, wood grain and molding, marble, and foliage, culminating in a final project designed to showcase your mastery of painting techniques and the compilation of a basic portfolio of scenic artistry.

Note: Typically Taught Spring of even years.

THEA 3233 - Prop Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A studio course in the process and techniques of prop making techniques. Tools, materials, building, and painting techniques will be demonstrated by the instructor and explored and executed by the student. This course not only places emphasis on artist ability but time management, critical thinking, and problem solving as well.

Pre-requisite(s): THEA 1513.

THEA 3243 - Costume History

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: A study of fashion from ancient Egypt to the 20th century in relation to stage applications and contemporary fashion. Students will gain a basic understanding of major periods in Western clothing history as well as the interrelationship of clothing and culture and a working ability to research clothing of any culture or era.

THEA 3253 - Wig Design & Construction

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: The course fee associated with this course pays for the basic sewing materials needed, such as thread, scissors, dye, tape, pattern-making supplies, wig kits, wig fronts, and weaving supplies.

Description: An exploration of the research and construction techniques used to create wigs for the stage.

Pre-requisite(s): THEA 1223.

THEA 3303 - History and Literature of Theatre I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: Examines the history of theatre and performance globally, from the beginning of recorded time through the English Restoration. The class encompasses important dramatic texts, theoretical lenses, as well as the history and historiography of Theatre. Students are expected to conduct individual historical research.

THEA 3313 - History and Literature of Theatre II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: Examines the history of theatre and performance globally, from the 1700s through Modernism. The class encompasses important dramatic texts, theoretical lenses, as well as the history and historiography of Theatre. Students are expected to conduct individual historical research.

THEA 3323 - History and Literature of Contemporary Theatre

Credits: (3)

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: A survey of theatre history and literature that will study theatre from the 20th century and into the present time. Specific attention will be given to the plays and producing organizations of minorities and other underrepresented groups.

THEA 3340 - Theatre Management

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: An overview of theatre management techniques that includes all the operating functions such as marketing, promotion, fundraising, accounting and personnel management. A functional business plan for a Theatre is the culminating experience of this course.

THEA 3343 - History & Literature of Musical Theatre

Credits: (3)

Typically Taught Spring Semester: *Full Sem even years*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: A study of musical theatre from the origins of Opera through contemporary musical theatre. Cultural connections are emphasized through examination of book, score and performance.

Pre-requisite(s): admittance to the Musical Theatre program.

THEA 3350 - Marketing and Communication for the Arts

Credits: (3)

Typically Taught Fall Semester: *Full Sem odd years*

Description: This class explores the dynamics of marketing and communication across dance, music, and theatre. The emphasis is on practical application of course content to enhance students' future roles in a variety of arts related careers.

THEA 3440 - Dance for Musical Theatre I

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: This fee is to support instructional technology in the classroom.

Description: This course provides intensive training in musical theatre dance, combining dance conditioning, cardio-strength exercises, and visits to Swenson Gym to enhance stamina, flexibility, and muscle strength. Through focused practice in ballet, jazz, and contemporary techniques, students will build precision, alignment, and breath control while learning injury-prevention methods to support joint stability and core strength. By course end, students will be physically prepared for the demanding nature of musical theatre performance, equipped to perform with power, endurance, and resilience.

May be repeated four times for a maximum of two credit hours, but use toward Major/Minor must be approved by program advisor.

THEA 3441 - Dance for Musical Theatre II

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: This course deepens students' proficiency in musical theatre dance through intensive training in style and technique. THEA 3441 rotates topics each semester: one semester focuses on Auditioning for Musical Theatre Dance, and the next semester focuses on Styles in Musical Theatre Dance* The Auditioning emphasis centers on building skills and confidence for dance auditions, while the Styles emphasis immerses students in key genres like jazz, Fosse, contemporary, tap, hip-hop, and partnering to develop a versatile dance foundation.

Pre-requisite(s): THEA 3440.

THEA 3443 - Scene Study for Musical Theatre

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: Advanced study of acting methods unique to the discipline of musical theatre. Emphasis will be placed on the interrelationship of characters through the use of duets, group scenes, and production numbers.

Pre-requisite(s): THEA 2443 and Admittance to the Musical Theatre program.

May be repeated two times for credit.

THEA 3500 - Sound Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Description: This class is an introduction to the art and craft of sound design for live theatre productions. This course covers script analysis and creative storytelling through sound, as well as the technical skills and application of the tools needed to effectively execute the design. Programs learned include Qlab and Vectorworks.

Note: Typically Taught Spring of even years.

THEA 3505 - Playwriting

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: This course will be a practical study of dramatic structure and the process of playwriting. Key components like theatricality, action, premise, and dialogue will be studied through application. Major projects will focus on the composition of ten minute plays. This class is writing intensive.

THEA 3525 - ArtsBridge

Credits: (1-6)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: ArtsBridge is a course that provides undergraduate students with an internship and academic credit for designing and implementing a comprehensive, needs-based, integrated arts project with community organizations or area schools. ArtsBridge students will work closely with a WSU faculty mentor, community/school stakeholder,

peers, and the ArtsBridge program coordinator throughout the process culminating in the development of an arts integrated project.

Pre-requisite(s): Recommendation by education supervisor in fine arts content area faculty mentor. Content methodology course(s) completed or in progress.

Note: Following faculty recommendation, please contact the ArtsBridge coordinator for an interview.

THEA 3651 - Musical Theatre Repertoire

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Advanced study of standard musical theatre repertoire, audition techniques and the business of musical theatre.

Pre-requisite(s): THEA 2443.

May be repeated for a total of four semester hours.

THEA 3810 - Experimental Course

Credits: (1-6)

Experimental

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

THEA 3991 - Junior Seminar

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: A colloquium that draws theatre students from various interests together in a mutual exploration of theatre research, production, and planning for employment opportunities and graduate study.

Pre-requisite(s): Theatre major - junior standing.

THEA 4002C - Special Studies in Theatre: Stage Combat

Credits: (2)

Description: Physical training in the art and craft of stage combat. Emphasis is on safe application of technique to choreograph stage fights. All Special Studies in Theatre courses are half-semester.

May be repeated up to two times.

THEA 4002D - Special Studies in Theatre: Auditioning

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$4.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: A practical exploration of professional audition techniques including cold reading, prepared

monologues, improvisation and portfolio preparation.

Pre-requisite(s): THEA 1033 or THEA 1220.

Repeatable two times for credit.

Note: Typically Taught Spring of Odd Years.

THEA 4002H - Special Studies in Theatre: Contemporary Topics

Credits: (2)

Description: A diversified exploration of pertinent theatre topics. May be repeated for upper division credit. All Special Studies in Theatre courses are half-semester.

May be repeated up to two times.

THEA 4103 INT - Directing II

Credits: (3)

Typically Taught Spring Semester: *Full Sem odd years*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: Advanced theory and application of directing approaches.

Pre-requisite(s): THEA 3103, and by audition.

Note: Offered spring semester every odd-numbered year.

THEA 4120 - Collaboration in the Theatre

Credits: (3)

Description: This class will help theatre students improve collaborative skills specific to production teams in the process of theatrical creation. Students will work in model production teams and explore different modes of communication and collaboration.

Pre-requisite(s): THEA 3103 INT - Directing I or THEA 4203 - Costume Design or THEA 3212 - Scenic Design or THEA 3222 - Lighting Design or THEA 3500 - Sound Design and instructor approval.

THEA 4143 - Directing for Musical Theatre

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: This course introduces students to the fundamentals of directing for musical theatre, focusing on the unique challenges of integrating storytelling, music, and staging. Students will explore key directing skills, including script analysis, working with actors on vocal and physical performance, and blocking musical numbers. Through hands-on projects, students will gain experience in developing character-driven interpretations and understanding the flow between scenes and songs. By the end of the course, students will have the foundational skills needed to bring a musical production to life with vision and coherence.

Pre-requisite(s): THEA 3103.

Note: Offered spring semester every even-numbered year.

THEA 4144 - Choreography for Musical Theatre

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Musical Theatre Choreography is an immersive course designed to equip students with the skills to

create and interpret choreography specifically for musical theatre. Students will explore the process of choreographing musical numbers, from concept development and staging to the refinement of movement styles and storytelling techniques. Emphasis will be placed on analyzing iconic choreographic styles and learning to adapt choreography for different character types, narratives, and ensemble configurations.

Pre-requisite(s): THEA 3440.

THEA 4203 - Costume Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$6.00

Course Fee Purpose: The course fee associated with this class pays for the maintenance of technology and materials.

Description: A practical application of the techniques of visual communication used to analyze characters, research, and create costume renderings for dramatic scripts.

Suggested Requisite(s): THEA 2022 and THEA 3243.

Note: Offered spring semester every even-numbered year.

THEA 4220 - Design Seminar

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: A flexible emphasis course devoted to the design processes of theatrical production; a forum through which advanced design students may further their interests and abilities in the design process and/ or portfolio development and presentation that will change in focus from student to student. THEA 4220 Design Seminar may be used as a capstone design project with faculty approval.

Pre-requisite(s): at least one Theatre Area design course - THEA 3212 or THEA 3222 or THEA 4203, and permission of the instructor.

Note: This class provides an opportunity for in-depth theatrical design work. Since there is only one formal design class in each of the design areas (costume, lighting, and scenery) students can continue their studies in Design Seminar. The course number stays the same from semester to semester but the content; the design projects changes each time. The maximum time a student can repeat this class for credit is eight times.

THEA 4230 - Performance Seminar

Credits: (1-3)

Typically Taught Fall Semester: *2nd Blk*

Course Fee: \$2.00

Course Fee Purpose: The course fee associated with this class pays for maintenance of the department lab and associated technology.

Description: A flexible emphasis course devoted to the acting and directing process of live theatrical production, a forum through which advanced performance students may further their interests and abilities in the acting/directing process that will change in focus from student to student. THEA 4230 Performance Seminar may be used as a capstone project with faculty approval.

Pre-requisite(s): THEA 1033, THEA 2033, THEA 3103 and permission of the instructor.

May be repeated twice with a maximum of 6 credit hours.

THEA 4250 - Music Direction Seminar

Credits: (1-3)**Typically Taught Spring Semester:** *Full Sem*

Description: A flexible emphasis course devoted to the music direction process of live musical theatre, a forum through which advanced Music Direction students may further their interests and abilities in a variety of topics that will change in focus from semester to semester and student to student. Possible topics may include pit conducting, music rehearsal strategies, and digital technology.

THEA 4270 - Dramatic Theory and Analysis**Credits: (3)**

Description: A study of dramatic theory from early Greek thinkers through contemporary theorists. The class will be based on reading primary and secondary texts and will class time will be spent on projects, activities, discussion, and lecture. Additional research assignments are required.

THEA 4603 - Creative Drama**Credits: (3)****Course Fee:** \$6.00

Course Fee Purpose: The course fee associated with this class pays for the maintenance of technology and materials.

Description: Theories and practices incorporating the techniques of creative drama into the elementary school curriculum. Especially recommended to students of elementary education, recreation, and social services.

THEA 4651 - Individual Training in Stage Voice**Credits: (1)****Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$445.00

Course Fee Purpose: The fee for these courses is used to compensate the instructor for teaching this class and overhead assessed by the university.

Description: Twelve individual lessons on vocal technique for the actor. A list of approved voice instructors is maintained in the department office. Students are responsible for contacting individual instructors to schedule lessons.

May be repeated up to nine times.

Note: The Musical Theatre students are required to complete Individual Training in Stage Voice a minimum of six times to complete their degree however it is not uncommon for students to take private voice lessons each semester they are enrolled. The maximum time a student can repeat this class for credit is eight times.

THEA 4652 - Individual Training in Music Direction**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$445.00

Course Fee Purpose: Private Instruction for the music and theater programs.

Description: Twelve individual lessons on Music Direction for Musical Theatre. A list of approved instructors is maintained in the department office. Students are responsible for contacting individual instructors to schedule lessons.

Note: The Musical Theatre: Music Direction Track students are required to complete Individual Training in Music Direction a minimum of seven times to complete their degree; however, it is not uncommon for students to take

private lessons each semester they are enrolled. The maximum number of times a student can repeat this class for credit is eight times.

THEA 4801 - College of Arts & Humanities Leadership Lecture Series

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: This one-credit elective course will give arts and humanities' majors the opportunity to interact with successful guest lecturers whose undergraduate backgrounds are in the arts and humanities. Lecturers will clarify how the talents and skills associated with their degrees have contributed to their pursuit of successful careers and lives.

THEA 4830 - Directed Readings

Credits: (1-3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Advanced level, independent study under the direction of faculty member.

Pre-requisite(s): Permission of supervising instructor required for credit.

May be repeated 8 times with a maximum of 9 credit hours.

THEA 4851 INT - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Hands on learning through involvement backstage on running crews, through studio work, acting in, or involvement in "front of house" operations for Weber State Theatre productions. To become a well-rounded theatre student, students are required to participate in the production of the departmental plays as often as their schedule allows. Since there are so many different learning opportunities in the theatre it is through Practicum that they are each exposed to the whole production process. There are 2 different Practicum course numbers, one for performance and the other for the design, technical, and management aspects of theatre. The course numbers stay the same from semester to semester but the content; the plays produced changes each time. Minimally students are required to enroll in a Practicum course 3 times to graduate, however since students are expected to be involved in the production of each play (2 per semester) then they should be completing 4 Practicums each academic year.

The maximum time a student can repeat this or any combination of THEA 4851 and THEA 4861 for credit is sixteen times.

THEA 4852 INT - Design/Tech Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Hands on learning through involvement backstage on running crews, through studio work, acting in, or involvement in "front of house" operations for Weber State Theatre productions.

May be repeated 9 times and receive up to 10 credits.

THEA 4853 INT - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Hands-on learning through involvement backstage on running crews, through studio work, acting in, or involvement in "front of house" operations for Weber State Theatre productions.
May be repeated 12 times and receive up to 12 credits.

THEA 4854 INT - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Hands-on learning through involvement backstage on running crews, through studio work, acting in, or involvement in "front of house" operations for Weber State Theatre productions.
May be repeated 12 times and receive up to 12 credits.

THEA 4855 INT - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Hands-on learning through involvement backstage on running crews, through studio work, acting in, or involvement in "front of house" operations for Weber State Theatre productions.
May be repeated 12 times and receive up to 12 credits.

THEA 4856 INT - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Hands-on learning through involvement backstage on running crews, through studio work, acting in, or involvement in "front of house" operations for Weber State Theatre productions.
May be repeated 12 times and receive up to 12 credits.

THEA 4857 INT - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Hands-on learning through involvement backstage on running crews, through studio work, acting in, or involvement in "front of house" operations for Weber State Theatre productions.
May be repeated 12 times and receive up to 12 credits.

THEA 4858 INT - Design/Tech/Management Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Hands-on learning through involvement backstage on running crews, through studio work, acting in, or involvement in "front of house" operations for Weber State Theatre productions.
May be repeated 12 times and receive up to 12 credits.

THEA 4859 INT - Design/Tech/Management Practicum

Credits: (1)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** Hands-on learning through involvement backstage on running crews, through studio work, acting in, or involvement in "front of house" operations for Weber State Theatre productions.

May be repeated 12 times and receive up to 12 credits.

THEA 4860 - Advanced Playwriting**Credits: (3)****Description:** This course will be an advanced study of dramatic structure and the process of playwriting, focusing on writing full length plays. Extensive writing is required.**Pre-requisite(s):** THEA 3505 and instructor approval.

May be repeated up to two times for a maximum of six credit hours.

THEA 4861 INT - Performance Practicum**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** Practical applied performance work to be registered for by students who are 1) cast in, 2) have a significant assistant directing responsibility, or 3) are the production director for a WSU production. To become a well-rounded theatre student, students are required to participate in the production of the departmental plays as often as their schedule allows. Since there are so many different learning opportunities in the theatre it is though Practicum that they are each exposed to the whole production process. There are 2 different Practicum course numbers, one for performance and the other for the design, technical, and management aspects of theatre. The course numbers stay the same from semester to semester but the content; the plays produced changes each time. Minimally students are required to enroll in a Practicum course 3 times to graduate, however since students are expected to be involved in the production of each play (2 per semester) then they should be completing 4 Practicums each academic year.**Pre-requisite(s):** Audition and permission of the instructor/director.

The maximum time a student can repeat this or any combination of THEA 4851 and THEA 4861 for credit is sixteen times.

THEA 4862 INT - Performance Practicum**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** Provides supervised experience in theatre production and performance. May be repeated. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a performance of an acting role in a production. Prerequisite: Audition and permission of the instructor/director. May be repeated up to 12 times for a maximum of 12 credit hours.**THEA 4862 INT - Performance Practicum****Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Description:** Provides supervised experience in theatre production and performance. May be repeated. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a

performance of an acting role in a production.

Pre-requisite(s): Prerequisite: Audition and permission of the instructor/director. The maximum time a student can repeat this or any combination of practicum for credit is twelve times.
May be repeated up to 12 times with a maximum of 12 credit hours.

THEA 4863 INT - Performance Practicum

Credits: (1)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. May be repeated. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a performance of an acting role in a production. Prerequisite: Audition and permission of the instructor/director. The maximum time a student can repeat this or any combination of practicum for credit is twelve times.

THEA 4864 INT - Performance Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. May be repeated. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a performance of an acting role in a production. Prerequisite: Audition and permission of the instructor/director. The maximum time a student can repeat this or any combination of practicum for credit is twelve times.
The maximum time a student can repeat this or any combination of practicum for credit is twelve times.

THEA 4865 INT - Performance Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. May be repeated. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a performance of an acting role in a production. Prerequisite: Audition and permission of the instructor/director. The maximum time a student can repeat this or any combination of practicum for credit is twelve times.

THEA 4866 INT - Performance Practicum

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides supervised experience in theatre production and performance. May be repeated. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a performance of an acting role in a production. Prerequisite: Audition and permission of the instructor/director. The maximum time a student can repeat this or any combination of practicum for credit is twelve times.

THEA 4867 INT - Performance Practicum

Credits: (1)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Provides supervised experience in theatre production and performance. May be repeated. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a performance of an acting role in a production. Prerequisite: Audition and permission of the instructor/director. The maximum time a student can repeat this or any combination of practicum for credit is twelve times.

THEA 4868 INT - Performance Practicum**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Provides supervised experience in theatre production and performance. May be repeated. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a performance of an acting role in a production. Prerequisite: Audition and permission of the instructor/director. The maximum time a student can repeat this or any combination of practicum for credit is twelve times.

THEA 4869 INT - Performance Practicum**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Provides supervised experience in theatre production and performance. May be repeated. Practicum is an experiential learning course supervised by theatre faculty to provide the student with a practical application of theatrical theory. The student will develop skills and abilities for the theatre through supervised experience in a performance of an acting role in a production. Prerequisite: Audition and permission of the instructor/director. The maximum time a student can repeat this or any combination of practicum for credit is twelve times.

THEA 4890 INT - Cooperative Work Experience or Internship**Credits: (1-3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Actual participation with outside performing arts organizations in the day-to-day activity of a performing arts organization will introduce the student to the professional application of classroom skill and knowledge. Students will arrange their own opportunities by interview or audition. A journal of their experience and a letter from a supervisor are required for credit. Possibilities include but are not limited to: Repertory Dance Theatre, Ballet West or Utah Symphony (management or tech only), Utah Shakespeare Festival, Salt Lake Acting Company, and Pioneer Theatre Company.

Pre-requisite(s): Permission of supervising instructor required for credit.

May be repeated twice with a maximum of 3 credit hours.

THEA 4900 INT - Senior Project**Credits: (1)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: The Senior Project is an opportunity for graduating students to generate and realize a project in an area of primary interest. Typically, the project will reflect the student's emphasis in theatre arts (e.g., Acting, Directing, Design, etc.) and will demonstrate a culmination of previous study and may be a collaborative project.

Pre-requisite(s): Faculty approval of the proposal and a faculty advisor and the student must have completed a minimum of 90 credit hours.

THEA 4920 INT - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

THEA 4950 INT - Theatre Festival Participation

Credits: (1)

Description: Attend the Kennedy Center/American College Theatre Festival Region VIII annual meeting or other national theatre conference. Students will have the opportunity to attend theatre performances brought to the festival from throughout the region, display designs, audition, act in new 10-minute plays, and participate in workshops. Students may be responsible for their own registration fees and transportation, lodging and meals.

Pre-requisite(s): Audition and Permission of Instructor.

Note: May be repeated up to 4 times for credit.

UNIV 1106 GLB - American College Experience

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: To aid in the integration of international students into Weber State campus life, and to foster a better understanding of the relationships between campus and community; comparing the experience with home country and institution. The class combines courses and programs designed to help students transition well to the rigorous academic environment of U.S. higher education.

UNIV 1107 - Design Your Weber

Credits: (2)

Description: In the course, you explore interests within and beyond selecting a major; consider radically different academic pathways at Weber; prototype and test areas of curiosity; identify fears that hold students back from maximizing your Weber experience; reframe the role of failure at college; actively explore and try out the resources and supports available to students at Weber State.

UNIV 1110 SS, CEL - FYS: Introduction to Social Issues in Higher Education

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The goal of the course is for first-time students in the Wildcat Scholars program to understand and embrace what it means to be a college student who is cultivating a future. Students will be exposed to and apply ways of thinking, acting, and interacting that social science and educational research has shown to promote success in college and in life. The course requires traditional academic activities coupled with other activities, such as tutoring, designed to help students adopt the beliefs, attitudes, skills, and knowledge necessary to be a person who is cultivating a future through college.

Pre-requisite(s): Acceptance into the Wildcat Scholars program.

UNIV 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

UNIV 3301 - Results Based Leadership for Social Change

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: In this class, we will explore the changes individuals and nonprofits can make to increase our impact in the world. We call this approach *Results Based Leadership*. Results Based Leadership is a theoretical framework focused on achieving measurable results. It includes understanding the current shortcomings of change efforts in our communities, building the technical skills to understand and display data in a way that motivates change, achieving mastery in facilitation to generate consensus and align collective action, and become an "adaptive" thinker to address complex and "wicked" problems in the world.

UNIV 4242 - Conspiracy Theories

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Why do people believe conspiracy theories? What are their origins? How can we avoid succumbing to conspiracy theories?

UNIV 4920 INT - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

WEB 1010 - Exploring Web and User Experience

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Capabilities and limitations of multimedia technology, evaluation of multimedia products, and creation of a multimedia portfolio.

WEB 1030 - Foundations of Computing

Credits: (4)

Typically Taught Summer Semester: *Full Sem, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: This course follows the core body of knowledge specified by the ACM which provides students with a broad overview of topics they might encounter within the major areas of computing. The course is taught at an introductory level and includes topics such as: history of computers, computer architecture, operating systems, web design and development, programming, database, software engineering, networking, and more. Cross-listed with CS 1030 and CYBR 1030.

WEB 1400 - Web Design and Usability

Credits: (3)**Typically Taught Summer Semester:** *Full Sem***Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Understand the technicalities of the World Wide Web and the Internet. Plan, design, and implement a successful web site using current web technologies. Topics covered include audience analysis, information architecture, wireframing, prototyping, responsive design, usability and accessibility, testing, and analytics.

WEB 1430 - Client Side Programming**Credits: (3)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This class introduces the JavaScript language, with a focus on advanced language features and client-side web programming. Topics covered include basic syntax, object-oriented programming, higher-order functions, the DOM, and AJAX. The class will also introduce jQuery.

Pre-requisite(s): (WEB 1400 or CS 1030) and CS 1400.

WEB 1501 - Document Creation Competency Exam**Credits: (.5)****Typically Taught Summer Semester:** *Full Sem, Online***Typically Taught Fall Semester:** *Full Sem, Online***Typically Taught Spring Semester:** *Full Sem, Online***Course Fee:** \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: The computer competency exam for this course is a hands-on examination verifying a student's skills at document creation. Practice materials are available on the web for studying the competencies covered on the test. The one-hour exam must be completed during the semester registered. Two repeats of the exam may be taken during the semester with an additional fee charged. The grade for the course is credit/no credit.

Note: Call (801-626-7384) or email CIL@weber.edu for more information.

WEB 1502 - Content, Internet Identity, and Device Management Competency Exam**Credits: (.5)****Typically Taught Summer Semester:** *Full Sem, Online***Typically Taught Fall Semester:** *Full Sem, Online***Typically Taught Spring Semester:** *Full Sem, Online***Course Fee:** \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: The computer competency exam for this course is a hands-on examination verifying a student's skills in content, internet identity, and device management. Practice materials are available on the web for studying the

competencies covered on the test. The one-hour exam must be completed during the semester registered. Two repeats of the exam may be taken during the semester with an additional fee charged. The grade for this course is credit/no credit.

Note: Call (801-626-7384) or email CIL@weber.edu for more information.

WEB 1503 - Data Manipulation, Visualization, and Presentation Competency Exam

Credits: (.5)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: The computer competency exam for this course is a hands-on examination verifying a student's skills at data manipulation, visualization, and presentation. Practice materials are available on the web for studying the competencies covered on the test. The one-hour exam must be completed during the semester registered. Two repeats of the exam may be taken during the semester with an additional fee charged. The grade for the course is credit/no credit.

Note: Call (801-626-7384) or email CIL@weber.edu for more information.

WEB 1700 - Introduction to Computer Applications

Credits: (3)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Students will use current software to produce correctly formatted research papers with an accepted academic reference format, to produce effective employment documents such as a resume and a cover letter, and to use multiple collaboration mediums to effectively share, communicate, and collaborate with their peers. Students will use current software/technology to manage content on local devices and in the cloud, to manage their web identity and presence according to e-safety, security, and privacy best practices and standards, and to manipulate multiple computing platforms to troubleshoot problems. Students will protect local devices from security threats including viruses, malware, and adware using current best practices and technologies. Students will also manipulate and analyze data using various software applications and basic programming, organize data using graphical methods such as charts and infographics, and create an effective, well-designed presentation. Keyboarding 25 wpm recommended.

WEB 1701 - Document Creation

Credits: (1)

Typically Taught Summer Semester: *1st Blk, Online*

Typically Taught Fall Semester: *1st Blk, Online*

Typically Taught Spring Semester: *1st Blk, Online*

Course Fee: \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Students will use current software to produce correctly formatted research papers with an accepted academic reference format such as MLA or APA. Students will use current software/technology to produce effective

employment documents such as a resume and a cover letter. Students will also be able to use multiple collaboration mediums to effectively share, communicate, and collaborate with their peers. Keyboarding 25 wpm recommended.

WEB 1702 - Content, Internet Identity, and Device Management

Credits: (1)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Students will use current software/technology to manage content on local devices and in the cloud. Students will manage their web identity and presence according to e-safety, security, and privacy best practices and standards. Students will manipulate multiple computing platforms and troubleshoot problems when they arise. Students will protect local devices from security threats including viruses, malware, and adware using current best practices and technologies. Keyboarding 25 wpm recommended.

WEB 1703 - Data Manipulation, Visualization, and Presentation

Credits: (1)

Typically Taught Summer Semester: *Full Sem, Online*

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Course Fee: \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Students will manipulate and analyze data using various software applications and basic programming. Students will organize data using various graphical methods such as charts and infographics to appropriately convey information. Students will create an effective, well-designed presentation using current technologies. Keyboarding 25 wpm recommended.

WEB 2080 - Database Applications

Credits: (1)

Typically Taught Fall Semester: *Full Sem Online*

Description: Use of database software to design and create a database, including objects such as tables, queries, reports, and forms. Use of advanced management features such as macros, switchboards, referential integrity, and compound criteria.

Pre-requisite(s): WEB 1700 or WEB 1702/WEB 1502.

WEB 2200 - Image Editing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Introduction to an image creation and editing program such as Adobe Photoshop. Students learn the

basics of the program (workspace, selections, and layers). The steps in editing images are completed (cropping, color and tonal adjustments, retouch, noise reduction, sharpening, and exporting). Students also work creatively with layer styles, filters, layer masks, blend modes, and paint brushes. Several of the assignments will involve editing images and creating composites for the web (i.e. hero image, web banner ad, Facebook cover).

WEB 2210 - Computer Illustrations

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: In this course you will learn the fundamentals of a vector drawing program such as Adobe Illustrator. Students become skilled using the Pen Tool and other drawing tools to create vector illustrations. Various techniques are learned for applying color, attributes, styles, and effects to illustrations. Students also create, edit, and format type to add to their illustrations. Projects will focus on web illustrations for banners, landing pages, user interface elements, social media, infographics, and other web content.

WEB 2220 - Digital Publishing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Use of professional page design and layout software such as Adobe InDesign to design, create, and edit a variety of publications for print and web. Students create publications for print such as a marketing card and business flyer/brochure, as well as interactive online web documents that contain audio, video, slideshows, and HTML content.

Pre-requisite(s): WEB 1400 and WEB 2200 or permission of instructor.

WEB 2300 - Video Editing

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Using video editing software such as Adobe Premiere, students will combine many separate video recordings to create short digital movies. The following steps of the video production process will be completed: creating storyboards; shooting the video and recording the audio; capturing resources to the computer; importing resources into a video project; adding titles, graphics, transitions, and effects; and exporting the video to formats for the computer, television, DVDs, and the Web.

WEB 2350 - Client Side Web Development

Credits: (4)

Typically Taught Summer Semester: *2nd Blk Online*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course provides an introduction to client-side programming and Web page development. Subjects covered include responsive Web page design and dynamic Web page development. The course will explore various technologies such as HTML5, CSS3, and Javascript with an introduction to JQuery and JQuery Mobile. Cross-listed with CS 2350.

Pre-requisite(s): CS 1400 and WEB 1400.

WEB 2410 - Web Animation I

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course introduces various web technologies that aid the creation of web animations for distribution on many platforms. Students discuss technical issues affecting animation such as speed and compression. Students will explore several current tools to create animations for the web.

WEB 2500 - User Experience Design

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: In this course students will be introduced to the four-step user experience design process which includes user research, design, testing, and implementation. The following topics will be covered: history of user experience, user behavior, cognitive processing, personas, web analytics, content strategy, information architecture, writing for the web, user-centered design, usability testing, and accessibility. Using current technologies and tools, students will create a basic web or mobile application.

Pre-requisite(s): WEB 1400 or CS 2350.

WEB 2620 - Advanced CSS

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: A deep knowledge of CSS properties and specifications is essential in client-side web development and design. This course will expand student's knowledge of CSS by covering the following CSS properties: media queries, animation & transitions, transforms, grid layouts, flexbox, web fonts, shapes, variables, exclusions, and regions. Browser support, preprocessors, frameworks, and minification will also be discussed. Using these advanced CSS techniques student will design and implement a consistent user experience and the page layout of a web application.

Pre-requisite(s): WEB 1400 or CS 2350.

WEB 2700 - Web Accessibility 1

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: In this course students will be introduced to the disability rights, legislation that governs the rules for accessibility in the United States, and WCAG 2.1 standards. The following topics will be covered: history of disability rights, key leaders in the disability rights movement, groups advocating for disability rights, legislation that governs the rules around accessibility, WCAG 2.1 standards. Using current accommodation software, students will test websites for accessibility and make recommendations to change the code to meet WCAG 2.1 guidelines.

Pre-requisite(s): WEB 2620.

WEB 2800 - Independent Projects and Research

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$7.50

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Independent project, student assistant, or research on an individual basis. Prerequisite: Permission of instructor.

May be taken twice up to 6 credit hours.

WEB 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

WEB 2860 - Work Study

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students can earn variable credit (depending on the number of hours performed) by working in the web and user experience career field or by serving as a teaching assistant for a WEB/UX faculty member. Either way, the student will fulfill objectives that have been pre-approved by a business/organization supervisor or faculty advisor. This lower division elective is primarily intended for WEB/UX majors currently working in entry-level (client side) positions within the career field. Junior and Senior level students, performing more complex server-side web development, should consider taking the Upper Division WEB 4860 course as an alternative.

Pre-requisite(s): Permission of instructor and WEB/UX program coordinator.

May be repeated up to four times with a maximum of four credit hours.

WEB 2890 - Client-Side Portfolio

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement

including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: In this project-based course students will design a web portfolio that features the work they have completed during the Web and User Experience AAS degree. Students will also create several portfolio pieces related to client-side web development.

Pre-requisite(s): WEB 2620.

WEB 3000 - Advanced Word Processing

Credits: (1)

Typically Taught Spring Semester: *Full Sem Online*

Description: Use of word processing software including sorts, tables, columns, reports, merges, graphics, and macros.

Pre-requisite(s): WEB 1700 or WEB 1701/WEB 1501.

WEB 3070 - Advanced Spreadsheet Applications

Credits: (1)

Typically Taught Fall Semester: *Full Sem, Online*

Typically Taught Spring Semester: *Full Sem, Online*

Description: Use of spreadsheet software including macros, sorts, advanced formulas, graphs, and creative presentations.

Pre-requisite(s): WEB 1700 or WEB 1703/WEB 1503.

WEB 3090 - Digital Presentations

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem Online*

Course Fee: \$15.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Use of electronic slide presentation software to create slides consisting of short paragraphs, bulleted lists, graphic images, movie clips, audio clips, data charts, diagrams, and imported data from other software. Emphasis will also be placed on professional quality presentation design and animation of slide elements.

Pre-requisite(s): WEB 1700 or WEB 1701/WEB 1501 and WEB 1702/WEB 1502 and WEB 1703/WEB 1503.

WEB 3110 - Training the Trainer

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Real-world strategies and techniques to provide better employee training, including development of materials and methods to enhance the learning process.

Pre-requisite(s): ENGL 2010 and WEB 1700 or WEB 1701, WEB 1702, and WEB 1703, or WEB 1501, WEB 1502, and WEB 1503.

WEB 3130 - Web Accessibility 2

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: In this course, students will learn to work with disabled users as co-participants in the design and development process. Using a website they built in a prior course, they will run testing with disabled users and adapt the site to meet the needs of users. These sites will go beyond basic WCAG 2.1 compliance, as they will be built with active participation from the disabled community.

Pre-requisite(s): WEB 2700.

WEB 3200 - Dynamic Languages for Web Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: General-purpose dynamic languages like Python and Ruby have become increasingly popular and well suited for the creation of full stack web applications. This course will introduce students to the syntax and programmatic idioms of both Ruby and Python. The following topics will be covered in both languages: complex data types, loops, conditionals, command line applications, and the object-oriented programming paradigm. The commonly used web frameworks of each language will be explored and used to create and deploy a full stack web application to a cloud provider.

Pre-requisite(s): CS 1400 and WEB 3350.

Pre-requisite/Co-requisite: WEB 2890.

WEB 3300 - Motion Graphics

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: In this course you will use Adobe After Effects to create motion graphics and visual effects for film and video. You will learn how to create sophisticated motion graphics using animated text and objects, compositing videos and images, and adding visual effects to video. You will learn how to set keyframes on a timeline and work with transform properties, motion paths, rotoscoping masks and effects, developing a solid foundation in this increasingly popular and versatile software.

Pre-requisite(s): WEB 2200 and WEB 2300 or approval of instructor.

WEB 3350 - Client Side Frameworks

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course covers client-side JavaScript Frameworks and building Single Page Applications (SPA). It starts with a review of the JavaScript programming language (with emphasis on the Document Object Model (DOM)) and covers various debugging techniques using the browser developer tools. An overview of Asynchronous JavaScript (AJAX) is introduced before diving deeper into a popular client-side JavaScript frameworks - like Angular, React or VueJS. Regardless of the primary framework chosen, we will explore and compare the other frameworks as time permits.

Pre-requisite(s): WEB 1430 or CS 2350.

WEB 3400 - LAMP Stack Web Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: This course explores the Linux-Apache-MySQL-PHP, or LAMP Web development framework to build applications that solve common business problems. The course begins with an exploration of the LAMP architecture, then covers fundamentals of the PHP programming language before introducing a PHP framework like Laravel. Additional coverage focuses on database concepts and how to interact with a MySQL database.

Pre-requisite(s): WEB 3200 or CYBR 2210.

WEB 3410 - Web Animation II

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Students will explore native web technologies that are useful for animation including JavaScript, SVG, the HTML canvas element and CSS. Using these native web technologies, students will design and produce advanced multimedia projects applicable for business and industry. These projects will be produced by combining web animation, graphics, video, and text into interactive web and mobile multimedia presentations.

Pre-requisite(s): WEB 2410.

WEB 3430 - Full Stack JavaScript Development

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Modern web development increasingly involves using end-to-end JavaScript-based technologies such as MongoDB, Express.js, Angular, React, Vue.js, Node.js, etc. This course introduces development techniques that capitalize on the strengths of every layer in this JavaScript-based full-stack.

Pre-requisite(s): WEB 3350.

WEB 3500 - User Interface Prototyping & Design

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Students will learn the elements of user interface design as it applies to front-end web and mobile app development. Students will identify best practices in user interface design. Using those best practices they will rapidly

prototype an effective user interface.

Pre-requisite(s): WEB 2500 or CS 2335, WEB 1400 or CS 1400, or permission from instructor.

WEB 3530 - Information Architecture

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: In this course students will learn the fundamentals of information architecture. They will learn how to create a functional site structure, navigation, taxonomy, metadata, and content strategies for websites. Students will conduct user research to gather the appropriate requirements through competitive analysis, site and content analysis, accessibility analysis, and user testing methods.

Pre-requisite(s): WEB 2500.

WEB 3600 - User Research Methods

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Description: In this course students will learn the fundamentals of user research. Students will learn the appropriate methods of user research to understand user behaviors, needs, experience, and motivations. Students will conduct qualitative and quantitative research that they will analyze for user insights. Statistical analysis will be applied to quantitative findings to support data-driven decisions. Students will create a research presentation that outlines their key findings, including their big wins and pain points with solutions for designing a better experience for users.

Pre-requisite(s): WEB 2500.

WEB 3620 - Server-Side Web Architecture

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Description: An introduction to server-side Web development using the most current Web server technologies. General Web development principles such as usability, reliability, maintainability and scalability will be applied to current Web development environments such as PHP, Python, Ruby and Java. Students will gain real-world experience in creating Websites for multiple Web platforms. Cross listed with CS 3620.

Pre-requisite(s): WEB 2350 and CS 2550.

WEB 3650 - Human-Computer Interaction

Credits: (4)

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Description: This course introduces the skills and concepts of Human-Computer Interaction (HCI) that enable students to design systems that effectively meet human needs. A concrete illustration of the practice of HCI, this course covers usability, user experience, and modern diverse interfaces. This course includes both theoretical and practical best practices. Cross-listed with CS 3650.

Pre-requisite(s): CS 2420 and CS 2450, or WEB 3500.

WEB 3700 - Web Development with .NET

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Microsoft's ASP.NET Core is a cross-platform, high-performance web framework for building full stack web applications. This course will introduce students to the syntax and programmatic idioms of ASP.NET/C#. The following topics will be covered: REST, Razor, Model Binding and Validation, Entity Framework and the MVC design pattern. Client-side development libraries will also be discussed and integrated, so that student can build and deploy a full stack application.

Pre-requisite(s): WEB 3200.

WEB 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

WEB 4350 - Web Development Capstone

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Senior level group project capstone course covering full stack client/server web development. The project will be implemented using an advanced web framework (such as Laravel, NPM, Django, Ruby on Rails, or others). Includes implementation and concepts of an MVC web architecture, Web UI design and creation, data modeling and retrieval, input validation, security, and unit testing

Pre-requisite(s): (CS 3260, WEB 3400, and WEB 3430) or (WEB 3130, WEB 3500, and WEB 3600)

WEB 4800 - Independent Research

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Directed research and study on an individual basis.

Pre-requisite(s): Permission of instructor.

May be repeated up to 6 credit hours.

WEB 4860 INT - Internship

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$10.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: Students work in the web and user experience field. The student fulfills objectives that have been approved by a business/organization supervisor and a faculty advisor. Must have Senior standing or approval of instructor.

Pre-requisite(s): Permission of instructor.

WEB 4890 - Server-Side Portfolio

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Course fees are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Description: In this project-based course students will revise and update the web portfolio that was created in the WEB 2890 course. They will add to the portfolio work that they have completed during the Web and User Experience BS degree. Students will also create several portfolio pieces related to server-side web development.

Pre-requisite(s): WEB 3500 and WEB 3620/CS 3620.

WGS 1500 SS/CC - Introduction to Women, Gender, and Queer Studies

Credits: (3)

Typically Taught Summer Semester: *Full Sem, 1st Block, 2nd Block*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An introduction to the discipline of Women Gender and Queer studies using multicultural sources based on current feminist and queer scholarship. In this course, we will examine the diversity experiences of women and LGBTQ people, perspectives, critiques, and theories across the categories of race, ethnicity, class, and gender.

WGS 2000 - Risk, Resilience and Rock Climbing

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Cover the costs of equipment replacement and maintenance, consumable materials, licensure examinations, or to meet specific regulatory requirements. Examples of course fee expenditures for this course include climbing shoes, harnesses, helmets, climbing rope, and climbing holds.

Description: This course will explore the intersections of rock climbing, interpersonal and intrapersonal growth, and women and gender studies. We will ignite conversations about safety, trust, risk taking, transcending fear, resiliency, and healthy community building. These conversations will be embodied through practical kinesthetic climbing skills. We will also look at power and privilege in the climbing world and ways in which we can expand the field to be more inclusive, intersectional, and accessible to people from a variety of backgrounds. We will look at climbers who are changing the field, as well as engage media that tackle these and further topics.

WGS 2500 SS/CC/GLB - Human Rights in the World

Credits: (3)**Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem*

Description: Human rights (HR) are a powerful idea in the modern world, but also the focus of controversy. This course will provide students with a broad foundation in human rights including the ability to analyze HR in domestic and int'l law, examine prevention and prosecution techniques, and debate current issues at home and abroad. Emphasis will be placed on women and gender studies (including LGBT issues), vulnerable populations such as refugees, and atrocity crimes.

WGS 2810 - Experimental Course**Credits: (1-6)****Experimental**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

WGS 2900 - Topics in Women's Studies**Credits: (1-3)****Variable Title**

Description: Varied topics as described in the semester schedule. Topics will be drawn from issues related to women's studies.
May be repeated 3 times up to 9 credits with different course content.

WGS 3050 - Introduction to Feminist Theories 1700 -- Present**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: An introduction to the study of feminist theories from the 18th Century to the present. Students will study historical accounts of feminism by looking at primary sources written by influential feminists, as well as theoretical treatises on different kinds of feminism, from liberal feminism, to radical feminism, socialist feminism, black feminism, multicultural or global feminism, and so on.
The class will be taught using collaborative learning and will rely on class discussion and interaction, rather than traditional lecture format.

WGS 3090 - Gender and Communication**Credits: (3)**

Description: This course is designed to help students understand the influence that communication has upon the shaping of gender and the influence that gender has in shaping communication interactions. Students become aware of, sensitive to, and more experienced in the issues, implications and skills necessary to successfully and meaningfully communicate with males and females, and about males and females, in a wide range of communication contexts.

Pre-requisite(s): Junior or Senior standing required or instructor permission.

Cross listed with COMM 3090.

WGS 4050 - Research Methodologies**Credits: (2)**

Description: Designed to introduce students to a variety of approaches to research in women's studies. Students will consider some of the assumptions which underlie research methodologies which may limit our knowledge about women as research subjects and as researchers themselves.

Pre-requisite(s): WGS 3050 (or equivalent coursework) or permission of instructor.

Note: Course not currently being offered.

WGS 4060 - Research Project

Credits: (2)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed research project including literature survey and completion of study in area of student's choosing, guided by faculty mentor(s) from Women's Studies program (and, where appropriate, student's major department.)

Pre-requisite(s): WGS 4050 (or equivalent coursework) and permission of instructor.

WGS 4150 - Research Methodologies

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Designed to introduce students to a variety of approaches to research in women and gender studies. Students will consider some of the assumptions which underlie research methodologies which may limit our knowledge about women as research subjects and as researchers themselves.

Pre-requisite(s): WGS 3050 (or equivalent coursework) or permission of instructor.

WGS 4170 GLB - Gender, Power, and Global Politics

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Description: This course is a comprehensive introduction to the gendered nature of global politics and how power and gender influence the world around us. During the semester, we will examine what cultural, structural, and political factors shape gendered access to power worldwide. We will discuss why women have succeeded in obtaining sustainable political power in some countries and not others. We will determine what factors influence why women and transgendered individuals are excluded from political processes and not represented proportionately in political, influential, or leadership positions. At the conclusion of this course, students will be familiar with multiple approaches to understanding how gender matters in many facets of world politics and how gender can intersect with other social identities such as race, ethnicity, class, and sexual orientation.

WGS 4250 INT - Community-Based Research/Internship

Credits: (3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: The purpose of this research/internship is to provide students with community experiences related to issues of women and gender. Students in this practicum will apply knowledge skills learned throughout their course of study in either the Women and Gender Studies minor or BIS. For this research/internship students will be required to check in with their course faculty supervisor weekly during the semester.

Pre-requisite(s): WGS 4150.

WGS 4810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and

credit authorized will appear on the student transcript.
May be repeated for a total maximum of 6 credit hours.

WGS 4830 - Directed Readings

Credits: (1-3)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed individual readings in the general area of women's studies. Specific topic selected in consultation with instructor; amount of material to be read determined at discretion of instructor, based on level of topic and degree of difficulty of reading and consistent with any existing university and departmental guidelines.

Pre-requisite(s): WGS 1500 (or equivalent coursework) and permission of instructor.

May be repeated 5 times up to 6 credit hours.

WGS 4860 - Internship in Women's Studies

Credits: (1-2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Opportunity for service learning with campus/community organizations involved with women's issues, applying principles learned in women's studies coursework to bring about beneficial social change.

Pre-requisite(s): completion of WGS 4050 (or equivalent coursework) and permission of the instructor.

This course may be repeated once up to two credits toward the minor.

Note: When taken to fulfill a program requirement, students must register for 2 credit hours.

WGS 4900 - Topics in Women's Studies

Credits: (1-3)

Variable Title

Description: Varied topics as described in the semester schedule. Topics will be drawn from issues related to women's studies.

This course may be taken 3 times up to 9 credits with different course content.

WGS 4990 - Senior Seminar

Credits: (2)

Typically Taught Spring Semester: *Full Sem*

Description: Capstone course including discussion and synthesis of major issues in women's studies. Students will discuss specific projects (completed or in progress) related to their career goals; these projects may have an academic or service orientation.

Pre-requisite(s): Completion of the women's studies core (or equivalent) courses and permission of the instructor.

WLC 1810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

WLC 2410 GLB - Introduction to Localization

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: Introduction to the field of localization. Includes the globalization of digital applications such as software, websites, videos, and video games. Addresses how to overcome both technical and cultural issues in localization and internationalization.

WLC 2600 HU - Introduction to Cultural and Literary Studies in Translation

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: May be offered under any of the languages taught in the department. All Foreign Language HU2600 courses are taught in English and all texts are read in English translation in order to make some of the literature we normally would teach in a foreign language accessible to all students. These courses may introduce students to specific literary periods, literary themes or some prominent authors in specific areas of the world where languages other than English are spoken.

May be repeated up to 10 times for credit under different titles.

Note: Check with Department for course availability.

WLC 2810 - Experimental Course

Credits: (1-6)

Experimental

Description: Individual courses offered on an experimental basis, identified by specific name and description. The specific title will appear on student's transcript along with the authorized credit.

May be repeated for a total maximum of 6 credit hours.

WLC 2851 - HU Study Abroad

Credits: (3)

Description: Language and culture studies for students whose minimal proficiency is Novice High. Language assignments at the Novice or Intermediate-Low levels are performed in the target language. All other assignments are performed in English. Prior travel experience does not apply.

WLC 2960 - Introduction to World Languages and Cultures

Credits: (1)

Typically Taught Summer Semester: *1st Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Required of all majors during their first year. This course provides guidance to help the student successfully navigate their academic career in WSU Department of World Languages & Cultures and its programs. It provides an overview of what it is like to study a second language, as well as an overview of the U.S. language industry and language careers. The course is also designed to help students develop a clearer focus on their educational and occupational goals, as well as creating a sense of belonging in our department, college, and community.

Co-Requisite(s): SPAN 3060.

WLC 3270 - Special Topics in Linguistics

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) An introduction to linguistic structures and semantic elements. The course provides useful information and practice in the language, its structures and usage. The sub-disciplines of linguistics, other than phonetics and phonology (covered in 3220), will be studied. These may include lexical analysis, semantics, morphology, syntax, linguistic change and dialectal variation.

Note: Check with Department for course availability.

WLC 3320 - Applied Language Studies

Credits: (1-3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Minimal proficiency level varies with content).

May be repeated up to 10 times under different titles.

WLC 3420 GLB - Introduction to Translation

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: Introduction to the theory and practice of translation, with emphasis on the techniques and skills needed to translate commercial texts. Students will learn the concepts and conceptual framework for the analysis and understanding of translation as a process and a product.

Pre-requisite(s): Intermediate Low proficiency in a second language (2020 or the equivalent).

WLC 3430 GLB - Translation Technology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: This course introduces students to the theory and practical use of translation technologies important to management, engineering and linguistic roles in translation and localization, with a primary focus on tools for linguistic roles including translation and editing.

WLC 3540 - Latin American Environment and Cultures

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: In order to provide an interdisciplinary introduction to Latin America, this course presents the region's history, its peoples, their culture and their political and natural environments. Other content to be discussed includes issues of migration, US Latinos and the region's relationship with the US.

WLC 3570 GLB - Special Topics in Culture

Credits: (3)

Variable Title

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (Intermediate Mid) In-depth studies in culture, history, geography, social customs, fine arts and civilization.

May be repeated up to 7 times for credit and for other non-English speaking cultures.

Note: Check with Department for course availability.

WLC 3580 - Global Cinema

Credits: (3)

Typically Taught Summer Semester: *1st Block, 1st Block Online, 2nd Block, 2nd Block Online*

Typically Taught Fall Semester: *Full Sem, Full Sem - Online*

Typically Taught Spring Semester: *Full Sem, Full Sem - Online*

Course Fee: \$8.00

Course Fee Purpose: Course fees in FL courses are designed to cover the costs of classroom equipment maintenance and replacement including desktops, projectors and projector screens, etc. and Translation and Localization software, including audiovisual translation; consumable materials and supplies; and support for student tutors, and online instructional resources.

Description: A survey of global cinema movements and film aesthetics. Analysis of films within the context of a variety of cultures and diverse cinematic traditions of the world.

WLC 3690 - Special Topics in Literature

Credits: (3)

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IM=Intermediate Mid) May be repeated under different titles. One literature course is required for regular and teaching majors.

WLC 3750 - Introduction to Interpreting

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: Introduction to basic techniques and skills needed for bilingual interpretation in a variety of professional settings. The course includes an overview and history of the interpreting industry and work of interpreters, certification and licensure, and the variety of consumers and modalities with which interpreters work. Ethical decision-making models and the Code of Ethics for interpreters are explored.

WLC 3760 - Special Topics in Translation

Credits: (3)

Variable Title

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$8.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: This is a specialized course that offers in-depth studies in selected topics, current developments or recent trends in the fields of Translation Studies and Localization.

WLC 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

WLC 4400 - Methods for Teaching Languages

Credits: (5)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$15.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (AL=Advanced Low) Practical Methods, techniques and strategies for teaching foreign languages. This course will also review second language acquisition research, various assessment techniques, the ACTFL Proficiency Guidelines and the National Standards for Foreign Language Learning. Emphasis is on planning, teaching and assessment. Offered spring semester only.

WLC 4500 - Methods for Teaching Languages

Credits: (4)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course presents theoretical premises and research on foreign language acquisition. It uses the standards for foreign language learning as the organizing principle for instructional methods; students design classroom lessons, projects and assessments based upon standards. FL 4500 is designed for students who are working toward a foreign language teaching degree or for teachers not desiring post-graduate credit. WLC 6500 is designed for teachers who are seeking to recertify or to become endorsed at the graduate level.

WLC 4580 - Special Topics in World Cinema

Credits: (3)

Typically Taught Spring Semester: *Full Sem, Full Sem-Online*

Course Fee: \$8.00

Course Fee Purpose: Course fees contribute to the maintenance and enhancement of technology in the active learning classroom (EH 408), the World Languages and Cultures (WLC) tutoring space, and other regular classrooms, ensuring a high-quality learning environment for students.

Description: In-depth study of a specific theme, movement, or director within the realm of international cinema. Course content may vary depending on the selected special focus.

WLC 4801 - A&H Leadership Lecture Series

Credits: (1)

Typically Taught Spring Semester: *Full Sem*

Description: This one-credit elective course will give arts and humanities' majors the opportunity to interact with successful guest lecturers whose undergraduate backgrounds are in the arts and humanities. Lecturers will clarify how the talents and skills associated with their degrees have contributed to their pursuit of successful careers and lives.

WLC 4810 - Experimental Course

Credits: (1-6)**Experimental**

Description: Individual courses offered on an experimental basis, identified by specific name and description. The specific title will appear on student's transcript along with the authorized credit.

May be repeated for a total maximum of 6 credit hours.

WLC 4860 INT - Foreign Language Internship**Credits: (1-3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$2.00

Course Fee Purpose: Maintain technology in the FL lab, EH 408, and classroom technology.

Description: (IL=Intermediate Low) An opportunity for students to receive academic credit for faculty-approved, on-the job learning experiences that involve foreign languages and/or cultures. Credit/No Credit grading only.

Pre-requisite(s): Instructor Approval.

May be repeated up to 6 credits.

WLC 4990 - Senior Assessment**Credits: (.5)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Required of all majors during their senior year. Students will assemble a portfolio with a representation of their work in the foreign language. Speaking skills will also be evaluated. Must be completed before graduation clearance.

WLC 5430 - Advanced Translation Technology**Credits: (3)**

Typically Taught Fall Semester: *Full Sem*

Description: This is an advanced-level course that examines the theory and practical use of translation technologies important to management, engineering, and linguistic roles in translation and localization, with a primary focus on tools for linguistic roles including translation and editing.

WLC 5860 - Advanced World Language Internship**Credits: (1-3)**

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: This course is an opportunity for students to receive academic credit for faculty-approved, on-the-job learning experiences in the field of translation, localization, and/or interpreting. The internship position must be in a language service company, or the position must be a translator, localizer, interpreter, or linguist position in a non-language service organization.

WLC 6500 - Methods for Teaching Languages**Credits: (4)**

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem Online*

Typically Taught Spring Semester: *Full Sem Online*

Description: This course presents theoretical premises and research on foreign language acquisition. It uses the standards for foreign language learning as the organizing principle for instructional methods; students design classroom lessons, projects and assessments based upon standards. WLC 4500 is designed for students who are working toward a foreign language teaching degree or for teachers not desiring post-graduate credit. FL 6500 is designed for teachers who are seeking to recertify or to become endorsed at the graduate level.

WSU 1450 CA/HU - Perspectives in Creative Arts and Humanities

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 1460 SS/CA - Perspectives in Social Science and Creative Arts

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 1470 PS/CA - Perspectives in Physical Sciences and Creative Arts

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 1480 CA/LS - Perspectives in Creative Arts and Life Sciences

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 1560 SS/HU - Perspectives in Social Science and Humanities

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 1570 PS/HU - Perspectives in Physical Sciences and Humanities

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 1580 HU/LS - Perspectives in Humanities and Life Sciences

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 1670 SS/PS - Perspectives in Social Science and Physical Science

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 1680 SS/LS - Perspectives in Social Science and Life Science

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 1780 PS/LS - Perspectives in Physical Sciences and Life Sciences

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2120 EN/AI - Perspectives in Composition and American Institutions

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2130 EN/QL - Perspectives in Composition and Quantitative Literacy

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2140 EN/CA - Perspectives in Composition and Creative Arts

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2150 EN/HU - Perspectives in Composition and Humanities

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2160 EN/SS - Perspectives in Composition and Social Sciences

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2170 EN/PS - Perspectives in Composition and Physical Sciences

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2180 EN/LS - Perspectives in Composition and Life Sciences

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2230 AI/QL - Perspectives in American Institutions and Quantitative Literacy

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2240 AI/CA - Perspectives in American Institutions and Creative Arts

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2250 AI/HU - Perspectives in American Institutions and Humanities

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2260 AI/SS - Perspectives in American Institutions and Social Science

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2270 AI/PS - Perspectives in American Institutions and Physical Sciences

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2280 AI/LS - Perspectives in American Institutions and Life Sciences

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2340 QL/CA - Perspectives in Quantitative Literacy and Creative Arts

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2350 QL/HU - Perspectives in Quantitative Literacy and Humanities

Credits: (3-5)

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2360 QL/LS - Perspectives in Quantitative Literacy and Life Sciences**Credits: (3-5)**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2370 QL/PS - Perspectives in Quantitative Literacy and Physical Sciences**Credits: (3-5)**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2380 QL/SS - Perspectives in Quantitative Literacy and Social Science**Credits: (3-5)**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

WSU 2420 PS/SS - Perspectives in Social Science and Physical Sciences**Credits: (3-5)**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ZOOL 1010 LS - Animal Biology**Credits: (3)**

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: A non-major's introduction to cell biology, genetics, evolution, ecology, and animal diversity with emphasis on diversity of animal architecture and life strategies in relation to the diverse environments of Earth. The overriding theme is the process of evolution, its basis, and its implications for all animals, including humans. Three lecture/discussion hours a week.

ZOOL 1020 LS - Human Biology**Credits: (3)**

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: Survey course for non-science majors. Course content includes basic structure and function of the human body, homeostasis, heredity, human evolution, and ecology. Implications for personal health, bioethical and environmental issues and the impact of each of these on society will be examined. Three lecture/discussion hours a week.

ZOOL 1030 LS - The Nature of Sex

Credits: (3)**Typically Taught Summer Semester:** *Full Sem Online***Typically Taught Fall Semester:** *Full Sem, Full Sem Online***Typically Taught Spring Semester:** *Full Sem, Full Sem Online*

Description: This course will present an overview of sexual reproduction in animals, including humans. It provides evolutionary, ecological, and behavioral perspectives on sex. Topics cover the value of sex for generating variation among individuals, breeding patterns in nonsocial and social species, mating systems such as monogamy and polygamy, and reproductive behavior. The relevance of this material to human reproduction is addressed.

ZOOL 1280 - Life in Medicine**Credits: (1)**

Description: This one credit course for premedical students is designed to provide insight into many of the aspects associated with a career in medicine. The objectives of this course include 1.) provision of basic information regarding admission to medical training programs; 2.) exposure to some of the basic tenets necessary for professional success; 3.) investigation of some of the benefits and detriments associated with this challenging career; and 4.) establishing a forum through which students can question and self-assess the feasibility and desire to pursue a medical career. Presentations, group discussions and introspective analysis of selected topics will be led by a local physicians of various specialties to accomplish these goals. May be repeated once.

ZOOL 1370 LS - Principles of Life Science**Credits: (3)****Typically Taught Spring Semester:** *Full Sem*

Description: A survey course recommended for elementary education majors. Course content includes cells, cell chemistry, genetics, plant and animal anatomy, plant and animal classification, physiology, immune systems, evolution, and ecology. Unifying concepts of all living things will be emphasized.

Two lecture hours and one 3-hour lab a week.

Cross-listed with BTNY 1370 and MICR 1370.

ZOOL 1610 LS - Principles of Zoology**Credits: (4)****Typically Taught Fall Semester:** *Full Sem***Typically Taught Spring Semester:** *Full Sem***Course Fee:** \$20.00**Course Fee Purpose:** Consumable lab supplies; lab equipment maintenance and replacement

Description: A science major's introduction to the study of cell biology, genetics, inheritance, evolution, and ecology. The nature and practice of science is also emphasized and basic skills in data collection, analysis, and presentation are introduced. Three hours of lecture and two hours of lab per week. The year-long major's introductory sequence is completed with ZOOL 2220.

Pre-requisite/Co-requisite: CHEM 1200 or CHEM 1210.

ZOOL 1810 - Experimental Course**Credits: (1-6)****Experimental**

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ZOOL 1990 - Zoology Orientation

Credits: (1)

Description: This seminar consists of faculty, staff, and professional presentations which will inform students of potential research opportunities in the department and career possibilities in the discipline.

One hour a week.

Suggested Requisite(s): This course should be taken concurrently with ZOOL 1610 or ZOOL 2220.

Note: This course is offered as needed.

ZOOL 2220 - Diversity of Animals**Credits: (4)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$20.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: A major's introduction to the diversity and evolution of vertebrate and invertebrate animals. Three hours of lecture and two hours of lab a week. Completes the year-long major's introductory sequence after ZOOL 1610.

Pre-requisite(s): ZOOL 1610 or permission of instructor.

Pre-requisite/Co-requisite: Completion of or co-registering for CHEM 1210 or equivalent is required.

ZOOL 2320 - Human Anatomy**Credits: (4)**

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$50.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: Systematic study of the organs of the human body with cadaver-based laboratory. ZOOL 1020 or HTHS 1101 strongly recommended prior to enrollment. First semester students are discouraged from registering. Three hours of lecture and one 2-hour lab per week.

ZOOL 2420 LS - Human Physiology**Credits: (4)**

Typically Taught Summer Semester: *1st Blk, 2nd Blk, Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Course Fee: \$25.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: Human physiology pertains to the study of the physical, biochemical and mechanical functions of the various human organs and the relationships between these organ systems. Its knowledge is essential in understanding diseases and the development of modern medical therapies. This class is critically important to undergraduate students aspiring to enter professional field in health-science such as medicine, dentistry, nursing, pharmacy, physical and occupational therapies, education, and research. Three hours of lecture and two hours of lab per week.

ZOOL 2800 - History of Life Sciences**Credits: (3)**

Description: Examination of the ways in which interaction among personalities, instrumentation, and ideas shape the development of biology - past, present, and future.

Three lecture hours a week.

Note: This course is offered as needed.

ZOOL 2900 - Topics in Zoology

Credits: (1-4)

Variable Title

Description: Variable topics related to zoology as announced in the class schedule; may include medical entomology, biostatistics, primatology, etc., and may be taught with a laboratory section.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

May be repeated 3 times with a maximum of 4 credit hours.

Note: This course is offered as needed.

ZOOL 2920 - Short Courses, Workshops, Institutes, and Special Programs

Credits: (1-6)

Workshop

Description: Consult class schedule for offerings under this number. The specific title and credit authorized will appear on the student transcript.

Pre-requisite(s): Determined by department.

May be repeated for a total maximum of 6 credit hours.

Note: This course is offered as needed.

ZOOL 3099 - Teaching the Human Anatomy Laboratory

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: The purpose of this course is to introduce students to human dissection and the teaching of human cadaver anatomy. In so doing, we will (1) provide a uniform laboratory experience for Zoology 2100 (Human Anatomy), (2) teach the students what and how to teach the human anatomy laboratories, (3) provide the students with the opportunity to teach their peers thus providing experience at public speaking, and, (4) reinforce the knowledge base of the students (the power of knowing something by teaching something).

Pre-requisite(s): Successful completion of ZOOL 2320 with a grade of B+ or higher; completion of interview process, and instructor approval.

ZOOL 3100 - Advanced Human Anatomy

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$45.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: The purpose of this course is to further expose and train students in human cadaver dissection and the teaching of human cadaver anatomy. In so doing, we will (1) provide a uniform laboratory experience for Zoology 2100 (Human Anatomy), (2) teach these advanced students what and how to mentor their junior colleagues in teaching the human anatomy laboratories, (3) provide these advanced students with the opportunity to teach both the 2100 students and other student instructors, thus further improving their public speaking, (4) place these advanced students in a more senior leadership position among their lab instructor peers, and (5) further reinforce the knowledge base of the students (the power of knowing something by teaching something).

Due to the complex and pedagogical nature, this course can be taken up to 4 times. Each semester, the focus of the lecture portion of this course will vary from: histological anatomy, developmental anatomy, evolution and pathological/clinically-relevant anatomy. In addition, the prosection assignments each repeated semester will increase in complexity, difficulty and leadership demand. The student instructor experience is maximized by their

ability to repeat this unique course by allowing them to capitalize on and improve their past efforts in both the teaching environment and prosection assignment.

Pre-requisite(s): Successful completion of ZOOL 2320 with a grade of B+ or higher, successful completion of ZOOL 3099, completion of interview process, and instructor approval.

May be repeated up to four times with a maximum of 12 credit hours.

ZOOL 3200 - Cell Biology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$35.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: Cells form the basis of all life on Earth and an understanding of cells is essential for examining the features of all living things, including evolutionary adaptations. This course explores the fundamentals of cellular structure and function, including bioenergetics, protein function, membrane properties, cell transport, and cell signaling. Research techniques are emphasized throughout. Applications of cell biology, such as stem cell biology, tissue organization and cancer are explored. Three hours of lecture and three hours of lab per week.

Three lecture hours and one 3-hour lab a week.

Pre-requisite(s): ZOOL 1610 and either the CHEM 1110 and CHEM 1120 series or the CHEM 1210 and CHEM 1220 series, or approval of instructor.

ZOOL 3300 - Genetics

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$30.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: Genetics is the foundation for all of biology, from anatomy, physiology, and cell biology, to ecology, behavior and evolution. This course is a comprehensive exploration of genetics, from molecular genetics to organismal genetics to population genetics. Specific topics include DNA and chromosome structure, regulation of gene expression, mutation, Mendelian genetics, and population genetics. The focus is on applications and current research, including biotechnology, forensics, medicine, genetic counseling, wildlife management, and evolution.

Three hours of lecture and three hours of lab per week.

Pre-requisite(s): ZOOL 1610 and MATH 1050 (or equivalent), or approval of instructor.

ZOOL 3340 - Information Resources in the Life Sciences

Credits: (2)

Description: A practical introduction to the literature and information resources of the life sciences. Students will expand their research skills and be able to develop effective research strategies to find and synthesize information available in academic libraries.

Two lecture hours a week.

Pre-requisite(s): ENGL 2010.

Cross listed in Botany, Library Sciences and Microbiology.

Note: This course is offered as needed.

ZOOL 3450 CRE - Ecology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement; motor pool

Description: Study of how environmental factors, both nonliving and living, affect the distribution and abundance of organisms at the individual, population, community, and ecosystem levels.

Three hours of lecture and three hours of lab (or field trip) a week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

Note: Writing intensive course.

ZOOL 3470 - Zoogeography

Credits: (3)

Typically Taught Spring Semester: *Full Sem, alternating years*

Description: Study of factors determining the distributions of animals with emphases on ecological and evolutionary processes occurring across landscapes and around the globe. Three hours of lecture per week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

ZOOL 3500 - Conservation Biology

Credits: (3)

Typically Taught Fall Semester: *Full Sem, alternating years*

Description: The study of how biological principles and concepts are used in conservation. Major emphasis on the preservation and management of biodiversity. Connections between biological and societal issues are explored. Three hours of lecture per week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

ZOOL 3570 - Foundations of Science Education

Credits: (3)

Typically Taught Spring Semester: *Full Sem*

Description: A thorough investigation of research in science learning and curricular standards at the state and national levels. Foundations of the philosophy of science and scientific inquiry as applicable to science teaching at the secondary level. This course serves as a foundation to a preservice science teacher's education coursework.

Cross-listed with BTNY, CHEM, GEO, MICR, & PHYS 3570.

ZOOL 3600 - Comparative Physiology

Credits: (4)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: A comparative and evolutionary approach to the study of how animals function in a variety of environments from cellular to whole-body level. Three hours of lecture and three hours of lab per week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

ZOOL 3720 - Evolution

Credits: (3)

Typically Taught Summer Semester: *Full Sem Online*

Typically Taught Fall Semester: *Full Sem, Full Sem Online*

Typically Taught Spring Semester: *Full Sem, Full Sem Online*

Description: The patterns and processes involved in changes in natural populations. How organisms evolve at the genetic, organismal, and population levels. Topics include adaptation, taxonomy, sex, speciation & species,

coevolution, and extinction. Three lecture hours a week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

ZOOL 3810 - Experimental Course

Credits: (1-6)

Experimental

Description: Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

May be repeated for a total maximum of 6 credit hours.

ZOOL 3820 - Biology of Cancer

Credits: (3)

Description: This upper-level elective course is designed to investigate the biological foundations and ramifications of cancer by exploring the molecular mechanisms underlying the development and progression of this disease.

Outside reading material will be used to provide a platform for discussion of common misconceptions and attitudes regarding cancer, with the goal of conveying a broad understanding of the disease from molecular, clinical, historical and personal perspectives. Three lecture hours a week.

Pre-requisite(s): ZOOL 1610 or approval of instructor.

ZOOL 3930 - Toxicology

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Introduction to the principles of toxicology and discussion of the literature on biological effects of environmental toxicants at the individual, population, and community levels. Three lecture hours a week (3 credits).

Pre-requisite(s): ZOOL 1610 and ZOOL 2220 or instructor approval

ZOOL 4050 - Comparative Vertebrate Anatomy

Credits: (4)

Typically Taught Spring Semester: *Full Sem, alternating years*

Course Fee: \$50.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: In-depth, comparative study of vertebrate functional anatomy. Students learn to dissect and understand the anatomical and evolutionary relationships between fishes, amphibians, reptiles, birds, and mammals. Three hours of lecture and three hours of lab per week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

ZOOL 4100 - Vertebrate Embryology

Credits: (4)

Typically Taught Spring Semester: *Full Sem, alternating years*

Description: A study of the principles and processes of embryological development in animals, emphasizing mechanisms of development, evolution, and pathology. Three hours of lecture and three hours of lab per week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

Suggested Requisite(s): A prior anatomy class is strongly recommended.

ZOOL 4120 - Histology

Credits: (4)

Typically Taught Fall Semester: *Full Sem, alternating years*

Description: Microscopic study of the structure and function of vertebrate tissues and organs, with an emphasis on human organ systems. Three hours of lecture and three hours of lab per week.

Pre-requisite(s): ZOOL 1610, ZOOL 2220, either ZOOL 2320 or ZOOL 4050, or approval of instructor.

ZOOL 4210 - Advanced Human Physiology

Credits: (4)

Typically Taught Spring Semester: *Full Sem, alternating years*

Course Fee: \$30.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: A study of vertebrate physiological processes with human emphasis, focusing on cardiovascular, digestive, and neuromuscular systems.

Three lecture hours and one 3-hour lab a week.

Pre-requisite(s): ZOOL 1610, ZOOL 2220, and ZOOL 2420, or approval of instructor; a minimum of one year of (preferably Organic) Chemistry.

ZOOL 4220 - Endocrinology

Credits: (4)

Typically Taught Fall Semester: *Full Sem, alternating years*

Course Fee: \$30.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: The comparative study of the function of the cells, tissues, glands, and organs that secrete hormones and how these hormones affect the physiology of organisms, from invertebrates to vertebrates.

Three lecture hours and one 3-hour lab a week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, and either ZOOL 2420 or ZOOL 3600, or approval of instructor.

ZOOL 4300 - Research Applications in Genetics

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Course Fee: \$40.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: The techniques of genetics are essential to all areas of biological research, from human biology and medicine, to ecology, population structure and diversification. This course examines the applications of genetics to a variety of topics, including medicine, forensics, wildlife management and ecology. Laboratory exercises provide hands-on experience with generating, analyzing and interpreting genetic data.

Three lecture/lab hours and one 3-hour lab per week.

Pre-requisite(s): ZOOL 1610, ZOOL 2220, and ZOOL 3300, or permission of instructor.

ZOOL 4350 - Animal Behavior

Credits: (4)

Typically Taught Fall Semester: *Full Sem, alternating years*

Course Fee: \$25.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement; motor pool

Description: All animals are motivated to acquire food, avoid predators and parasites, find and secure mates, select habitat, communicate with other animals, and move through their environment. This course is centered on the concepts that underlie such behaviors in nature, with a strong emphasis on both the ecological context and the evolutionary history that has produced them. The primary focus of the lab is on the development and completion of

an original, semester-long research project. Three hours of lecture and three hours of lab per week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

ZOOL 4470 - Wildlife Ecology and Management

Credits: (4)

Typically Taught Fall Semester: *Full Sem, alternating years*

Description: Principles of wildlife ecology and the techniques of wildlife population analysis and manipulation. Three lecture hours and one 3-hour lab a week.

Pre-requisite(s): ZOOL 1610, ZOOL 2220, and ZOOL 3450, or approval of instructor.

Writing intensive course.

ZOOL 4480 - Freshwater Ecology

Credits: (4)

Typically Taught Fall Semester: *Full Sem, alternating years*

Course Fee: \$50.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: Study of freshwater ecosystems with emphasis on streams. Learn about stream habitats, food webs, biodiversity, and conservation. Field trips are required and include hiking up steep trails in variable weather and wading in small, coldwater streams. Three hours of lecture and three hours of lab per week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

Writing intensive course.

ZOOL 4490 - Marine Ecology

Credits: (4)

Typically Taught Spring Semester: *Full Sem*

Description: This course will examine the physical, chemical, and biological interactions within and among marine ecosystems. Topics covered will include: physical and biological oceanography, ecological processes driving the distribution and abundance of marine organisms, and exploration of major marine communities. Emphasis will be placed on reading primary scientific literature and discussion of human impacts such as pollution, overfishing, and climate change on all aspects of marine ecosystems. This course is a mixed lecture-lab design with six hours of lecture/lab per week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220 or approval of instructor. ZOOL 3450 recommended.

ZOOL 4570 CEL - Secondary School Science Teaching Methods

Credits: (3)

Typically Taught Fall Semester: *Full Sem*

Description: Acquaintance and practice with various teaching and assessment methods. Development of science curricula including lesson and unit plans. It is recommended that this course be completed immediately before student teaching.

Pre-requisite(s): Admission to the Teacher Education Program.

Cross-listed with BTNY, CHEM, GEO, MICR, & PHYS 4570.

ZOOL 4640 - Entomology

Credits: (4)

Typically Taught Summer Semester: *Full Sem*

Course Fee: \$25.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement; motor pool

Description: Insects are the dominant animal group in terrestrial ecosystems and account for over half of all

described species of organisms. This course provides an overview of insect anatomy, physiology, ecology and evolution. It also emphasizes the taxonomy of insects at the order and family levels and examines their role in natural systems, as well as their harmful and beneficial effects on agriculture and human health. The field-oriented lab focuses on the collection and curation of local insect specimens. Three hours of lecture and three hours of lab per week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

ZOOL 4650 - Ichthyology

Credits: (4)

Typically Taught Spring Semester: *Full Sem, alternating years*

Course Fee: \$50.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement

Description: Classification, ecology and biology of fishes and emphasis on local freshwater forms. Field trips required.

Three lecture hours and one 3-hour lab a week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

ZOOL 4660 - Herpetology

Credits: (4)

Typically Taught Fall Semester: *Full Sem, alternating years*

Description: Structure, function and evolutionary relationships of amphibians and reptiles.

Three lecture hours and one 3-hour lab a week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

ZOOL 4670 - Ornithology

Credits: (4)

Typically Taught Spring Semester: *Full Sem, alternating years*

Description: The biology of birds including form, function, behavior and ecology. Lab emphasizes identification of Utah species.

Three lecture hours and one 3-hour lab or a field trip each week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

ZOOL 4680 - Mammalogy

Credits: (4)

Typically Taught Spring Semester: *Full Sem, alternating years*

Description: An overview of mammalian anatomy, behavior, conservation, ecology, evolution, physiology, and taxonomy. Three hours of lecture and three hours of lab per week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

ZOOL 4700 - Topics in Zoology

Credits: (1-4)

Variable Title

Description: New and experimental courses, taught infrequently; may be taught with a laboratory section. Check current semester schedule. Specific title and credit hours will appear on the student transcript.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

May be repeated up to 12 credit hours for university credit.

Note: Check with Department for course availability.

ZOOL 4800 - Research in Zoology

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed individual research in zoology guided by faculty member. Specific requirements determined in consultation with faculty member.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, and approval of instructor.

May be repeated up to 8 credit hours for university credit.

ZOOL 4820 - Human Physiology Laboratory Teaching Assistant

Credits: (1)

Typically Taught Summer Semester: *1st Blk, 2nd Blk*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Students selected to be Laboratory Teaching Assistants (Lab TA) will help in the Human Physiology laboratories. Under the teacher's supervision, they (two teaching assistants per class) will address classes of up to 30 students. They will help set up the instruments, present background information, run the experiments and assess the student's learning by giving and grading short quizzes.

Pre-requisite(s): Students will need to have taken the Human Physiology class (ZOOL 2420) and laboratory, and obtained a minimum of a B+ in the class. Students will need to apply for one of the positions. Approval to be a Laboratory Teaching Assistant will be at the teacher's discretion.

May be repeated twice for a maximum of two credit hours.

ZOOL 4830 - Readings in Zoology

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed individual readings in the general area of zoology. Specific topic selected in consultation with faculty member.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, and approval of instructor.

May be repeated up to 8 credit hours for university credit.

ZOOL 4850 - Projects in Zoology

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Directed individual projects in zoology guided by faculty member. Specific requirements determined in consultation with faculty member.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, and approval of instructor.

ZOOL 4890 INT - Cooperative Work Experience

Credits: (1-4)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Provides academic credit for on-the-job experience, guided by specific written contract designed by student, employer, and Zoology Department Chair. Credit hours determined by the department.

Pre-requisite(s): ZOOL 1610, ZOOL 2220, two upper-division Zoology courses, and instructor approval. May be repeated up to 12 credit hours for university credit.

ZOOL 4950 - Field Zoology

Credits: (1-3)

Course Fee: \$30.00

Course Fee Purpose: Consumable lab supplies; lab equipment maintenance and replacement; motor pool

Description: Study conducted on an extended, supervised field trip.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

May be repeated for a maximum of 3 credit hours.

Note: Check with Department for course availability.

ZOOL 4960 - Techniques in Field Ornithology

Credits: (3)

Typically Taught Summer Semester: *1st Blk*

Description: "Techniques in Field Ornithology" is an immersive, hands-on course designed to provide students with practical experience in the methods used by wildlife biologists and professional ornithologists. Through field-based activities, students will be introduced to commonly used survey techniques, including point counts, line transects, territory mapping and the use of autonomous recording units (ARUs). The course also covers capture techniques such as mist netting, noose mats, and funnel traps, with a focus on safe and ethical bird handling. Students will learn to band birds and take standard field measurements, essential skills for tracking and studying avian populations. In addition, students will be introduced to vegetation sampling and habitat characterization methods to understand how environmental factors influence bird behavior and distribution. This course emphasizes experiential learning, allowing students to develop practical field skills that are foundational for careers in ornithology, wildlife biology, and conservation.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

Suggested Requisite(s): ZOOL 4670.

ZOOL 4970 - Thesis

Credits: (2)

Typically Taught Summer Semester: *Full Sem*

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: An extended, individual research project planned and completed under faculty supervision. Normally, two semesters of research (ZOOL 4800) will precede registration for this course. Culmination is an oral and written report of results obtained, with the final draft of the latter being due two weeks prior to the beginning of final exam week. Instructor approval required.

Pre-requisite(s): Thesis committee approved research proposal, advanced class standing, and ZOOL 1610 and ZOOL 2220.

ZOOL 4990 - Seminar

Credits: (1)

Typically Taught Fall Semester: *Full Sem*

Typically Taught Spring Semester: *Full Sem*

Description: Presentations and discussion concerning a specific topic in Zoology. One semester required. May be repeated to fulfill one additional credit of Zoology elective hours if taken beyond the one credit hour required for the major.

One hour a week.

Pre-requisite(s): ZOOL 1610 and ZOOL 2220, or approval of instructor.

May be repeated up to 3 credit hours for university credit.