



WEBER STATE UNIVERSITY 2012 - 2013 CATALOG

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Contents	
University Profile	13
Overview	13
Historical Perspective.....	13
Mission Statement.....	13
WSU Mission Core Themes Assessment.....	13
Accreditation	14
Catalog Information	14
Assessment at WSU.....	14
Non-Discrimination Policy Statement.....	15
Commitment to an Inclusive Community.....	15
Exceptions to University Policy.....	15
Academic Calendar	16
Enrollment Services and Information	18
The Office of Admissions.....	18
Recruitment Services.....	18
Orientation.....	18
Transfer Advisement	18
Admission Process.....	18
Freshman Students.....	19
Transfer Students	19
International Students	19
Graduate Program Information	20
Departmental Admissions.....	21
Admission Requirements	21
Freshman Students.....	21
Applicants Without High School Diplomas	21
Transfer Students	21
Readmitted/Reactivated Students	21
Admission Appeal Process	21
Utah Residency	21
Assessment and Placement	21
Developmental Course Fee.....	22
Special Admission Programs.....	22
Concurrent Enrollment	22
Early College	22
First Year Experience	22
Honors Program	22
Senior Citizen.....	22
Scholarships	22
Academic Awarding Categories.....	23
Wildcat Activity Award Categories.....	23
Emerging Leaders Scholarships.....	23
Donor Sponsored Departmental and Special Consideration Scholarships (Privately Funded)....	23
Scholarships for Out-of-State Students	23
International Students	23
Western Undergraduate Exchange (WUE).....	23
Utah Code 53-34-2.4 (100 Mile Tuition Reduction).....	24
Scholarship Waivers	24
Financial Aid	24
General Eligibility Requirements.....	24
Types of Financial Aid Available at WSU.....	24
Application Process	25
Satisfactory Progress	25
Appeals & Reinstatement of Aid	25
Withdrawals and Return of Title IV Funds.....	25
Student Expense Budget (Cost of Attendance).....	26
Student Success Center.....	26
First Year Experience Program	26
Program of Study (Major/Minor) Declaration	27

Registration	27	Parking Services	33
Registration Process - New Students.....	27	Academic Support Services	33
Registration Process - Continuing Students.....	27	Academic Support Centers & Programs.....	33
Registration Appointments	27	Tutoring Services.....	33
First Registration Phase - (Registration by Appointment)	27	Supplemental Instruction	33
Second Registration Phase - (Open Registration).....	28	Student Support Services (TRIO Program)	33
Changes in Registration	28	Summerbridge (Connecting to College, SmartStart)	34
Closed Classes.....	28	Computer Labs	34
Credit/No Credit (CR/NC) Registration	28	Testing Centers.....	34
Audit Course Registration	28	Career Services Center.....	34
Registration Credit Hour Loads.....	29	Student Wellness Services	34
Overload Registration	29	Student Wellness Program.....	34
Withdrawal	29	Student Health Center.....	34
Class Standing	29	Counseling & Psychological Services Center	35
Course Numbering System.....	29	Services for Special Student Populations	35
Davis Campus and Additional Locations.....	29	Women's Center	35
Tuition, Fees and Refunds	29	Multicultural Student Center	35
Tuition and Fees	29	International Student & Scholar Center.....	35
Surcharge.....	30	Hourly Childcare Center.....	35
Agreement to Pay Tuition Charges	30	Nontraditional Student Center.....	35
Billing Statement	31	Services for Students with Disabilities (SSD).....	35
Administrative Withdrawals	31	Veterans Services.....	36
Financial Petitions.....	31	Housing & Residence Life	36
Refunds and Reimbursements.....	32	Student Life & Activities	36
Student Affairs, Services and Information	33	Department of Campus Recreation.....	36
Campus Services.....	33	WSU Athletics.....	36
Computing Support Services.....	33	Shepherd Union.....	36
Wildcat and Email Account.....	33	Student Involvement and Leadership	36
Student ID (Wildcard).....	33	Community Involvement Center.....	36

WSU Student Association (WSUSA).....	37	Requests for Exceptions to Graduation Requirements	43
Dean of Students	37	Completed Degree	43
Academic Information	38	Awarding of Multiple Degrees.....	43
Records.....	38	Second Bachelor's Degree	43
Privacy Rights.....	38	Honors at Graduation.....	43
Transcripts.....	38	Degree and General Education Requirements	44
Record Holds	38	General Requirements All Degrees	44
Grading	39	Requirements for Master's Degrees	44
Changing of Grades	40	Requirements for Bachelor's Degrees	44
Repeat Courses	40	Language Requirement	44
Academic Renewal.....	40	Requirements for Associate's Degrees	45
Credit by Examination or Petition	40	Requirements for Institutional Certificates	45
Advanced Placement Examination (AP).....	40	Requirements for Graduate Certificates	45
International Baccalaureate Credit (IB)	40	Requirements for Certifications.....	45
College Level Examination Program (CLEP).....	40	Diversity Requirement.....	46
Special Examination.....	41	General Education Requirements	47
Foreign Language Credit for Prior Language Experience	41	Core Requirements.....	47
Credit for Military Training.....	41	Breadth Requirements	48
Credit for Courses from Non-accredited Schools and Colleges	41	AP, CLEP and Transfer Credit.....	51
Credit for Experiential Learning and Industrial or Commercial Training	41	College of Applied Science & Technology	52
Academic Standards/Eligibility	41	General Technology (AAS)	52
Minimum GPA Standards	41	Department of Automotive Technology ..	54
Academic Honors	42	Automotive Service Technology (AAS)	55
Student Activity Eligibility	42	Automotive Service Technology Institutional Certificate.....	56
Intercollegiate Athletics Eligibility.....	42	Automotive Technology (BS)	57
Graduation	42	Department of Computer Science	58
Commencement.....	42	Computer Science (AAS).....	58
Graduation Application Deadlines and Verification Process	42		
Changes in Graduation/Catalog Requirements.....	43		

Game Development Institutional Certificate.....59	Production Operations and Control Emphasis, Manufacturing Engineering Technology (BS)78
Computer Science (BS).....59	Welding Emphasis, Manufacturing Engineering Technology (BS).....79
Computer Science for Minor, Teaching Minor or BIS Concentration..... 61	Other classes approved by your MFET advisor Production and Inventory Control (APICS) Emphasis (BIS)79
Computer Science Departmental Honors..... 61	Electronics Engineering Technology Minor 80
Parson Construction Management Technology Department..... 62	Electronics Engineering Technology Departmental Honors..... 80
Construction Management Technology (AAS) 62	Department Network Technology and Business Multimedia 80
Construction Management Emphasis, Construction Management Technology (BS)..... 63	Business/Multimedia Technologies (AAS)81
Facilities Management Emphasis, Construction Management Technology (BS)..... 64	Network Management Technology (AAS) 81
Construction Management Technology Minor.....65	Network Management Technology Institutional Certificate..... 82
Department of Engineering 65	Network Technologies Institutional Certificate..... 82
Pre-Engineering (APE).....65	Business Education Composite Teaching (BS)..... 83
Electronics Engineering (BS)67	Business/Multimedia Technologies (BS)..... 83
Department of Engineering Technology .. 68	Network Management Technology (BS) 84
Apprenticeship (AAS)..... 69	Business/Multimedia Technologies (BIS) 85
Design Engineering Technology (AAS)..... 69	Network Management Technology Minor 85
Electronics Engineering Technology (AAS)..... 70	Business Education Teaching Minor 85
Manufacturing Engineering Technology (AAS)..... 71	Business/Marketing Education Teaching Minor... 86
Mechanical Engineering Technology (AAS) 71	Department of Sales and Service Technology 86
Plastics and Composites Emphasis, Manufacturing Engineering Technology (AAS)..... 71	Interior Design Technology (AAS)87
Production Operations and Control Emphasis, Manufacturing Engineering Technology (AAS).....72	Sales and Merchandising (AAS).....87
Welding Emphasis, Manufacturing Engineering Technology (AAS)73	Interior Design - Technical Sales (BS)..... 88
Quality and Lean Manufacturing Graduate Institutional Certificate74	Technical Sales (BS) 89
Design Engineering Technology (BS)74	Interior Design Technology Emphasis (BIS) 90
Electronics Engineering Technology (BS) 75	Business/Multimedia Technologies Minor..... 90
Manufacturing Engineering Technology (BS)76	Fashion Merchandising Minor..... 90
Mechanical Engineering Technology (BS).....76	Interior Design Minor 91
Plastics and Composites Emphasis, Manufacturing Engineering Technology (BS) 77	Sales Minor 91

Interior Design Technology Departmental Honors 91	Communication (BIS)120
Sales and Service Technology Departmental Honors 92	Communication Minor120
Telitha E. Lindquist College of Arts & Humanities 93	Communication Teaching Minor 121
Master of Professional Communication Program 93	Journalism Concentration, Communication Teaching Minor 121
Master of Professional Communication (MPC)..... 93	Communication Departmental Honors 121
Master of Arts in English Program 95	Department of English Language and Literature 122
Master of Arts in English (MA)95	Professional and Technical Writing Institutional Certificate123
Department of Communication 97	Creative Writing Emphasis, English (BA)123
Civic Advocacy Concentration, Communication (BA)..... 98	English (BA).....124
Electronic Media Concentration, Communication (BA)..... 99	English Teaching (BA).....125
Interpersonal & Family Communication Concentration, Communication (BA) 101	Professional & Technical Writing Emphasis, English (BA).....126
Journalism Concentration, Communication (BA).....102	English (BIS).....127
Journalism Concentration, Communication Teaching (BA).....104	English Minor127
Organizational Communication Concentration, Communication (BA).....105	Professional and Technical Writing Minor128
Public Relations & Advertising Concentration, Communication (BA).....107	English Teaching Minor128
Civic Advocacy Concentration, Communication (BS)109	English Departmental Honors128
Communication Studies Concentration, Communication Teaching (BS) 110	Department of Foreign Languages 129
Electronic Media Concentration, Communication (BS)111	French (BA)129
Interpersonal & Family Communication Concentration, Communication (BS)..... 113	French Teaching (BA).....130
Journalism Concentration, Communication (BS) 114	French, Commercial Emphasis (BA)..... 131
Journalism Concentration, Communication Teaching (BS) 115	German (BA).....132
Organizational Communication Concentration, Communication (BS).....117	German Teaching (BA).....133
Public Relations & Advertising Concentration, Communication (BS) 118	German, Commercial Emphasis (BA).....134
	Spanish (BA)135
	Spanish Teaching (BA)135
	Spanish, Commercial Emphasis (BA)136
	French Minor137
	French, Commercial Emphasis Minor138
	German Minor138

German, Commercial Emphasis Minor	139	Art (BFA)	161
Japanese Minor	139	Art Education Composite (BS).....	162
Spanish Minor	139	Art Education Minor	162
Spanish, Commercial Emphasis Minor	140	Art History Minor	163
French Teaching Minor	140	Art Minor	163
German Teaching Minor	141	Design for Digital Media Minor	163
Spanish Teaching Minor	141	Photography Minor	163
Foreign Language Departmental Honors	142	BFA Departmental Honors	164
Department of Performing Arts		John B. Goddard School of Business	
Sid and Mary Foulger School of Music..	142	& Economics.....	165
Dance (BA).....	146	Entrepreneurship Institutional Certificate	169
Dance Education (BA).....	147	International Business & Economics	
Music (BA).....	147	Institutional Certificate	169
Musical Theatre (BA)	148	International Business & Economics	
Theatre Arts (BA)	149	Institutional Certificate Language Emphasis.....	170
Theatre Arts Teaching (BA).....	150	Master of Business Administration	
Music Major Performance and Pedagogy (BM)....	151	Program	170
Music Education Teaching (BME)	153	Master of Business Administration (MBA).....	170
Dance Education (BS)	154	Aerospace Management Graduate Certificate	172
Music/Fine Arts Concentration for Elementary		Contract Management in Business Graduate	
Education.....	155	Certificate.....	172
Dance Minor	155	Environmental Sustainability for Business	
Music Minor	156	Graduate Certificate.....	173
Theatre Arts Minor.....	156	Information Systems & Technologies:	
Dance Teaching Minor	157	Information Assurance Graduate Certificate.....	173
Theatre Arts Teaching Minor	157	Master of Accounting Program	173
Dance Departmental Honors	157	Master of Accounting (MACC)	174
Music Departmental Honors.....	158	Master of Taxation Program	174
Theatre Departmental Honors.....	158	Master of Taxation (MTAX)	174
Department of		School of Accounting & Taxation	175
Visual Arts.....	158	Accounting (BS).....	176
Art (BA).....	159	Accounting Minor.....	176
Art Education Composite (BA).....	160	Department of Business Administration	177
		Information Systems & Technologies (AS)	178
		Business Administration (BS)	178

Finance Emphasis, Business Administration (BS).....179	Child and Family Studies (BIS)..... 200
Human Resource Management Track, Business Administration (BS)..... 180	Child Development Minor..... 200
Information Systems & Technologies (BS)..... 181	Family Studies Minor201
Management Emphasis, Business Administration (BS)182	Child and Family Studies Departmental Honors .201
Marketing Emphasis, Business A dministration (BS).....182	Department of Health Promotion and Human Performance 201
Supply Chain Management Emphasis, Business Administration (BS)183	Athletic Therapy (BS) 202
Information Systems & Technologies (BIS).....184	Athletic Training (BS)..... 203
Business Administration for Non-Business Majors Minor184	Health Promotion (BS)..... 205
Information Systems & Technologies Minor184	Human Performance Management (BS) 206
Information Systems & Technologies Departmental Honors.....185	Physical Education (BS) 208
Department of Economics 185	Exercise Science (BIS) 209
Economics, Business (BS)186	Health Promotion (BIS) 209
Economics, General (BS).....186	Nutrition Education (BIS).....210
Economics for Non-Business Majors Minor.....189	Physical Education (BIS).....210
Economics Teaching Minor.....189	Recreation (BIS) 211
Economics Departmental Honors.....189	Sports Medicine (BIS) 212
Jerry and Vickie Moyes College of Education 190	Coaching Sport Minor 213
Master of Education in Curriculum and Instruction Program 190	Health Promotion: (Community, Worksite, Clinical, School) Minor..... 213
Master of Education in Curriculum and Instruction (MEd) 191	Nutrition Education Minor 213
Master of Science in Athletic Training Program 193	Physical Education/Coaching Dual Minor 214
Master of Science in Athletic Training (MS).....194	Recreation Minor.....214
Department of Child and Family Studies195	Athletic Therapy Departmental Honors 215
Early Childhood (AAS)196	Athletic Training Departmental Honors..... 215
Early Childhood (BS).....197	Physical Education Departmental Honors 215
Early Childhood Education (BS).....198	Secondary Physical Education Teachers for Elementary School Dual Certification.....216
Family Studies (BS)199	Department of Teacher Education 216
	Elementary Education (BS).....218
	Special Education (BS)219
	ESL (English as a Second Language) Minor..... 221
	Elementary Education Departmental Honors..... 221
	Basic Reading Endorsement 222

Bilingual Endorsement.....	222	Department of Health Administrative Services	234
Education of the Gifted Endorsement	222	Health Information Technology (AAS).....	236
Elementary Education Mathematics Endorsement.....	222	Health Information Management Institutional Certificate.....	236
ESL (English as a Second Language) Endorsement	223	Healthcare Coding & Classification Institutional Certificate	237
Special Education Mild/Moderate Endorsement	223	Health Administrative Services (BS)	237
Secondary Education Licensure.....	224	Health Information Management Emphasis, Health Administrative Services (BS)	238
Special Education Licensure Mild/Moderate Endorsement	225	Health Promotion Emphasis, Health Administrative Services (BS).....	239
Dr. Ezekiel R. Dumke College of Health Professions	226	Long-Term Care Administration Emphasis, Health Administrative Services (BS)	240
Master of Health Administration Program	226	Health Administrative Services Minor.....	241
Master of Health Administration (MHA)	226	Health Information Management Emphasis, Health Administrative Services Minor.....	241
Health Services Administration Graduate Certificate.....	227	Health Promotion Emphasis, Health Administrative Services Minor.....	241
Master of Science in Nursing Program	227	Long-Term Care Administration Emphasis, Health Administrative Services Minor.....	242
Master of Science in Nursing (MSN)	227	Health Administrative Services Departmental Honors	242
Nursing Administration Graduate Certificate	228	Department of Medical Laboratory Sciences.....	242
Nursing Education Graduate Certificate.....	228	Medical Laboratory Sciences (AAS).....	243
Master of Science in Radiologic Sciences Program	229	Pre-Medical, Pre-Dental, Pre-Vet, and Pre-Professional, Medical Laboratory Sciences	244
Master of Science in Radiologic Sciences (MSRS).....	229	Medical Laboratory Sciences (BS)	244
Department of Dental Hygiene	229	Medical Laboratory Sciences Departmental Honors	246
Dental Hygiene (AS).....	230	Medical Laboratory Sciences Clinical Laboratory Assistant (CLA) Certificate of Completion	246
Dental Hygiene (BS).....	231	School of Nursing	247
Department of Emergency Care and Rescue (EMT and Paramedic)	231	Nursing, PN-to-RN [RN Completion] (AAS).....	249
Paramedic Studies (AAS)	232	Nursing, Weber State/Utah State University Cooperative - Logan Campus (AAS).....	250
EMT-Paramedic Institutional Certificate	232	Nursing (AS)	250
Emergency Medical Technician EMT Basic and Intermediate Certification.....	233		
Department of Health Sciences.....	233		
Health Sciences (AS)	234		

Nursing PN-to-RN [RN Completion] (AS)	251	Botany (BS).....	271
Nursing, Weber State/Utah State University Cooperative - Logan Campus (AS)	252	Botany (BIS)	274
Nursing, RN-to-BSN (BS)	253	Botany Minor.....	274
Nursing Departmental Honors	254	Botany Departmental Honors	274
Department of Radiologic Sciences.....	254	Department of Chemistry	275
Radiography (AAS).....	255	Chemical Technician (AAS).....	275
Diagnostic Medical Sonography (BS)	256	Chemical Technician Institutional Certificate	276
Nuclear Medicine (BS)	257	Chemistry (BS)	276
Radiation Therapy (BS).....	258	Chemistry Teaching (BS).....	277
Radiologic Sciences, Advanced (BS)	258	Chemistry (BIS)	278
Radiologic Sciences, Advanced, Minor Emphasis	260	Chemistry Minor.....	278
Radiologic Sciences Departmental Honors	261	Chemistry Teaching Minor.....	278
Department of Respiratory Therapy.....	261	Chemistry Departmental Honors.....	279
Respiratory Therapy, Pre-Professional (AAS).....	261	Department of Geosciences.....	279
Respiratory Therapy (BS).....	262	Geomatics (Applied Mapping Sciences) Institutional Certificate	279
Respiratory Therapy (BIS)	263	Geology (BA).....	280
College of Science	264	Applied Environmental Geosciences (BS)	281
Biotechnician (AS).....	265	Earth Science Teaching (BS)	282
Biotechnician Institutional Certificate.....	265	Geology (BS)	283
Pre-Chiropractic Program	266	Geology Minor	284
Pre-Dentistry Program	266	Geospatial Analysis Minor	284
Pre-Medical Program, The Dr. Ezekiel R. Dumke Family	266	Earth Science Teaching Minor	284
Pre-Optometry Program.....	267	Geosciences Departmental Honors.....	285
Pre-Pharmacy Program.....	267	Developmental Mathematics Program ..	285
Pre-Physical Therapy Program	268	Department of Mathematics	286
Pre-Physician Assistant Program.....	268	Mathematics (BA).....	286
Pre-Podiatry Program	269	Mathematics Teaching (BA).....	287
Department of Botany	269	Mathematics, Applied (BA)	288
Pre-Agriculture and Pre-Horticulture.....	270	Mathematics (BS)	290
Pre-Forestry and Pre-Range Management	271	Mathematics Teaching (BS)	290
		Mathematics, Applied (BS)	291
		Mathematics Minor	293

Mathematics Teaching Minor	293	Criminal Justice Departmental Honors.....	311
Mathematics Departmental Honors	293	Department of Geography	311
Department of Microbiology	293	Geography (BS).....	311
Pre-Medical, Pre-Dental, and Pre-Physician Assistant Emphasis, Microbiology	294	Geography Teaching (BS).....	313
Biotechnology or Industrial Microbiology Emphasis, Microbiology (BS).....	295	Geography Teaching Minor.....	314
Microbiology (BS).....	296	Geography Departmental Honors.....	315
Public Health Emphasis, Microbiology (BS)	297	Department of History	315
Microbiology Minor.....	298	History (BA).....	315
Microbiology Departmental Honors	298	History Teaching (BA).....	316
Department of Physics	298	Social Science Composite Teaching (BA).....	318
Physical Science Composite Teaching (BS)	299	History Minor	319
Physics Teaching (BS)	301	Public History Minor	320
Physics, Applied (BS)	301	History Teaching Minor	320
Physics Minor	302	History Departmental Honors	320
Physics Teaching Minor	302	Department of Political Science and Philosophy	321
Physics Departmental Honors	303	Philosophy (BA).....	321
Department of Zoology.....	303	Political Science (BA)	322
Biology Composite Teaching (BS).....	304	Political Science Teaching (BA).....	324
Zoology (BS)	304	Political Science (BS).....	326
Zoology Minor	306	Political Science Teaching (BS).....	328
Biology Teaching Minor	306	Political Science (BIS)	330
Zoology Departmental Honors.....	306	International Politics Minor.....	331
College of Social & Behavioral Sciences	307	Philosophy Minor	332
Master of Criminal Justice Program	307	Political Science Minor	332
Master of Science in Criminal Justice (MSCJ)	307	Public Administration Minor	333
Department of Criminal Justice.....	308	Political Science Teaching Minor	333
Criminal Justice (AS)	308	Philosophy Departmental Honors	334
Criminal Justice (BS).....	309	Political Science Departmental Honors	334
Criminal Justice (BIS)	311	Department of Psychology	334
Criminal Justice Minor.....	311	Psychology Major (BS)	336
		Psychology Teaching (BS)	336
		Psychology (BIS).....	337

Psychology Minor	337	Aerospace Studies (Air Force ROTC)	357
Psychology Teaching Minor	337	Aerospace Studies (Air Force ROTC) Minor.....	358
Psychology Departmental Honors	338	Engaged Learning and Interdisciplinary Programs.....	359
Department of Social Work and Gerontology	338	Office of Undergraduate Research	359
Social Work (BA)	338	Community-Based Learning Program.....	359
Gerontology (BS)	341	Honors Program	360
Social Work (BS).....	342	Bachelor of Integrated Studies Program.....	361
Gerontology (BIS).....	345	Learning English for Academic Purposes (LEAP)	362
Social Work (BIS)	345	Library Science	363
Gerontology Minor	345	Asian Studies Minor Program	363
Gerontology Departmental Honors	345	Environmental Studies Minor Program	364
Social Work Departmental Honors.....	345	Ethnic Studies Program.....	364
Gerontology Non-degree Certification.....	346	European Studies Minor Program	365
Department of Sociology and Anthropology	346	Latin American Studies Minor Program.....	366
Archaeological Technician (AAS).....	346	Legal Studies Minor Program	366
Archaeological Technician Institutional Certificate	347	Neuroscience Minor Program	368
Anthropology (BA)	348	Urban and Regional Planning Emphasis.....	369
Archaeology Track, Anthropology (BA).....	349	Women's Studies Minor Program.....	370
Anthropology (BS).....	349	WSU Davis.....	371
Archaeology Track, Anthropology (BS)	350	Degree Paths at WSU Davis	371
Sociology (BS).....	351	Enrollment Services	371
Sociology Teaching (BS)	352	Library	371
Anthropology (BIS)	353	Bookstore and Convenience Store	371
Sociology (BIS)	353	Student Programs and Services	372
Sociology Minor.....	354	Davis Learning Center	372
Sociology Teaching Minor	355	Northern Utah Academy for Math, Engineering, and Sciences (NUAMES).....	372
Anthropology Departmental Honors	355		
Sociology Departmental Honors.....	356		
Military Science (Army ROTC).....	356		
Military Science Minor	357		

Continuing Education & Community Services	373
Continuing Education Programs	373
WSU Online	373
International Services	373
Learning English for Academic Purposes (LEAP)	373
Continuing Education Administrative and Enrollment Services	374
Continuing Education Marketing and Communication Services	374
Major Program Areas	374
Programs for High School Students.....	374
Credit Programs.....	374
Professional and Non-Credit Opportunities.....	374
Career and Technical Education Programs	375
Course Descriptions	376

University Profile

Overview

Weber State University is an exceptional comprehensive university providing associate, bachelor and master's 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 over 225 separate degrees/programs (see Programs Sorted by Degree or Programs Sorted by Major/Minor) – the largest and most expansive undergraduate program in the State of Utah. With a student body of over 25,000 drawn predominantly from Utah, but also including students from 50 states and 49 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 Integrated Studies (BIS) program. The Office of Undergraduate Research (OUR) and Community-Based Learning (CBL) program 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 aid those with particular needs.

The WSU Ogden campus has 60 buildings on 526 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 new 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

Weber State University provides associate, baccalaureate and master degree programs in liberal arts, sciences, technical and professional fields. Encouraging freedom of expression and valuing diversity, the university provides excellent educational experiences for students through extensive personal contact among faculty, staff and students in and out of the classroom. Through academic programs, research, artistic expression, public service and community-based learning, the university serves as an educational, cultural and economic leader for the region.

WSU Mission Core Themes Assessment

Each of the mission core themes has objectives, indicators of achievement and empirical assessment measures of the indicators. This section contains summary assessment data for the indicators of achievement for each of the core theme objectives.

ACCESS

- Programs and degrees are responsive to student needs
- Students earn degrees
- Graduates have "next step" success
- Student enrollments reflect support for non-traditional students
- Student enrollments reflect diversity and inclusion

LEARNING

- Students participate in learning experiences such as undergraduate research, service learning, and other forms of experience-based learning
- Students experience extensive contact with faculty, staff and other students
- Students are satisfied with student support services
- Students achieve General Education learning goals
- Students achieve the learning goals of Major programs
- Faculty engage in creative and scholarly activity
- Faculty perceive that WSU fosters knowledge creation, free inquiry and free expression for faculty and students.

COMMUNITY

- WSU contributes to Pre K-12 education and professional development
- WSU promotes preparation for higher education
- The community participates in a diverse offering of WSU events
- WSU facilitates community development through public service

- WSU facilitates economic development in the region through professional development and technical support

Accreditation

Weber State University is regionally 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 Applied Science & Technology

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

Construction Management Technology (*American Council of Construction Education*)

Design Engineering Technology, Electronics Engineering Technology, Manufacturing Engineering Technology, Mechanical Engineering Technology (*Technology Accreditation Commission of ABET, Inc.*)

Interior Design--Technical Sales BS/BA (*Council for Interior Design Accreditation [CIDA]*)

Telitha E. Lindquist College of Arts & Humanities

Music (*National Association of Schools of Music*)

Visual Arts (*National Association of Schools of Art and Design [NASAD]*)

John B. Goddard School of Business & Economics

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

School of Accountancy--all undergraduate and graduate programs in accounting (*AACSB - Association to Advance Collegiate Schools of Business*)

Jerry and Vickie Moyes College of Education

Athletic Training (*Commission on Accreditation of Athletic Training Education*)

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

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

Teacher Education (*National Council for Accreditation of Teacher Education, Utah State Board of Education Standards*)

Dr. Ezekiel R. Dumke College of Health Professions

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

Emergency Care & Rescue (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*)

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

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

Nursing (*National League for Nursing Accrediting Commission*)

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

College of Science

Chemistry (*American Chemical Society*)

College of Social & Behavioral Sciences

Social Work (*Council on Social Work Education*)

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.

For more information on outcomes assessment at WSU, contact the Office of Academic Affairs, MAB 306, 801-626-6006, <http://www.weber.edu/assessment>.

Non-Discrimination Policy Statement

Weber State University is committed to protecting the personal rights of all responsible students and employees by providing an environment free from harassment and other forms of discrimination based upon race, color, ethnic background, national origin, religion, creed, age, lack of American citizenship, disability, veteran status, sexual orientation or preference, or gender, including sexual/gender harassment. 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.

A grievance procedure is available to enforce this policy. Individuals who believe any of these rights have been violated should review information available at the Affirmative Action/Equal Opportunity website (<http://departments.weber.edu/aaeeo>). 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 the Office for Civil Rights, U.S. Department of Health and Human Services, 1961 Stout Street, Room 1185 FOB, Denver, Colorado 80294-3538, Voice Phone 303-844-2024, Fax 303-844-2025, TDD 303-844-3439.

Commitment to an Inclusive Community

Pivotal to Weber State University's mission is the need to embrace and value the diversity of its members. Acknowledging the uniqueness of each individual, we seek to cultivate an environment that encourages freedom of expression. Because the University is a community where inquiry is nurtured and theories are tested, every individual has the right to feel safe to express ideas that differ from those held by other members of the community. However, all persons who aspire to be part of our campus community must accept the responsibility to demonstrate civility and respect for the dignity of others. Recognizing that the proper balance between freedom of expression and respect for others is not always apparent or easy to achieve, we must continually challenge ourselves and each other in an atmosphere of mutual concern, good will and respect. Therefore, expressions or actions that disparage an individual's or group's ethnicity, gender, religion, sexual orientation, marital status, age or disability are contrary to the mission of Weber State University.

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, Davis Campus Room 261, 801-395-3460.

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 (Student Services Center, Room 150) or on-line at <http://weber.edu/ppm/6-22.htm>.

Academic Calendar

Academic Year 2012-2013

Note: Check the Academic Calendar on the WSU website for updated information.

Summer Semester 2012	
March 26 (M)	Summer Semester registration begins
May 7 (M)	First Day of School (Summer Semester and 1st Block)
May 12 (SA)	First day of Saturday-Only classes
May 18 (F)	Last day to cancel (CL) Semester & 1st Block classes
May 28 (M)	Memorial Day Holiday - no classes
June 18 (M)	Last Day to Withdraw (W), declare CR/NC or Audit for 1st Block classes
June 22 (F)	Last day of 1st Block
June 22 (F)	Final Exam Period for 1st Block
June 25 (M)	First day of 2nd Block
July 4 (W)	Independence Day Holiday - no classes
July 16 (M)	Last day to cancel (CL) 2nd Block classes
July 17 (T)	Last Day to Withdraw (W), declare CR/NC or Audit for Semester classes
July 25 (W)	Pioneer Day Holiday (Observed) - no classes
Aug 7 (T)	Last Day to Withdraw (W), declare CR/NC or Audit for 2nd Block classes
Aug 10 (F)	Last day of Summer Semester & 2nd Block
Aug 13-15 (M-W)	Final exam period (last class period or Saturday)
Fall Semester 2012	
Apr 2 (M)	Fall Semester registration opens
Aug 27 (M)	First day of Fall Semester & 1st Block
Sept 1 (SA)	First day of Saturday-Only classes
Sept 3 (M)	Labor Day Holiday - no classes
Sept 17 (M)	Last day to cancel (CL) Semester & 1st Block classes
Oct 8 (M)	Last day to withdraw (W), declare CR/NC or Audit for 1st Block classes
Oct 18 (R)	Last day of 1st Block
Oct 22 (M)	First day of 2nd Block
Oct 19 (F)	Fall Break - no classes
Nov 6 (T)	Last day to withdraw (W), declare CR/NC or Audit for Semester classes
Nov 9 (F)	Last day to cancel (CL) 2nd Block classes
Nov 22-23 (R, F)	Thanksgiving Day Holiday - no classes
Dec 4 (T)	Last day to withdraw (W), declare CR/NC or Audit for 2nd Block classes
Dec 7 (F)	Last day of Fall Semester & 2nd Block*
Dec 10-13 (M-R)	Final exam period
Dec 14 (F)	Graduation/Commencement
Dec 24, 25 (M, T)	Winter Holiday

Spring Semester 2013	
Nov 5 (M)	Spring Semester registration opens
Jan 1 (T)	New Year's Holiday
Jan 7 (M)	First day of Spring Semester & 1st Block
Jan 12 (SA)	First day of Saturday-Only classes
Jan 21 (M)	Martin Luther King Holiday - no classes
Jan 28 (M)	Last day to cancel (CL) Semester & 1st Block classes
Feb 19 (T)	Last day to withdraw (W), declare CR/NC or Audit for 1st Block classes
Feb 18 (M)	President's Day Holiday - no classes
Mar 1 (F)	Last day of 1st Block
Mar 11 (M)	First day of 2nd Block
Mar 4-8 (M-F)	Spring Break (Note: 2nd Block classes are held during spring break)*
Mar 29 (F)	Last day to cancel (CL) 2nd Block classes
Mar 26 (T)	Last day to withdraw (W), declare CR/NC or Audit for Semester classes
Apr 19 (F)	Last day to withdraw (W), declare CR/NC or Audit for 2nd Block classes
Apr 22 (M)	Last day of Spring Semester & 2nd Block*
Apr 23-25 (T-R)	Final exam period
Apr 26 (F)	Graduation/Commencement

**It is important to note that 2nd Block classes are held during finals week for fall and spring semester and are also held during spring break for spring semester.*

Enrollment Services and Information

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 on the Internet 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 on the WSU Web site (*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 Information.

The Office of Admissions

Admissions Director: Scott Teichert
Associate Director of Admissions: Andrew S. Young
Location: Student Services Center, Room 201 and Room 210
Telephone: 801-626-6743 or 801-626-6050
Internet Address: 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

Location: Student Services Center, Room 210
Telephone: 801-626-6050
Email: recruit1@weber.edu

Admissions Advisors and staff help future students navigate the admission process, understand residency requirements 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 individual campus tours and regularly host campus visit opportunities. Personal campus visits may be scheduled through the Office of Admissions by calling 801-626-6050 or by visiting weber.edu/getintoweber.

Orientation

Location: Student Services Center, Room 201
Telephone: 801-626-6532
Internet Address: weber.edu/orientation

All new students are strongly encouraged to attend New Student Orientation. This experience will help connect students with academic advisers, friends, and resources, easing the transition into the WSU community. During Orientation, students will have the opportunity to become familiar with:

- Student services, student involvement and activities, and Weber State's campus
- eWeber account and how to register for classes
- Procedures for obtaining parking permits, Wildcards, and purchasing textbooks
- Policies and procedures
- Classroom expectations
- General Education requirements
- Program specific degree information

View dates and times for New Student Orientations and register online at weber.edu/orientation.

Transfer Advisement

Location: Student Services Center, Room 201
Telephone/Appointments: 801-626-6050
Email: transfer@weber.edu
Internet Address: 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 transferring courses and general education requirements, information on admission, scholarships and financial aid, and more. In addition, students can learn how a course might transfer to Weber State from another school by exploring the transfer guide through the Office of Admissions website.

NOTE: The Office of Admissions does not determine how courses will transfer; those decisions are made by academic departments. To see how your credits will transfer, first check the transfer guide to see if an equivalency has already been established. If an equivalent course does not exist, students may either submit the *transfer request form* on the transfer guide website or apply for admission providing official transcripts.

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 Services Center, Room 201. This may also be done by mail:

Weber State University
 Admissions Office
 1137 University Circle
 Ogden, UT 84408-1137

Students can complete an online application by going to www.weber.edu; click on the "Apply" link in the upper right hand corner.

For more information visit the above Internet address or call 801-626-6743.

Refer to the Academic Calendar in this catalog for semester dates.

Specific guidelines for international students are described on the next page.

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 other than that listed on his/her acceptance letter.

Important: All information submitted for admission will be kept on file for 6 months. If applicants do not enroll within 6 months, the information will be destroyed.

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 a sealed envelope.
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. Associate of Arts (AA) and Associate of Science (AS) degrees earned at any higher education institution accredited by one of the following six regional accrediting associations (recognized by the U.S. Department of Education) will satisfy all general education core and breadth requirements provided the granting institution was regionally accredited at the time the degree was awarded.

- North Central Association Commission on Accreditation and School Improvement
- New England Association of Schools and Colleges
- Middle States Association of Schools and Colleges
- Southern Association of Schools and Colleges
- Western Association of Schools and Colleges
- Northwest Association of Schools and Colleges

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 and a 2.0 GPA will be considered a transfer student. International applicants with a cumulative GPA below 2.0 will be referred to an Admissions Committee for admissions consideration and are not guaranteed admission.

Application Steps for International Students

The following must be submitted at least 60 days prior to the start of the semester in which the applicant plans to enroll.

1. A completed international application for admission. (see weber.edu/sis)
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 a Bank Letter: Indicating the required funds are available for use. This document may **NOT** be faxed or printed from the internet; it must be printed on bank letter head with a signature and stamp from a bank official. The bank statement or letter may be from any banking institution in the world. Please make sure that the amount being verified by the bank is listed in U.S. dollars (\$).

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. If the bank statement is from the applicant's personal bank account, then a Financial Guarantee form is not required. You can obtain a blank Financial Guarantee form from the International Student and Scholar Center (see weber.edu/sis/)

5. Official transcripts, certificates and diplomas from all high schools, colleges, and universities previously attended. To be considered official they must either be sent directly from the school to Weber State University or be in a sealed envelope. The transcripts must show course work taken and marks earned. Please send them in the original language as well as a certified English translation, if appropriate.

International Transfer Students: Need to provide all items listed above and also the items listed below.

6. Copy of current I-20 from a U.S. educational institution.

7. 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 faxed 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 weber.edu/sis. Please request that the course by course evaluation be sent to the WSU International Student and Scholar Center.

International Graduate Applicants: If you wish to apply for a graduate program at WSU, you will need to apply for admission with the graduate program in addition to applying to the University as an international student. You will need to meet the graduate program's admission requirements and the International Student admission requirements before you will be issued an I-20.

TOEFL or IELTS Requirements: A TOEFL or IELTS score is not required for admission to WSU. However if an official score report with the following minimum scores is provided, the student will not be required to take Learning English for Academic Purposes (LEAP) courses.

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

If a TOEFL or IELTS score is not provide or the score is below the required score, you will be required to take a placement test to determine your English proficiency level.

Additional Requirements

International students must attend fall and spring semesters and take at least 12 credit hours each semester. All international students are required to meet with an International Student advisor immediately after arriving on campus to receive individualized guidance. The International Student advisor gives assistance to students in meeting U.S. Immigration and Customs Enforcement requirements concerning visas, passports, permits, permission to work, and related matters. Students are also assisted in making academic, social, and environmental adjustments to campus and community life.

International students must carry medical insurance while studying in the U.S.

Graduate Program Information

WSU offers eleven master's degree programs.

- Master of Arts in English (MA) 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
- Master of Education in Curriculum and Instruction (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) Dumke College of Health Professions
- Master of Science in Nursing (MSN) 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 (MSCJ) College of Social & Behavioral Sciences

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

For a number of programs, students must submit a separate application and fee and must meet additional admission requirements specific to that program. More detailed information is available in this catalog under the Admission Requirements listed for each program. Students should contact the academic department responsible for the program in which they are interested for more information about specific admission 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 410. 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).

Applicants who plan to submit GED scores in lieu of a high school diploma are not eligible to take the test prior to the graduation date of their high school class.

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.

Readmitted/Reactivated Students

Students who interrupt their enrollment at WSU by not registering for one or more semesters, with the exception of summer term, must contact the WSU Admissions Office to reactivate their file.

- Students who have missed the Fall or Spring semester, and who have not attended any other university or college during that time, may call the WSU Admissions Office at 801-626-6743 to reactivate their files.
- Students who have attended another school since last attending WSU will be considered transfer returning students and must submit an official transcript from each institution attended since last enrolling at WSU along with a \$10 re-application fee.

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. 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 or in the Admissions Office. 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.

Assessment and Placement

All new students will, based on their ACT sub-scores or the Accuplacer placement scores, be placed into math, reading, and English courses, as outlined in the WSU Assessment & Placement Standards document. The purpose of this policy is to help students succeed academically by matching their skills and knowledge with the appropriate academic course(s) in Math, Reading, and English. For specific information about the policy go to the online Policies and Procedures Manual, PPM 6-2 or to the following website: weber.edu/SSC/assessmentandplacement.html.

Developmental Course Fee

Students who do not meet the requirements for enrollment in ENGL 1010 and MATH 1030-MATH 1080 will be charged an additional fee for each semester they are enrolled at WSU until these requirements are met. Further information is available from Academic Support Services, Student Services Center Room 160 (telephone 801-626-7847).

Special Admission Programs

Concurrent Enrollment

The Weber State University Concurrent Enrollment Program allows eligible high school juniors and seniors to fulfill both high school and university graduation requirements at the same time by attending WSU-approved high school classes taught by WSU-approved teachers. These classes match the WSU course content and student performance criteria. These students, though not officially matriculated at WSU, still create a WSU official permanent transcript. WSU academic department representatives work closely with these teachers to provide professional development opportunities as well as to assure WSU standards are maintained. The state of Utah provides a funding allocation that enables students to participate without having to pay tuition.

For updated information, visit weber.edu/concurrent.

Early College

Location: Student Services Center, Room 140
Telephone: 801-626-8953

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. Students are responsible for the university tuition and fees, and Utah colleges and most out-of-state and private universities will accept Early College credits.

For updated information, visit weber.edu/earlycollege.

First Year Experience

Location: Student Services Center, Room 140
Telephone: 801-626-6752 (option 5)
Internet Address: 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 later in this section.

Honors Program

Location: Library, Room 225
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 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

Director: Jed W. Spencer
Location: Student Services Center, Room 120
Telephone: 801-626-7569
Internet Address: weber.edu/scholarships

WSU awards scholarships for achievement of excellence in either academics or specific activities as described below. Unless otherwise specified, all scholarships are for one year and are not renewable. New students are automatically considered for academic scholarships upon completion of the Admission Application. New students should complete the Scholarship Application to apply for non academic scholarships. Continuing students must apply by the 2nd Monday in January for all scholarships, by updating their scholarship application in their eWeber student portal each year. It is important to apply early; the online application is generally available by the first day of all semester of the prior year.

An award may be canceled if the Award Offer is not accepted within the specified time period.

The priority deadline for scholarships is:

Continuing Students	2nd Monday in January
New Freshman	2nd Monday in January
Transfer Students	March 1st

Students may only have up to full tuition in academic and activity waiver combined.

Academic Awarding Categories

New Freshmen

Scholarships include the Presidential Awards (8 consecutive semesters of tuition waiver and general fees); High Honors, Honors, Achievement, and Sterling Scholar Winners. Awards 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) or upon competition placement level.

Transfer Students

Scholarships are awarded based upon cumulative GPA and completion of 30 GPA hours of college credit. Scholarships include High Honors, Honors and Transfer Awards.

Continuing Students

Scholarships are based upon WSU cumulative GPA only. A minimum of 12 semester credit hours at Weber State University is required for this category. Scholarships include High Honors, Honors, and Achievement.

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 15, audition only, call 801-626-6437 for more information

Debate - Contact WSU Communication Department, 801-626-6220

Cheerleaders and Pro/Mo Dancers - Audition only, contact WSU Athletics, 801-626-7163

Rodeo - Write to Rodeo Club, c/o Dennis Montgomery, WSU 3001 University Circle, Ogden, UT 84408-3001

Signpost - Student newspaper. Contact WSU Communication Department, 801-626-7499

KWCR Radio - Contact WSU Communication Department, 801-626-6558

Visual Arts - Contact WSU Visual Arts Department, 801-626-6455

Club Sports – Contact Student Life 801-626-6349

Emerging Leaders Scholarships

These scholarships are available only to graduating high school seniors and transfer students. Students need not be student body officers to be considered. In addition to the scholarship application, students applying for a leadership scholarship must submit the following portfolio:

1. A resume of high school and community extra-curricular activities/experiences. Emphasis on leadership responsibilities.
2. A letter of recommendation from a principal, counselor or teacher.
3. A one page essay regarding a leadership challenge faced by the applicant.

Students must apply for admissions/scholarships by the 2nd Monday in January. Portfolios are due February 1 - Send to: Aaron Newman, Student Involvement & Leadership Programs, 2102 University Circle, Ogden, UT 84408-2102.

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.

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 Non-resident waivers, Weber Edge, Alumni Legacy, the Western Undergraduate Exchange Program, and the 100 mile radius scholarship. Current information for each program can be found on WSU website at weber.edu/Scholarships.

International Students

International students who have not attended another Utah System of Higher Education may apply for any non-resident scholarships. Donor specified selection criteria are the only limitations imposed upon international students for sponsor scholarship competitions.

Western Undergraduate Exchange (WUE)

This is a reciprocal tuition reduction program between 15 participating Western states. Tuition for WUE students is the regular in-state tuition plus 50 percent of that amount. WSU excludes Teacher Education, Nursing and Dental Hygiene majors. There are a limited number of these tuition waivers. *Recipients must be full time (12 hours) and a minimum cumulative GPA of 2.0 maintained.* This scholarship is renewable. To renew a WUE scholarship the applicant must complete the online Scholarship Application by the second Monday in January.

Participating states are: Alaska, California, Colorado, Hawaii (four-year college level only), Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming. For complete information on the Western Undergraduate Program write to: Student Exchange Programs, Western Interstate Commission for Higher Education, PO Drawer P, Boulder, CO 80301- 9752, or call (303) 541-0214. The priority deadline for online scholarship application for WUE is the second Monday in January.

Utah Code 53-34-2.4 (100 Mile Tuition Reduction)

This is a non-resident partial tuition reduction awarded initially only to an undergraduate student who has not previously been enrolled in a college or university in Utah, who has enrolled full-time, and whose legal domicile is within approximately 100 highway miles of the Utah institution at which the non-resident student wishes to enroll. The reduction may not be more than one half of the differential tuition charged to non-resident students. The deadline is March 1. *There are a limited number of these tuition wavers. Recipients must be full time (12 hours) and a minimum cumulative GPA of 2.0 maintained.*

Scholarship Waivers

Any deferrals, exceptions or extended leaves of absence must be in writing and submitted to the Financial Aid & Scholarship Appeal Committee stating the request. Certain verification may be necessary. A form may be requested by emailing Scholarship@weber.edu.

Financial Aid

Director: Jed W. Spencer

Location: Student Services Center, Room 120

Telephone: 801-626-7569

Internet Address: weber.edu/financialaid

The Financial Aid Program was established to assist students in achieving 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 progress is maintained.

Student Loans - funds that are loaned to students and must be repaid.

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 Office as early as possible for guidance and assistance.

The priority deadline for financial aid is March 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.
- Sign a Statement of Educational Purpose/Certification outlining refund and default penalties.
- Be in good standing (not in default) on any student loan, federal loan or grant. (Any previous student loans must be within the annual limits.)
- Maintain satisfactory academic standing. (See Satisfactory Progress.)
- Have a correct Social Security Number.

Types of Financial Aid Available at WSU

Grants/Gifts

Grants are gifts that do not have to be repaid if satisfactory academic progress is maintained. All grants require a minimum GPA of 2.00 by the end of the second year. All grants require that the student demonstrate a financial need. The types of grants available are:

Federal Pell Grant - Available to undergraduate students. Awards may range up to \$ 2,775 per semester.

Federal SEOG (Supplemental Educational Opportunity Grant) - Awarded to help undergraduates pay for their education after high school. Awards may range up to \$500 per semester.

LEAP (formerly SSIG - State Student Incentive Grant) - Available only for Utah resident undergraduate students. The maximum yearly award varies.

UCOPE (Utah Centennial Opportunity Program for Education) - Available only for Utah resident undergraduate students. Maximum yearly award varies.

UHEAA GRANT (Utah Higher Education Assistance Authority) - Available only for Utah resident undergraduate students. Maximum yearly award varies.

Student Loans

Loans are aid that **must** be repaid. The types of loan programs available are:

- Federal Perkins Loan (formerly National Direct Student Loan)
- Federal Direct Loan
 - Subsidized Stafford
 - Unsubsidized Stafford
 - Federal Parents Loan for Undergraduate Students
 - Federal Graduate Plus Loan for Students in Graduate Programs

Employment - FWSP (Federal Work-Study Program)

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 offcampus. The Career Placement Center (Student Services Center, Room 230) has a listing of all available jobs and, where possible, will help students with employment that relates to their course of study. Work study earnings are not reported as income in the application for federal aid, which makes the student eligible for more grant money.

Application Process

Students should first determine if they are eligible for financial aid. Refer to General Eligibility Requirements above. The priority application deadline is March 1; this does not guarantee receipt of any specific type or types 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 application. All 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). (Students should make a copy for their records.)
Students apply for Federal Student Aid via the Internet at www.fafsa.ed.gov
2. Complete the WSU Financial Aid Application form (available on eWeber online at weber.edu, located under the Student Services Tab in the Financial Service section).
3. Submit a copy of the student's personal 1040 tax return, if filed, and spouse and/or parent 1040 forms if applicable (ONLY IF REQUESTED).

Special Requirements

- Married students under 24 years of age with no dependents must submit a copy of their marriage certificate.
- Students applying as Separated/Divorced or with parents who are Separated/Divorced, must also submit a copy of the Separation/Divorce Decree.
- Students who are eligible non-citizens must also submit a copy of their Alien Registration Receipt Card (forms I-151, I-551, I-1551C, or I-94 with proper endorsements).

Students are advised to apply online (see items above for appropriate Web sites). 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 Student Aid Report (SAR) which will provide information on family contribution and financial need. To make changes to the data, students 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 the web which will list the financial aid programs and the monetary amounts for which the student is eligible. Students should accept their award through eWeber online at weber.edu, located under the Student Services Tab in the Financial Service section.

An award may be canceled if the Award Offer is not accepted within the specified time period.

Satisfactory Progress

Students working toward a first bachelor's degree may receive financial aid up to a maximum of 189 semester credit hours. For students enrolled in a two-year degree program the maximum credit hours will be prorated accordingly.

Qualitative (Academic Standing)

In addition to the University's standards, all students who receive financial aid must maintain at least a "C" average cumulative GPA (2.00) by the end of their second year of attendance. Students not meeting this requirement will be disqualified from financial aid until they bring their cumulative GPA to the minimum requirement. (This includes any transfer work.)

Quantitative (Completion Rate)

Students who receive financial aid must satisfactorily complete (receive grades other than I, T, W, UW, NC, E, or AU) a specified minimum number of credit hours based upon their award level. Any exceptions to this requirement must be approved by the Financial Aid & Scholarship Petition Committee. Only cases resulting from mitigating circumstances will be reviewed by the committee.

Eligibility Status

Students who receive financial aid and are under the minimum number of credit hours required by their award level will be put on probation or suspended from financial aid.

Students may reduce the deficit hours by taking extra credits each semester or enroll in the summer term without using financial aid. (Transfer work cannot be used to reduce a WSU deficit).

Credit hours transferred from other colleges/universities will be included in the total hour eligibility for satisfactory 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. Once students reach the maximum attempted hours (150% of credits needed for graduation), they must complete their program with their own funding. Maximum hours cannot be appealed.

Appeals & Reinstatement of Aid

Students disqualified from financial aid can regain eligibility by making up deficit hours without using financial aid and/or by bringing their cumulative GPA to at least 2.00.

Administrative Review appeals requesting an exception to satisfactory progress requirements may also be made to the Financial Aid & Scholarship Petition Committee.

Withdrawals and Return of Title IV Funds

Up through the 60% point in each semester or period of enrollment, a pro rata schedule is used to determine the amount of FSA funds the student has earned at the time of withdrawal. After the 60% point in the semester or period of enrollment, a student has earned 100% of the Title IV funds he or she was scheduled to receive during the period.

If a recipient of Title IV grant or loan funds withdraws from a school after beginning attendance, the amount of Title IV grant or loan assistance earned by the student must be determined. If the amount disbursed to the student is

greater than the amount the student earned, unearned funds must be returned. You may contact the Financial Aid & Scholarship Office for any questions at 801-626-7569 or email financialaid@weber.edu.

WSU returns Title IV funds to the programs from which the student received aid during the semester or period of enrollment as applicable, in the following order.

1. Unsubsidized Federal Stafford loans.
2. Subsidized Federal Stafford loans.
3. Federal Perkins loans.
4. Federal PLUS loans.
5. Federal Pell Grants.
6. Federal Supplemental Educational Opportunity Grants (FSEOG).
7. Other awards (e.g., LEAP, UCOPE, and UHEAA Grants).

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 2010/2011 fall and spring semesters. Students should use this only as an estimate when planning their education expenses.

Sample Budget: 2011-2012 Undergraduate - 9 months

	In-state (Utah residents)*	Out-of state (non- resident)*
Full-Time Tuition (2 semesters)	\$3,773	\$11,485
Student Fees	\$775	\$775
Books (estimated)	\$800	\$800
Room & Board ** (on-campus housing)	\$3600-\$4600	\$3600-\$4600

**Based on attending full time. Please note that these amounts are from last year. 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.*

Student Success Center

Director: Dr. Jill Grob

Location: Student Services Center, Room 140

Telephone: 801-626-6752 (option 5)

Internet Address: weber.edu/ssc

Email: studentsuccess@weber.edu

The Student Success Center at Weber State University provides academic advisement for students earning an Associate of Arts or Associate of Science degree in General Studies. Academic advisors assist General Studies majors with academic planning, graduation sign-offs, and referrals to other campus support services. The Student Success Center is also responsible for the administration of Early college, the

First Year Experience Program (FYE), the Academic Advising Referral Service, WSU's Assessment and Placement Policy compliance and WSU's Early Alert Referral Service (EARS).

Office hours at Ogden Campus (Student Services Center 140)

8:00 a.m. - 5:00 p.m. Monday - Thursday

8:00 a.m. - 4:30 p.m. Friday

Evening hours available by appointment only.

Please call 801-626-6752 (option 5) for an appointment

Office hours at Davis Campus (Room 241)

7:30 a.m. - 7:00 p.m. Monday - Thursday

7:30 a.m. - 5:00 p.m. Friday

Please call 801-395-3480 for an appointment

First Year Experience Program

Location: Student Services Center, Room 140

Telephone: 801-626-6752 (option 5)

Email: fye@weber.edu

Internet Address: 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.

Program Components

To aid students in achieving these goals, the FYE Program includes the following components:

- **UNIV 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.
- **Clustered-Course Learning Communities** Students may elect to participate in the FYE Program by joining a learning community where a group of students registers for the same two or three courses which will help satisfy general education and elective graduation requirements. UNIV 1105 is one of these cluster courses. Students may also take additional classes, outside the cluster, to reach full-time status.

- **UNIV 3170 First Year Experience Mentor Leadership Seminar (2)** In this seminar course, FYE Peer Mentors are taught to effectively help Foundations of College Success (UNIV 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.

Program Requirements

Any WSU student with 30 hours or fewer is welcome to participate in the program by taking the UNIV 1105 class by itself or in a cluster.

Program of Study (Major/Minor) Declaration

Contact: Department Office for Major and Minor

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 contact the department office of their chosen major and minor. To declare an associate's degree in general studies, students should contact the Student Success Center.

Registration

Registrar: Mark Simpson

Registration Advisor: Sharon Dansie

Location: Student Services Center, Room 101

Telephone: 801-626-7780 or 801-626-6100

Internet Address: weber.edu/registrar
(click on "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 on-line at weber.edu/admissions), but have not received an acceptance notice by mail, should contact the Admissions Office at 801-626-6050.
2. Obtain a registration appointment by accessing the Internet* see the Academic Calendar in this catalog to determine when registration begins each semester; the system will be available to provide appointments one week prior to that date.
3. Plan a course schedule — some alternate classes should be selected in case first selections are closed.
4. At the correct appointment time access the Internet.*

5. 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. Obtain a registration appointment by accessing the Internet* — see the calendar (page 2) in this catalog to determine when registration begins each semester; the system will be available to provide appointments one week prior to that date.
2. Plan a course schedule — some alternate courses should be selected in case first selections are closed.
3. At the correct appointment time access the Internet*.
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/eservices. For assistance contact Computing Support at 801-626-7777.

Registration Appointments

- Registration appointments are issued to new and continuing students one week before registration begins each semester. During this week students may obtain a registration appointment by accessing the Internet at weber.edu and entering their Wildcat Username and password. Go to the Student Services tab and click on Registration Time.
- Students are assigned a registration appointment time on the basis of their earned hours. Earned hours include hours earned with a passing letter grade and hours earned through credit by examination.

First Registration Phase - (Registration by Appointment)

- During this registration phase, students may register starting on their appointed day.
- On their assigned day and appointed time, 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 or at the registration windows (Registrar's Solution Center at the main campus, Davis campus, West center and Morgan center) 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 may drop classes online or at the registration windows (Registrar's Solution Center) through the deadline dates (see the Academic Calendar online). There are different deadlines for refunds and grading when withdrawing from classes.
- 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.

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.

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 from academic departments or the Registrar's Solution Center.

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 come in-person with picture ID to the Registrar's Solution Center, SC 101, or the Davis Campus, D2 246, or 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 (1102 University Circle, 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 (weber.edu/accounting/cashiers) 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 submitting a completed "Withdrawal from Class" form to the Registrar's Solution Center. Courses dropped during this period will appear on the transcript with a "W" notation.

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)

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 N. University Park Blvd, Layton

WSU Morgan Center, 241 E. Young St., Morgan

WSU West Center, 5627 S. 3500 W., Roy

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

Internet Address: 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 State Board of Regents 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 2012-2013

Full-time undergraduate resident students at Weber State University paying a semester of tuition and fees amount of \$2,384 contribute an estimated 59% of the full cost of instruction of \$4,041. The remaining support of \$1,657 is provided by state tax funds.

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 wsuonline.weber.edu/students/costs.asp 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.

Developmental Course Fee

Students who do not meet the requirements for enrollment in ENGL 1010 and MATH 1030-MATH 1080 (see Assessment and Placement) will be charged an additional fee for each semester they are enrolled at WSU until these requirements are met. Further information is available from Academic Support Services, Student Services Center Room 160 (telephone 801-626-7847).

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 State Board of Regents 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 credits x 1.35 = 170 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. 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 beginning of each semester. See weber.edu/bursar 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 will 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 graduation, and limit use of the Wildcard and certain student services.

Unpaid accounts will be processed by University collections. A collection fee of ten percent of the outstanding balance will 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/erefunds.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.

Student Affairs, Services and Information

The Division of Student Affairs includes a variety of services ranging from those that directly supplement classroom learning to those which are aimed at helping students attain a holistic education and a healthy lifestyle. The goal of Student Affairs is a commitment to solving student problems and helping students become aware of services, activities and programs available to them. The staff in Student Affairs will assist in designing, developing, implementing and evaluating programs to expand the students' personal development and enrich co-curricular opportunities.

Campus Services

Bookstore

Telephone: 801-626-6352
Location: Shepherd Union Building and Davis Campus
Website: bookstore.weber.edu

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

Computing Support Services

Location: Technical Education (TE) 209
Telephone: 801-626-7777

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 via the Computing Support Services Website at weber.edu/eservices (visit any student computer lab to access the Internet).

Student ID (Wildcard)

Telephone: 801-626-6367
Location: Shepherd Union Lobby Information Center
Hours: Mon - Fri 7:30 a.m. - 8:30 p.m., Sat - 8:30 a.m. - 5:30 p.m. (Hours may vary during breaks and summer)

You need a Wildcard because it:

- is your library card
- allows you use of the physical education 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

The Wildcard is available for students and their dependents and spouse. There is a \$10.00 fee for each new card. Dependents and spouses of students also pay an additional activation fee per semester. There is a \$20.00 fee for all replacements, lost or stolen Wildcards. See weber.edu/wildcard for more information.

Parking Services

Telephone: 801-626-6533
Location: Annex 5
Hours: Monday through Friday, 6:30 a.m. to 4:30 p.m.

Parking Services is responsible for issuing parking permits and regulating traffic, parking, and related campus matters. See weber.edu/parking for more information.

Academic Support Services

Academic Support Centers & Programs

Main Telephone: 801-626-6870
Website: weber.edu/ascp

Academic Support Centers and Programs (ASCP) offers an array of services designed to meet the individual needs of WSU students. These services include tutoring, testing centers, computer labs, and international academic support programs.

Tutoring Services

Website: weber.edu/tutoring

Academic Support Centers and Programs (ASCP) offers an array of peer tutoring services designed to meet the individual needs of WSU students. Tutoring focus is 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). ASCP strives to assist WSU students reach their academic goals by helping them become strong, independent learners.

Supplemental Instruction

Ogden Campus Telephone: 801-626-7847
Location: Student Services, Suite 160;
Davis Campus Telephone: 801-395-3539
Website: weber.edu/si

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 (TRIO Program)

Telephone: 801-626-7009
Location: Student Services, Suite 260
Website: weber.edu/ss

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.

Summerbridge (Connecting to College, SmartStart)

Telephone: 801-626-7707

Location: Student Services, Suite 260

Website: weber.edu/summerbridge

- Supports students who are transitioning between high school and college
- Meets the needs of students who are low-income and first generation college students
- Includes a 7-week summer bridge program
 - Students get an early start on fall classes
 - Group seminars allow students to get to know the campus and each other
- One-on-one peer mentoring
- Students continue to receive academic support during their first year at WSU
- All services are provided free of charge

Computer Labs

Telephone: 801-626-7018

Website: weber.edu/computerlabs

Student Affairs Technology manages WSU's 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, but overall lab hours range from 6:30 a.m. to midnight and some labs are open seven days a week.

Locations:

Hours and software may vary in each location and semester. Please check Website for current information.

- Davis Campus - DC 205
- Dumke College Of Health Professions – MH 111
- Elizabeth Hall – EH 214
- Science - NS 228
- Shepherd Union Computer Lab – UB 230
- Social Science - SS 40
- University Village - CC 107
- Wattis - WB 205
- West Center (Roy) - WS 109

Testing Centers

The testing center offers a variety of standardized tests for the purpose of placement into appropriate courses, admission to academic programs, assistance in choosing a career or major, and assistance with college or personal adjustments. Tests are also administered for various academic departments on campus and for Independent Study courses.

Telephone: 801-626-6803

Website: weber.edu/testingcenter

Locations:

- Student Services, Room 262
- Social Science, Room 38

- Science Lab, Room 228
- Davis Campus, Room 214
- Morgan Testing Center
- Shepherd Union, Room 323
- West Center, Roy

Career Services Center

Telephone: 801-626-6393

Location: Student Services, Suite 230

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 on-line. Help is provided with resume and interview preparation and networking strategies. The 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 Career Connect. 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. Career Services is a key contributor to the next step success of Weber State Students.

Student Wellness Services

Student Wellness Program

Telephone: 801-626-7561

Location: Student Services, Suite 150

Website: weber.edu/studentwellness

The WSU student wellness program (located in Student Service Center, Room 150Q) views every student as a whole person with the inherent capability to succeed in all areas of life: intellectual, social, spiritual, physical, and emotional. Our programming focuses on functional health education with an emphasis on increasing critical thinking skills, self-awareness, confidence, and behavior change knowledge, and ability. The program specifically provides education on alcohol, stress, drugs, tobacco, nutrition, healthy interpersonal relationships, and exercise. Services are offered through group and one-on-one wellness coaching, campus and community partnering, and health education campaigns.

Student Health Center

Telephone: 801-626-6459

Location: Student Services, Suite 190

Website: weber.edu/healthcenter

The Student Health Center (located in the Student Service Center, Room 190) provides clinical medical care and assistance on a walk-in basis. Students with current Wildcard ID are eligible for services. Health insurance is not required to use the Student Health Center. During their office visits students may receive examinations, evaluations and minor care for free. X-rays, medicines, lab work etc. incur minimal charges.

Counseling & Psychological Services Center

Telephone: 801-626-6406

Location: Student Services, Suite 280

Website: weber.edu/counselingcenter

The mission of the Counseling and Psychological Services Center (located in the Student Service Center, Room 280) is to enhance the psychological growth and development of the diverse Weber State University community. The center provides professional assistance for students struggling with depression, anxiety, relationship problems, stress, grief or other concerns.

Services for Special Student Populations

Women's Center

Telephone: 801-626-6090

Location: SUB 322

Website: weber.edu/womenscenter

The Women's Center (located in the Shepherd Union, Room 322) programs and services are aimed at empowering individuals to strengthen and utilize all educational, interpersonal and leadership opportunities available at Weber State University. The center offers practicum/intern and work-study opportunities, volunteer opportunities, individual consultation and advisement, scholarships, a single mothers support group, and referrals to campus and community resources. Campus and community presentations are available upon request.

Multicultural Student Center

Telephone: 801-626-7330

Location: Student Services, Suite 150

Website: weber.edu/multicultural

The Multicultural Student Center, (located in the Student Service Center, Room 150) is committed to planning, developing and implementing services, programs and interventions that foster the learning and personal development of the various students served. The Multicultural Student Center promotes a strong campus sense of common community and aids students in building essential skills for independent critical thinking and self-determination through, in, and out of classroom experiences.

International Student & Scholar Center

Telephone: 801-626-6853

Fax: 801-626-7693

Location: Student Services, Suite 143

Website: weber.edu/sis

The International Student and Scholar Center advises and assists international students with their personal, cultural, and academic adjustment to WSU. 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 Childcare Center

Telephone: 801-626-7798

Location: Shepherd Union Building, Room 322 E

Website: weber.edu/nontrad

The Hourly Childcare Center (located in Shepherd Union, Room 322 E) is designed to provide flexible, hourly, or back-up care for the children of WSU students. Children ages two to nine years old may attend. A child may be at the center for a maximum of four hours per day, while parents are attending classes, using the computer lab, studying, or using other campus resources. There is a \$15 application fee (one-time, nonrefundable). Applications are accepted on an on-going basis. The hourly rate is \$3.50/ hour. Back-up care is based on availability.

Nontraditional Student Center

Telephone: 801-626-7794

Location: Shepherd Union Building, Room 322

Website: weber.edu/nontrad

The Nontraditional Student Center (located in Shepherd Union, Room 322) has a lounge, kitchen, computer lab, study area, and hourly childcare center to help meet the needs of students who are over 25, married, a parent, divorced, or widowed. Peer mentors are available to help navigate the campus and provide support to students academically and personally. The center strives to provide a supportive environment through events and other educational experiences allowing the student to be involved at WSU while still balancing family, home, and work. The center offers scholarships and leadership opportunities.

Services for Students with Disabilities (SSD)

Ogden Telephone: 801-626-6413

Davis Telephone: 801-395-3524

Video Phone: 801-626-7283

Ogden Location: Student Services, Suite 181

Davis Location: Room 221

Website: weber.edu/ssd

Students requesting accommodations due to disability should be referred to Services for Students with Disabilities (located in the Student Service Center, Suite 181). Based upon documentation of the disability, SSD will authorize appropriate accommodations. SSD works closely with faculty and staff to ensure that any given accommodation is appropriate and necessary for the situation. Some examples of accommodations are 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. SSD advises students on issues related to disabilities and higher education and provides priority registration for qualified students.

Veterans Services

Telephone: 801-626-6039/6042

Location: Student Service Center, Room 154

Website: weber.edu/vetaffairs

Veterans Services (located in the Student Service Center, Room 154) 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, 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.

Housing & Residence Life

Telephone: 801-626-7275

Location: University Village

Website: weber.edu/housing

Housing serves single 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 4-person suite style with kitchens, private bedrooms and 2 bathrooms. Wildcat Village, our newest on-campus housing offers single and double rooms in a suite style with 4 people per suite. Housing includes high speed internet, IPTV, 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

Department of Campus Recreation

Telephone: 801-626-7967

Location: C. William Stromberg Building, Room 21

Website: weber.edu/campusrecreation

The Department of Campus Recreation offers a variety of recreational opportunities at the C. William Stromberg Complex/Reed K. Swenson Building and throughout campus for users with an active WSU Wildcard. The staff strive to create opportunities that inspire engagement in healthy active lifestyles! Please check weber.edu/campusrecreation for facility hours, program information, and schedules.

Campus Recreation Programs and Services offers students opportunities to improve their personal health, well-being, and overall health through:

- Aquatics Program
- Fitness and Wellness
- Intramural Sports and Club Sports

- Outdoor Programs (Located in Annex 9)
- Special Events

WSU Athletics

Telephone: 801-626-6817

Location: 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 which are:

- Wildcard Office – Shepherd Union Information Center
- Information Center
- Wildcat Lanes & Games Center
- Personal Banking
- WSU Bookstore
- Scheduling Events and Conference Services
- Dining Services

Student Involvement and Leadership

Telephone: 801-626-6349

Location: Shepherd Union, Suite 326

Website: weber.edu/studentinvolvement

Student Involvement and Leadership programs offer students opportunities to engage on campus through an array of programs, services, organizations, and events including:

- Leadership Development Programs
- Student Programming and Events
- Student Organizations
- Student Volunteer Opportunities

WSU Student Association (WSUSA) includes:

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

Community Involvement Center

Telephone: 801-626-7737

Location: Shepherd Union, Suite 327

Website: weber.edu/CommunityInvolvement

The Community Involvement Center represents an intentional and strategic partnership between Academic Affairs and Student Affairs to facilitate a civically engaged experience for Weber State University students. The mission of the center is to engage students and faculty members in a process which combines community service and academic learning in order to promote civic participation, build community capacity, and enhance the education process.

Students can participate in co-curricular service activities addressing environmental concerns, food security issues, lack of low cost housing, and mentoring youth through the Volunteer Involvement Program.

Curricular service-learning and community-based research experiences can be accessed in CBL designated courses (community-based learning).

Students engaged in significant service to the community can be recognized at graduation for their important contributions through the Excellence in Service honor or WSU's service-scholar program, Civitas.

Scholarships and AmeriCorps membership offer students the opportunity to pursue their degree and a leadership experience while serving their community.

Hall Endowment for Community Outreach Grants provide funding for faculty, staff and/or students engaged in community-based service projects throughout Ogden and the surrounding communities.

Students may also receive recognition for his/her outstanding involvement in the community.

WSU Student Association (WSUSA)

Telephone: 801-626-6349

Location: Shepherd Union, Suite 326

Website: weber.edu/studentinvolvement

WSU Student Association (WSUSA) includes:

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

Dean of Students

Telephone: 801-626-7256

Location: Student Services Center, Room 151

The Office of the Dean of Students (located in the Student Services Center, Room 151) 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.

Academic Information

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

Admissions Information
801-626-6743

Admissions Director, Mr. Scott Teichert
801-626-6005

Graduation Information
801-626-6739 or 801-626-6100

Graduation Supervisor, Ms. Lynn Schow
801-626-6327

NCAA Eligibility Information
801-626-6061

Records Information
801-626-6100

Records Supervisor, Ms. Teri Clawson
801-626-7791

Registration Assistance
801-626-6100

Registration Supervisor, Ms. Candy Stevens
801-626-6052

Registrar, Mr. Mark Simpson
801-626-6061

Student Success Center
801-626-6752 (option 5)

Student Success Center Director, Dr. Jill Grob
801-626-7910

For information on General Studies, contact the Student Success Center.

Records

Registrar: Mark Simpson

Supervisor: Teri Clawson

Location: Student Services Center, Room 101

Telephone: 801-626-7791

Fax: 801-626-6936

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, date of birth 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 \$5.00 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, mail, or fax.

- Transcripts picked up in person require photo identification.
- Transcript requests may be made by mail, fax, 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, birth date, 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.
 - The name of your friend or relative that will be retrieving your transcript.
 - Your full name and any prior names.
 - Your Social Security Number or Student ID Number and birth date.
 - Your approximate dates of enrollment.
 - 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, 1102 University Circle, Ogden, UT 84408-1102; or faxed to 801-626-6936.

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 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). (See Registration section 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 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 bases 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 committee 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 yet reported a grade for the course. This temporary symbol is used for the semester Report of Grades only. A course without a grade will not appear on the student's transcript. However, all courses must have an earned grade posted prior to graduation.

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. Note: UW's 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 bachelor's degree has been posted to a student's permanent record, courses used for that degree may not be repeated to improve their GPA.

Academic Renewal

Academic renewal allows students the opportunity to recalculate their GPA by discounting grades of D+ or lower which were earned six or more years prior to the date of petition.

- Courses completed prior to the awarding of a certificate, associate or bachelor's degree do not qualify for academic renewal.
- Students must be currently registered, attending and have their tuition paid in full.
- Academic renewal may be requested only once during a student's academic career.
- 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 received a grade (A-E) or notation I, T, W, UW, CR, NC, or if the student has registered for the equivalent course covered by the examination or petition.
- 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.
- Up to eight WSU credit hours may be earned with each AP examination score of 3, 4, or 5. Credit awarded is at the discretion of the academic department. Some departments require a score of 4 or 5 for the awarding of credit. Please see <http://www.weber.edu/admissions/aptests.html> for details.
- To have credit evaluated, a student must submit their scores and pay a \$10 recording fee.
 - 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)

- A student who completes the IB Diploma program will receive 30 semester credit hours, a waiver of all Breadth Requirements contained in the general education requirements, and a waiver of the University Diversity requirement. To further waive the Core Requirements of general education, a student must complete the corresponding Higher-Level Subject with a score of five (5) or higher.
- If the IB Diploma is not earned, students will be awarded eight (8) semester hours of credit and a waiver of the corresponding general education requirement for each Higher-Level Subject completed with a score of five (5) or higher.
- 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.
- 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.

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 and a receipt for the \$10 application fee 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 Foreign Language Department 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 3 credit hours which satisfy general education HLTH 1030 and 7 elective credit hours.
- Students who have completed four or more years in the National Guard or a reserve unit may be granted 3 credit hours which satisfy general education HLTH 1030 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 already have a bachelor's degree are not eligible for a military credit evaluation.
- Military credit is added to a student's total credit hours completed, and may reduce a student's eligibility for financial aid.

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 at in the WSU catalog.

- Specific course credit may be applied by the Admissions Office if recommended and approved by the appropriate department chair with the Application for Transfer Credit form which can be obtained from the Admissions 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

Registrar: Mark Simpson

Academic Standing Coordinator: Mr. Casey Bullock

Location: Student Services Center, Room 101

Telephone: 801-626-6061

NCAA Eligibility Coordinator: Ms. Erica Fryer

Location: Student Services Center, Room 101

Telephone: 801-626-6061

Minimum GPA Standards

The minimum cumulative grade point average (GPA) required at WSU is 2.00 or C. The minimum GPA required by the University for graduation is 2.00; however most 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 advisor immediately.

Academic Warning

- Students who have accumulated less than 60 semester credit hours with a cumulative GPA below 2.00 will be placed on academic warning.

Academic Probation

- Students who have accumulated less than 60 semester credit hours who earn a semester GPA below 2.00 while on academic warning will be placed on academic probation. They must earn a GPA of at least 2.00 their next semester to avoid suspension.
- Students who have accumulated 60 or more semester credit hours who have a cumulative GPA lower than 2.00 will be placed on academic probation and must earn a GPA of at least 2.50 their next semester to avoid suspension.

Academic Suspension

- Students who do not earn the minimum required GPA while on probation will be suspended for a length of time specified according to the number of suspensions:

- Students suspended for the first time will be required to remain out of school for one semester.
- Students suspended for the second time must remain out of school for one calendar year.
- Students suspended for the third time must remain out of school for three years.

Appeal Procedure

- Students who have been placed on academic warning, probation, or suspension and feel their classification is in error or wish to appeal their status should see the Associate Registrar to review their records and receive information regarding the process of appeal.
- Early readmission from suspension will be considered if the student meets with their academic advisor, presents evidence which shows a positive change of circumstance and suggests a high probability of future academic success.

Academic Honors

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

4.00 for the High Honors Certificate
3.50 to 3.99 for the Honors 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

Registrar: Mark Simpson

Supervisor: Lynn Schow

Location: Student Services Center, Room 101

Telephone: 801-626-6100

Internet Address: weber.edu/registrar (click on graduation)

Commencement

Commencement ceremonies are held in April and December. 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.

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 Office.

Graduation Application Deadlines and Verification Process

Important Application Deadlines:

Fall 2012	October 5, 2012
Spring 2013	February 8, 2013
Summer 2013	June 28, 2013*

* *Summer graduates 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. Obtain an application for graduation from the Registrar's Solution Center (SC 101) or on the web at: weber.edu/Graduation/Applications.html.
2. Schedule an appointment with their major/minor academic advisors and inform them that the purpose of the meeting is to review requirements in preparation for final clearance to graduate.
3. Meet with their major/minor academic advisor. If all degree requirements will be complete by the end of the semester, the advisor will initiate the final electronic clearance process in the CatTracks degree evaluation system.
4. Students who are seeking an Associate of Science or Arts degree in General Studies should meet with an Academic Advisor in the Student Success Center. If all degree requirements will be complete by the end of the semester, the advisor will initiate the final electronic clearance process.
5. Take the completed application to the Cashier's Office or the Davis Campus and pay the application fee.
6. Submit the completed application to the Registrar's Solution Center, Student Services Center, Room 101 or the Davis Campus by the schedule of deadlines. Commencement Ceremony information will be sent to all candidates who apply by the application deadline.
7. Monitor their CatTracks degree evaluation to ensure that:
 - a. All requirements appearing in their CatTracks degree evaluation will be marked as complete by the end of their graduation semester.
 - b. A final graduation clearance message from their major and minor advisor is displayed in CatTracks.

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 responsible department has approved the completion of general education, university, major, and minor requirements. Students who do not complete graduation requirements during their anticipated semester or who change their graduation semester should notify the Graduation Office of their new anticipated semester graduation date.

- 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 graduation, general education and program requirements listed in the catalog in effect when they first enroll, with the following exceptions:

- When students select or change their program of study, they are then required to graduate under the catalog in effect when they declare the program of study (see Program of Study (Major/Minor) Declaration).
- 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, respectively. Students taking longer to graduate may either choose to graduate under the requirements from the oldest active catalog or under the catalog which is in effect at the time they file for graduation.

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. 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 GPA, grades cannot be changed, 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 two degrees in the same academic year with the following exceptions:

- Students who complete requirements for an associate's degree (AA/AS) in general studies, and a bachelor's degree in the same academic year will be awarded the bachelor's degree only.
- Students who first earn an associate of arts or science degree in a specific academic area of study will not be awarded an associate's degree (AA/AS) in general studies.

Students must apply for graduation and are subject to a graduation fee for each degree or certificate received.

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. The first and second baccalaureate degrees may not be awarded during the same semester or term. Application forms for a second degree may be obtained in person or by mail from the Registrar's Solution Center. 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 in second degree. 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 12 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 diversity (DV) 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 WSU 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).

Degree and General Education Requirements

General Requirements All Degrees

1. Students must earn a cumulative GPA of at least 2.00 for all WSU work. No more than 20 credit hours of "D" grade may be applied toward graduation. A college or department may reject any or all "D" grade work toward major or minor requirements.
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 Master's Degrees

WSU offers eleven master's degree programs. 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) 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
- Master of Education in Curriculum and Instruction (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) Dumke College of Health Professions
- Master of Science in Nursing (MSN) 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 (MSCJ) College of Social & Behavioral Sciences

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 Department of Performing Arts | Sid and Mary Foulger School of Music for more information.
- Bachelor of Science (BS)
- Bachelor of Integrated Studies (BIS)
See the Integrated Studies (BIS) 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 – Foreign Language**

One of the following

- a. 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.
- b. Completion of WSU foreign language course 2020 with a grade of "C" or higher, or comparable transfer credit.
- c. Completion of any upper-division WSU foreign language course with a grade of "C" or higher, or comparable transfer credit.
- d. Students for whom English is a second language may meet the BA foreign language requirement by:
 - verifying their proficiency in their (non-English) native language in cooperation with the Foreign Language Department *and*
 - verifying their proficiency in English as a second language by passing the ESL Special Examination.
- e. 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."
- f. Completion of WSU American Sign Language course 2020 with a grade of "C" or higher, or comparable transfer credit.
- g. Completion of twelve semester-hours of foreign language.

Refer to the Foreign Language section of this catalog for additional information on obtaining foreign language credit.

- **Option 2 – Foreign 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 foreign 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. 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 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.

Requirements for Associate's Degrees

AA/AS Degree Requirements (General Studies)

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 and diversity requirements.

The **Associate of Arts** Degree must include a foreign language or ASL (American Sign Language) requirement which may be met by one of the following:

- Documentation of a proficiency level of "Novice High" or better through an examination administered by the WSU Foreign Language Department or through an examination by a recognized testing agency.
- Completion of WSU foreign language course 1020 with a grade of "C" or higher, or comparable transfer credit.
- Completion of any WSU foreign language course at a level beyond the first year with a grade of "C" or higher, or comparable transfer credit.
- Documentation of three years of the same language completed in high school with a minimum grade of "B".
- 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."
- 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 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 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.

Diversity Requirement

To satisfy the University diversity requirement, each student who is a candidate for a Bachelor of Arts degree, a Bachelor of Music degree, a Bachelor of Music Education degree, a Bachelor of Fine Arts degree, a Bachelor of Science degree, a Bachelor of Integrated Studies degree, an Associate of Science degree, or an Associate of Arts degree will complete a minimum of 3 credit hours from the list below of courses approved for the diversity requirement. Courses taken as part of a student's major or minor program requirements or taken to satisfy the General Education requirements may also count toward the diversity requirement if on the approved list.

Approved Courses

- ANTH 1000 SS/DV - Introduction to Anthropology (3)
- ANTH 1020 LS/DV - Biological Anthropology (3)
- ANTH 1040 HU/DV - Language and Culture (3)
- ANTH 2010 SS/DV - Peoples and Cultures of the World (3)
- ANTH 3200 DV - Archaeology of Early Civilizations (3)
- ANTH 3500 DV - Advanced Cultural Anthropology (3)
- ANTH 3600 DV - Culture Area Studies (1-3)
- ANTH 3700 DV - Sex Roles: Past, Present and Future (3)
- ANTH 3900 DV - Magic, Shamanism and Religion (3)
- BTNY 2303 DV - Ethnobotany (3)
- CHF 3350 DV - Diverse Families (3)
- CJ 3040 DV - Community Policing (3)
- CJ 3360 DV - Prisons - Contemporary Issues and Dilemmas (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- DANC 1010 CA/DV - Introduction to Dance (3)
- DENT 2250 DV - Professional Ethics (1)
- EDUC 3200D DV - Foundations of Diversity: Culturally, Linguistically Responsive Teaching (Special Education) (3)
- EDUC 3200E DV - Foundations of Diversity: Culturally, Linguistically Responsive Teaching (Elementary) (3)
- EDUC 3200S DV - Foundations of Diversity: Culturally, Linguistically Responsive Teaching (Secondary) (3)
- EDUC 3260S DV - The Exceptional Student (Secondary) (3)
- EDUC 3260E DV - The Exceptional Student (Elementary) (3)
- ENGL 2200 HU/DV - Introduction to Literature (3)
- ENGL 2220 HU/DV - Introduction to Fiction (3)
- ENGL 2240 HU/DV - Introduction to Poetry (3)
- ENGL 2290 HU/DV - Introduction to Drama (3)
- ENGL 2510 HU/DV - Masterpieces of Literature (3)
- ENGL 2710 HU/DV - Perspectives on Women's Literature (3)
- ENGL 3510 HU/DV - World Literature (3)
- ENGL 3550 DV - Multicultural and Ethnic Literature in America (3)
- ENGL 3730 DV - Literatures of Cultures and Places (3)
- FL 3550 DV - Cultural Heritage I (3)
- GEOG 1300 SS/DV - Places and Peoples of the World (3)
- GEOG 1520 SS/DV - Geography of the United States and Canada (3)
- GEOG 3540 DV - Geography of Latin America (3)
- GEOG 3590 DV - Geography of Europe (3)
- GEOG 3620 DV - Geography of Russia and the Former USSR (3)
- GEOG 3640 DV - Geography of Asia (3)
- GEOG 3660 DV - Geography of China and Japan (3)
- GEOG 3740 DV - Geography of Africa (3)
- GERT 3320 DV - Ethnicity and Older Women in the American Society (3)
- HAS 3190 DV - Cultural Diversity in Patient Education (3)
- HLTH 3420 DV - Multicultural Health and Nutrition (3)
- HIST 1510 SS/DV - World History from 1500 C.E. to the Present (3)
- HIST 3010 DV - American Indian History: 1300 to Present (3)
- HIST 3030 DV - African-American History (3)
- HIST 3050 DV - History of U.S. Latinos (3)
- HIST 3070 DV - Women in American History: 1600 to Present (3)
- HIST 3090 DV - American Social History (3)
- HIST 4110 DV - History of the American West to 1900 (3)
- HIST 4350 DV - History of Modern Germany (3)
- HIST 4510 DV - Twentieth Century World (3)
- HIST 4530 DV - Far Eastern History (3)
- HIST 4550 DV - Southeast Asian History (3)
- HIST 4590 DV - Middle Eastern History (3)
- HIST 4650 DV - Modern Latin America (3)
- HIST 4670 DV - History of Mexico (3)
- HNRS 2130 HU/SS/DV - Intellectual Traditions: Great Ideas of the East (3)
- MUSC 1040 CA/DV - Music of World Cultures (3)
- NRSG 4000 DV - Culture and Health Care (2)
- NRSG 4001 DV - Clinical Experience Related to Culture and Health Care of Nurses (1-3)
- NUTR 3420 DV - Multicultural Health & Nutrition (3)
- PHIL 3550 DV - Philosophy of Eastern Religion (3)
- POLS 3630 DV - Identity Politics (3)
- POLS 4070 DV - Sex Roles and the Law (3)
- POLS 4160 - Topics in World Politics (3) (Third World Women)
- PSY 2370 DV - Psychology of Women and Gender (3)
- PSY 3100 DV - Psychology of Diversity (3)
- RADT 3003 DV - Psycho-Social Medicine (3)
- SOC 1010 SS/DV - Introduction to Sociology (3)
- SOC 1020 SS/DV - Social Problems (3)
- SOC 3010 DV - Social Inequality (3)
- SOC 3120 DV - Sex/Gender Roles: Past, Present, Future (3)
- SOC 3850 DV - American Minorities in Urban Settings (3)
- SOC 4410 DV - Sociology of Globalization (3)
- SOC 4550 DV - Sociology of Work (3)
- SW 2200 DV - Issues in Diversity (3)
- SW 3320 DV - Ethnicity and Older Women in the American Society (3)
- WS 1500 SS/DV - Introduction to Women's Studies (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)
- WS 3090 DV - Gender and Communication (3)

General Education Requirements

General education at Weber State University provides students with a foundation in the arts and sciences that transcends and complements their academic emphases. This exposure to diverse fields of study enables students to make intellectually honest and ethical decisions that reflect a knowledge of and respect for diverse people, ideas, and cultures. Such breadth of education also cultivates skills critical to student success in academic, personal, professional and community endeavors both within and beyond the university.

Students completing the general education program can

- Communicate, understand and interpret ideas and information using written, oral and visual media.
- Think critically and creatively to construct well-reasoned arguments supported by documented research.
- Use quantitative, mathematical relationships, operations and reasoning.
- Demonstrate an understanding of the history, foundational principles, economics, and politics of the United States.
- Demonstrate proficiency in computer and information literacy.
- Demonstrate an understanding of how the biological and physical sciences describe and explain the natural world.
- Demonstrate an understanding of humans, their behavior, and their interaction with and within their physical, social, local and global environments.
- Demonstrate an understanding of diverse forms of aesthetic and intellectual expression.

Before selecting general education courses, students should consult with an advisor and review their CatTracks degree evaluation accessed through the eWeber student portal.

See weber.edu/generalstudiesheet to view a listing of general education courses that includes course offerings by semester.

Core Requirements

The core requirements listed below apply to all Bachelor's degrees and AA/AS degrees. It is recommended that students complete these requirements within the first 60 credit hours. General education requirements for AAS degrees vary and are specified by each program.

1. Composition (3 credit hours)

ENGL 2010 EN - Intermediate College Writing (with a grade of C or above).

Entrance into ENGL 2010 requires one of the following:

- a. Passing ENGL 1010 with a grade of C or better.
- b. Passing the AP Language and Composition or Literature and Composition examination with a score of 3 or better.
- c. Achieving an ACT English and Reading score of 29 or better.

- d. A CLEP with essay test with a score of 50 or better.
- e. An articulated transfer credit from another regionally accredited college or university.

2. American Institutions (3 credit hours)

one of the following with a grade of C or above:

- a. POLS 1100 AI - American National Government , or HIST 1700 AI - American Civilization , or ECON 1740 AI - Economic History of the United States .
- b. HIST 2700 - History of the United States to 1877 , and HIST 2710 - History of the United States since 1877 (recommended for history majors).
- c. Present advanced placement credit in American History, American Government or suitable transfer courses from other institutions.

3. Quantitative Literacy (3-5 credit hours)

one of the following: *

- a. Completion of one of the following mathematics courses (with a grade of C or above): MATH 1030 QL - Contemporary Mathematics , or MATH 1040 QL - Introduction to Statistics , or MATH 1050 QL - College Algebra , or MATH 1080 QL - Pre-calculus , or any math course with either MATH 1050 or MATH 1080 as a prerequisite.
- b. Completion of the three-credit * PHIL 2200 QL - Deductive Logic course with a grade of C or above.
- c. A score of 70 or greater on the ACCUPLACER College Level Math exam.
- d. A score of 3 or higher on the AP Calculus or AP Statistics exam.

Note:

** Weber State University students who anticipate transferring to another institution within the Utah State higher education system should fulfill quantitative literacy (QL) with one of the approved Math QL courses rather than PHIL 2200 , "Deductive Logic." PHIL 2200 will not be accepted in transfer as a QL course by another Utah public institution of higher education.*

4. Computer & Information Literacy (2 to 5 credit hours)

Successful completion of approved four-part (A, B, C, D) requirement. Can be met by taking proficiency exams with a C- grade or better, courses with a C- grade or better, or a combination of the two.

Completion of one three-credit NTM 1700 TE - Introduction to Microcomputer Applications course and/or one one-credit IST 2010 TE - Business Computer Skills will meet Parts A, B, and C of the requirement.

Exams are credit/no credit, courses vary.

Students should check with the advisor for their Major to determine the best way to meet the computer literacy requirement. More information is also available at: <http://programs.weber.edu/cil/>.

Part A. WORD PROCESSING

- NTM 1501 TA - Word Processing Competency Exam (.5) or
- NTM 1701 TA - Introduction to Word Processing (1)

Part B. PRESENTATIONS AND OPERATING SYSTEMS

- NTM 1502 TB - Operating Systems and Digital Presentations Competency Exams (.5) or
- NTM 1702 TB - Operating Systems and Digital Presentations (1)

Part C. SPREADSHEETS

- NTM 1503 TC - Spreadsheets Competency Exam (.5) or
- NTM 1703 TC - Introduction to Spreadsheets (1)

Part D. INFORMATION LITERACY (Library and Internet Research Skills)

- NTM 1504 TD - Information Literacy Competency Exam (.5)

or one of the following courses:

- LIBS 1704 TD - Information Navigator (1)
- LIBS 2604 TD - Information Resources in Education (1)
- EDUC 2604 TD - Information Resources in Education (1)
- LIBS 2704 TD - Information Resources in the Business Disciplines (1)
- BSAD 2704 TD - Information Resources in the Business Disciplines (1)
- LIBS 2804 TD - Information Resources in the Social Sciences (1)
- LIBS 2904 TD - Information Resources in the Health Professions (1)
- HTHS 2904 TD - Information Resources in the Health Professions (1)

Note:

CIL Transfer Credit:
Computer and Information Literacy (CIL) transfer credit that does not automatically transfer from another college or university will be evaluated on an individual basis. Transfer credit must meet the current WSU CIL requirements, have been taken within the last seven years, and passed with a grade of C- or above.

The Network Technology and Business Multimedia Department offers testing options for those who have transfer credit over the seven-year limit.

Exams are credit/no credit, courses vary.

Students should check with the advisor for their Major to determine the best way to meet the computer literacy requirement. More information is also available at: <http://programs.weber.edu/cil/>.

Breadth Requirements

Courses selected to fulfill the following general education requirements must each be from a different program (i.e., have a different course abbreviation, with the exception of HNRS – Honors courses).

Humanities/Creative Arts

Associate of Arts, Associate of Science, Bachelor of Arts, Bachelor of Science, Bachelor of Music, Bachelor of Fine Arts, or Bachelor of Integrated Studies

Select nine (9) credit hours – at least three (3) credit hours from Humanities and at least three (3) credit hours from Creative Arts.

Each course must be from a different program (i.e., have a different course abbreviation), with the exception of HNRS – Honors courses.

Associate of Applied Science

Select three (3) credit hours from Humanities or Creative Arts.

Groups - Humanities

Anthropology

- ANTH 1040 HU/DV - Language and Culture (3)

Communication

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 2010 HU - Mass Media & Society (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Foreign Language

- FL 1851 - Study Abroad (3) or
- FL 2851 HU - Study Abroad (3)
- FL 2020 HU - Second Year II (3)

Honors

- HNRS 1110 HU - Introduction to Honors: The Construction of Knowledge (3)
- HNRS 1540 HU - Perspectives in the Humanities (3)
- HNRS 2010 HU - Exploring Key Concepts in the Disciplines: Humanities (3)
- HNRS 2110 HU/SS - Intellectual Traditions: Great Ideas of the West in the Classical and Medieval Eras (3)
- HNRS 2120 HU/SS - Intellectual Traditions: Great Ideas of the West in the Modern Era (3)
- HNRS 2130 HU/SS/DV - Intellectual Traditions: Great Ideas of the East (3)

Literature

- ENGL 2200 HU/DV - Introduction to Literature (3)
- ENGL 2220 HU/DV - Introduction to Fiction (3)
- ENGL 2240 HU/DV - Introduction to Poetry (3)
- ENGL 2290 HU/DV - Introduction to Drama (3)
- ENGL 2510 HU/DV - Masterpieces of Literature (3)
- ENGL 2710 HU/DV - Perspectives on Women's Literature (3)

- ENGL 3500 HU - Introduction to Shakespeare (3)
- ENGL 3510 HU/DV - World Literature (3)
- ENGL 3520 HU - Literature of the Natural World (3)
- ENGL 3750 HU - Topics and Ideas in Literature (3)
- FL 2600 HU - Introduction to Foreign Literature in Translation (3)

Music

- MUSC 1043 HU - Music, the Arts & Civilizations (3)

Philosophy

- PHIL 1000 HU - Introduction to Philosophy (3)
- PHIL 1120 HU - Contemporary Moral Problems (3)
- PHIL 1250 HU - Critical Thinking (3)

Theatre

- THEA 3323 HU - History and Literature of Contemporary Theatre (3)

Groups - Creative Arts

Art

- ART 1010 CA - Introduction to the Visual Arts (3)
- ART 1030 CA - Studio Art for the Non-Art Major (3)
- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 (4)
- ARTH 1100 CA - Art and Architecture of the World: AD 1000-Present (4)

Note:

Only one course from either ART or ARTH may be used to fulfill the Creative Arts general education requirement.

Computer Science

- CS 1010 CA - Introduction to Interactive Entertainment (3)

Dance

- DANC 1010 CA/DV - Introduction to Dance (3)

English

- ENGL 2250 CA - Creative Writing (3)
- ENGL 2260 CA - Introduction to Writing Short Fiction (3)

Honors

- HNRS 1530 CA - Perspectives in the Creative Arts (3)

Music

- MUSC 1010 CA - Introduction to Music (3)
- 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/DV - Music of World Cultures (3)
- MUSC 1063 CA - Music in Religion (3)

Theatre

- THEA 1013 CA - Introduction to Theatre (3)
- THEA 1023 CA - Introduction to Film (3)
- THEA 1033 CA - Acting I (3)
- THEA 1043 CA - Introduction to American Musical Theatre (3)
- THEA 1053 CA - Introduction to Technical Production (3)

Social Sciences

Associate of Arts, Associate of Science, Bachelor of Arts, Bachelor of Science, Bachelor of Music, Bachelor of Fine Arts, or Bachelor of Integrated Studies

Select six (6) credit hours in addition to the American Institutions requirement.

Each course must be from a different program (i.e., have a different course abbreviation), with the exception of HNRS – Honors courses.

Associate of Applied Science

Select three (3) credit hours.

Groups - Social Sciences

Anthropology

- ANTH 1000 SS/DV - Introduction to Anthropology (3)
- ANTH 2010 SS/DV - Peoples and Cultures of the World (3)
- ANTH 2030 SS - Principles of Archaeology (3)

Child and Family Studies

- CHF 1500 SS - Human Development (3)

Criminal Justice

- CJ 1010 SS - Introduction to Criminal Justice (3)

Economics

- ECON 1010 SS - Economics as a Social Science (3)
- ECON 1100 SS - Environmental Issues and Economic Policy (3)
- ECON 2010 SS - Principles of Microeconomics (3)
- ECON 2020 SS - Principles of Macroeconomics (3)

Geography

- GEOG 1300 SS/DV - Places and Peoples of the World (3)
- GEOG 1520 SS/DV - Geography of the United States and Canada (3)

Gerontology

- GERT 1010 SS - Introduction to Gerontology (3)

Health Education

- HLTH 1030 SS - Healthy Lifestyles (3)

History

- HIST 1500 SS - World History to 1500 C.E. (3)
- HIST 1510 SS/DV - World History from 1500 C.E. to the Present (3)

Honors

- HNRS 1520 SS - Perspectives in the Social Sciences (3)
- HNRS 2110 HU/SS - Intellectual Traditions: Great Ideas of the West in the Classical and Medieval Eras (3)
- HNRS 2120 HU/SS - Intellectual Traditions: Great Ideas of the West in the Modern Era (3)
- HNRS 2130 HU/SS/DV - Intellectual Traditions: Great Ideas of the East (3)

Information Systems & Technologies

- IST 1100 SS - The Wired Society (3)

Political Science

- POLS 2100 SS - Introduction to International Politics (3)
- POLS 2200 SS - Introduction to Comparative Politics (3)
- POLS 2300 SS - Introduction to Political Theory (3)

Psychology

- PSY 1010 SS - Introductory Psychology (3)
- PSY 2000 SS - Interpersonal Relationships (3)

Social Work

- SW 1010 SS - Introduction to Generalist Social Work (3)

Sociology

- SOC 1010 SS/DV - Introduction to Sociology (3)
- SOC 1020 SS/DV - Social Problems (3)

Women's Studies

- WS 1500 SS/DV - Introduction to Women's Studies (3)

Physical & Life Sciences

Associate of Arts, Associate of Science, Bachelor of Arts, Bachelor of Science, Bachelor of Music, Bachelor of Fine Arts, or Bachelor of Integrated Studies

Select nine (9) credit hours – at least three (3) credit hours from Physical Sciences and at least three (3) credit hours from Life Sciences.

Each course must be from a different program (i.e., have a different course abbreviation), with the exception of HNRS – Honors courses.

Associate of Applied Science

Select three (3) credit hours from Physical or Life Sciences.

Groups - Physical Sciences**Chemistry**

- CHEM 1010 PS - Introductory Chemistry (3)
- CHEM 1050 PS - Introduction to General, Organic & Biochemistry (5)
- CHEM 1110 PS - Elementary Chemistry (5)
- CHEM 1210 PS - Principles of Chemistry I (5)
- CHEM 1360 PS - Principles of Physical Science (3) *

* PS1360 is cross listed in Chemistry and Physics.

Geography

- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEOG 1400 PS - The Science of Global Warming: Myths, Realities and Solutions (3)

Geosciences

- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1060 PS - Environmental Geosciences (3)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3)

- GEO 1130 PS - Introduction to Meteorology (3)
- GEO 1350 PS - Principles of Earth Science (3)

Only one course from either the Geography (GEOG) or the Geosciences (GEO) areas in the above list may be used to fulfill the Physical Sciences general education requirement.

Honors

- HNRS 1500 PS - Perspectives in the Physical Sciences (3)

Physics

- PHYS 1010 PS - Elementary Physics (3)
- PHYS 1040 PS - Elementary Astronomy (3) (cross listed with ASTR 1040)
- PHYS 1360 PS - Principles of Physical Science (3) *
- PHYS 2010 PS - College Physics I (5)
- PHYS 2210 PS - Physics for Scientists and Engineers I (5)

* PS1360 is cross listed in Chemistry and Physics.

Groups - Life Sciences**Anthropology**

- ANTH 1020 LS/DV - Biological Anthropology (3)

Botany

- BTNY 1203 LS - Plant Biology (3)
- BTNY 1303 LS - Plants in Human Affairs (3)
- BTNY 1370 LS - Principles of Life Science (3) *
- BTNY 1403 LS - Environment Appreciation (3-4)

Health Education

- HLTH 1020 LS - Science and Application of Human Nutrition (3) **

Health Science

- HTHS 1110 LS - Biomedical Core (4)

Honors

- HNRS 1510 LS - Perspectives in the Life Sciences (3)
- HNRS 2040 LS - Exploring Key Concepts in the Disciplines: Life Science (3)

Microbiology

- MICR 1113 LS - Introductory Microbiology (3)
- MICR 1153 LS - Elementary Public Health (3)
- MICR 1370 LS - Principles of Life Science (3) *
- MICR 2054 LS - Principles of Microbiology (4)

Nutrition

- NUTR 1020 LS - Science and Application of Human Nutrition (3) **

Zoology

- ZOOL 1010 LS - Animal Biology (3)
- ZOOL 1020 LS - Human Biology (3)
- ZOOL 1030 LS - The Nature of Sex (3)
- ZOOL 1370 LS - Principles of Life Science (3) *

* LS1370 is cross listed in Botany, Microbiology and Zoology.

** LS1020 is cross listed in Health and Nutrition.

Elementary Education majors should refer to the Teacher Education Department section of this catalog for specific science requirements.

AP, CLEP and Transfer Credit

General education requirements may also be satisfied by:

AP Credit

Students who have completed advanced placement courses in high school and passed the Education Testing Service examination with acceptable scores (3, 4, or 5) may be granted WSU credit hours for each, and will be given general education credit in the appropriate category. (Refer to the Credit by Examination or Petition section and/or contact the Admissions Office for more information.)

International Baccalaureate Credit (IB)

Students who have completed International Baccalaureate courses in high school and passed the corresponding Higher-Level or Diploma examinations may be granted WSU credit hours for each, and will be given general education credit in the appropriate category. (Refer to the Credit by Examination or Petition section and/or contact the Admissions Office for more information.)

CLEP Credit

All students are eligible to take the CLEP (College Level Examination Program) battery which, if passed satisfactorily, may satisfy most of the general area requirements. (Refer to the Credit by Examination or Petition section and/or contact the Admissions Office for more information.)

Transfer Credit

Weber State University accepts transfer credit from regionally accredited colleges and universities. Associate of Arts (AA) and Associate of Science (AS) degrees earned at any higher education institution accredited by one of the following six regional accrediting associations (recognized by the U.S. Department of Education) will satisfy all general education core and breadth requirements provided the granting institution was regionally accredited at the time the degree was awarded.

- North Central Association Commission on Accreditation and School Improvement
- New England Association of Schools and Colleges
- Middle States Association of Schools and Colleges
- Southern Association of Schools and Colleges
- Western Association of Schools and Colleges
- Northwest Association of Schools and Colleges

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

Contact the Transfer Admissions Advisement Office for more information (see Transfer Advisement).

College of Applied Science & Technology

Dr. David Ferro, Dean

The vision of the College of 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 citizens of Northern Utah and 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 which expand the technological education our students receive and provide 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 Advisor: Geri Harames 801-626-7552

Telephone Contact: Gina Naisbitt 801-626-6303

Location: Engineering Technology Building, Room 110

Department Chairs

Automotive Technology: Vel S. Casler 801-626-6579

Parson Construction Management Technology:
Steven Peterson 801-626-7761

Computer Science: Brian Rague 801-626-7929

Engineering: Kirk D. Hagen 801-626-6998

Engineering Technology: Rick Orr 801-626-6305

Network Technology and Business Multimedia:
Allyson Saunders 801-626-6059

Sales and Service Technology: Vel S. Casler 801-626-6913

Engineering Technology Programs

Engineering technology education focuses primarily on the applied 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 engineering technology programs at Weber State prepare individuals for a wide variety of positions in technologybased business and industries. The study of engineering technology requires a knowledge of mathematical, scientific, and engineering principles in combination with a strong applications-orientation in support of engineering activities. The College of Applied Science & Technology offers AAS and BS degrees in the following engineering technology programs:

- Computer Engineering Technology
- Design Engineering Technology
- Electronics Engineering Technology
- Manufacturing Engineering Technology
- Mechanical Engineering Technology

The BS degrees in these programs are accredited by the Technology Accreditation Commission of ABET, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700.

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.

Technology Assistance Center

Director: Rainie Ingram

Location: ET 116 **Telephone:** 801-626-7785

The Technology Assistance Center was established in 1991 to provide various types of technical assistance to the region. The goal of the Center includes furnishing technical, managerial, and interdisciplinary support for the University, regional businesses, governments, schools, and other organizations. The Center works as an outreach organization in promoting technological excellence through educational outreach. The Center works as an information clearing house by conducting data base searches, providing technical assistance in product or process development or testing, demonstrating new or emerging technologies, training, promoting technical careers in primary, secondary, and post-secondary students, and creating an understanding of technology, economy, society, and the individual. This assistance, which is provided by faculty, students, and others, includes but is not limited to problem solving, decision support for new technology or systems, product or process design assistance, material handling, cost analysis, quality control assistance, team building, software and hardware development, technical training, promotion, retreats, camps, and seminars.

General Technology (AAS)

Program Prerequisite: A 900 hour minimum certificate from a WSU approved DATC or OWATC program.

Grade Requirements: An overall GPA of 2.00 or "C."

Credit Hour Requirements: A minimum of 63.5 credit hours (includes 30 WSU credit hours for completing an approved 900 or more hour certificate program at DATC or OWATC awarded within 5 years of beginning the AAS program).

Advisement

All General Technology students are required to meet with the College of Applied Science & Technology academic advisor before entering the program to establish a program

contract plan. Students will also be required to meet with the advisor at least annually for ongoing course and program advisement.

Admission Requirements

Regular university admission requirements and a completed 900 hour minimum approved technical specialty certificate from OWATC or DATC awarded within 5 years of beginning the AAS program. Students meeting this requirement will receive 30 hours of transfer elective credit toward an AAS in General Technology degree upon completion of all WSU graduation requirements for the AAS in General Technology. Approval by the College of Applied Science and Technology at Weber State University is required.

Major Course Requirements for the AAS in General Technology Degree

NOTE: Individual articulated courses between WSU and DATC/OWATC will not count for this requirement if those courses were included in the 900-hour certificate.

Core Courses Required (10.5 credit hours minimum)

- ENGL 1010 EN - Introductory College Writing (3) and
- ENGL 2010 EN - Intermediate College Writing (3)
- OR ENGL 1010 OR ENGL 2010 AND one other course in oral and written communication
- AND
- MATH 1030 QL - Contemporary Mathematics (3) or
- MATH 1040 QL - Introduction to Statistics (3) or
- MATH 1050 QL - College Algebra (4) or
- MATH 1080 QL - Pre-calculus (5)
- AND
- NTM 1700 TE - Introduction to Microcomputer Applications (3) or
- NTM 1501 TA - Word Processing Competency Exam (.5) and
- NTM 1502 TB - Operating Systems and Digital Presentations Competency Exams (.5) and
- NTM 1503 TC - Spreadsheets Competency Exam (.5)

Breadth Courses Required (9 credit hours minimum)

Creative Arts & Humanities:

- COMM 2110 HU Interpersonal & Small Group Communication (3)

Social Science:

- Any Approved (3)

Physical or Life Science:

- Any Approved (3-5)

Elective Courses (Select 14-17 credit hours)

Grades for the following elective courses must meet departmental requirements. Students should work closely with the College of Applied Science & Technology academic advisor to select a course sequence that will support the student's chosen career pathway.

- ACTG 1010 - Practical Accounting & Taxes (3)

- ACTG 2010 - Survey of Accounting I (3)
- BSAD 1010 - Introduction to Business (3)
- AUSV 1001 - Collision Repair Fundamentals and Estimating (2)
- AUSV 1100 - Principles of Technology I (2)
- AUSV 1325 - Automotive Electronics, Electrical and Body Control Systems (7)
- AUSV 2860 - Automotive Shop Practice (3-8)
- CEET 1130 - Digital Systems (4)
- CEET 1140 - AC and DC Circuits (4)
- CEET 1850 - Industrial Electronics (4)
- CEET 2150 - Embedded Controllers (4)
- CEET 2170 - Industrial Controls (3)
- DET 1060 - Fundamentals of Mechanical Drafting Using 3D CAD (3)
- DET 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD (3)
- DET 2460 - Product Design Fundamentals Using 3D CAD (3)
- DET 2650 - Product Design & Development (3)
- HTHS 1101 - Medical Terminology (2)
- HTHS 1103 - Introduction To Health Careers and Care in a Diverse Society (3)
- HTHS 1108 - Biocalculations for Health Professions (5)
- HTHS 1110 LS - Biomedical Core (4)
- HTHS 1111 - Biomedical Core (continued) (4)
- IST 1100 SS - The Wired Society (3)
- MFET 1210 - Machining Principles Lecture/Lab I (3)
- MFET 2150 - Metal Forming, Casting and Welding (2)
- MFET 2360 - Manufacturing Processes and Materials (3)
- MFET 2410 - Quality Concepts and Statistical Applications (3)
- SST 1143 - Fundamental Selling Techniques (3)
- SST 1303 - Sales Channels (3)
- SST 2182 - Credit and Collection Methods (2)
- SST 2383 - Retail Merchandising and Buying Methods (3)
- SST 2443 - Advertising Methods (3)
- SST 2603 - Advanced Selling Techniques (3)
- SST 2703 - Internet Sales and Service (3)
- NTM 2010 - Business English Applications (3)
- NTM 2080 - Database Applications (1)
- NTM 2200 - Microcomputer Operating Systems (3)
- NTM 2300 - Introduction to LAN Management (3)
- NTM 2334 - Introduction to Multimedia Web Animation (3)
- NTM 2531 - Exploring Multimedia Applications (3)
- NTM 2533 - Image Editing Solutions (3)
- NTM 2534 - Video Editing Techniques (3)

Technical Specialty Credit (30 credit hours)

Technical specialty credit for completing a third-party approved 900 hour or more certificate program from DATC or OWATC awarded within 5 years of beginning the AAS program. Credit is applied after WSU graduation clearance for the AAS in General Technology.

Department of Automotive Technology

Department Chair: Vel S. Casler

Location: Technical Education Building, Room 201

Telephone Contact: Jessica Lott 801-626-6579

Department Web Site: weber.edu/automotive

Associate Professor: John Kelly; **Instructors:** Joseph Grundvig, Scott Hadzik, Kevin Roner, William Speigle, Matthew Stagg, Justin Tate

The Automotive Technology Department curriculum is a "2 + 2" design leading to an Associate of Applied Science degree in Automotive Service Technology and a Bachelor of Science degree in Automotive Technology.

Chrysler Training Center

Coordinator: John Kelly

Advisor: Paul Sylvester

Telephone: 801-626-7743

The Chrysler Training Center provides short, current product information courses for Chrysler technicians and service management personnel throughout Utah and several western states. The Center's resources are shared with a broader automotive community through activities such as automotive faculty development workshops.

General Motors Training Center

Coordinator: John Kelly

Advisor: Matthew Stagg

Telephone: 801-626-6229

The General Motors Training Center provides short, current product information courses for GM technicians and service management personnel throughout Utah and several western states. The Center's resources are shared with a broader automotive community through activities such as automotive faculty development workshops.

Toyota Training Center

Coordinator: John Kelly

Advisor: William Carroll

Telephone: 801-626-7056

The Toyota Training Center provides short, current product information courses for Toyota technicians and service management personnel throughout Utah and several western states. The Center's resources are shared with a broader automotive community through activities such as automotive faculty development workshops.

Automotive Service Technology

Automotive Service Technology is a program offered under the Automotive Technology Department. Automotive Service Technology is the field of study dealing with diagnosis, service, and repair of automobiles and light trucks. Lab and classroom courses are oriented toward high levels of technical understanding, current developments such as electronic control systems and environmental issues, the development of the students' diagnostic capabilities, and proficiency with recommended service procedures. In addition to specific technical training, supporting courses provide for growth of interpersonal and other skills needed to advance within the automotive service industry.

There are six tracks available under the Automotive Service Technology Associate of Applied Science degree.

- Chrysler College Automotive Program (CAP) is a program with technical coverage specializing exclusively in current Chrysler products.
- General Motors Automotive Service Educational Program (ASEP) is a program with technical coverage specializing exclusively in current General Motors products.
- Collision Repair is a program with an Inter-Industry Conference On Auto Collision Repair (I-CAR) based curriculum. I-CAR training is recommended by most major automobile and truck manufacturers.
- Toyota Toyota Technical Education Network (T-TEN) is a program with technical coverage specializing exclusively in current Toyota and Lexus products.
- Automotive Technology Educational Program (ATEP) is a comprehensive training program covering all major manufacturers' products.
- Heavy Duty Truck Technology is an articulated program with Davis Applied Technology Center, specializing in current Mack and Volvo White products.

Additionally, an Institutional Certificate is offered that prepares students for entry level automotive technician positions in either Chrysler or Ford, Lincoln, or Mercury dealerships or at independent shops that repair either Chrysler or Ford vehicles.

The Automotive Service Technology degree tracks are certified by the National Automotive Technicians Education Foundation (NATEF). Partnerships with four of the world's largest automotive corporations—Chrysler, Ford, General Motors and Toyota—assure direct access to state-of-the-art automotive technology. Although it is normally advantageous to complete one of the specified tracks, a student may elect to take an individual course or courses to meet their particular needs (provided the prerequisites have been met). To assure optimum functioning, individual program tracks may have limited enrollment. See department for details.

In addition to the above degree tracks, the Automotive program also has the manufacturer's training centers, listed above, located on campus allowing faculty and students access to the latest equipment, data, and vehicles.

Automotive Technology

Automotive Technology is a program offered under the Automotive Technology Department. The baccalaureate degree in Automotive Technology is designed to prepare graduates for employment in a wide variety of automotive related industries including field service operations, fleet management, and technical support activities. It will also prepare them to advance in organizations such as:

- Original Equipment Manufacturers
- Aftermarket Management
- Service/Parts Management and Marketing
- Collision Repair and Automotive Insurance
- Advanced Vehicle Systems Technical Research and Support.

To cover the broad range of knowledge and skills that these different organizations require, the degree has three different tracks. They are as follows:

- Field Service Operations
- Collision Repair and Insurance Management
- Advanced Vehicle Systems

Automotive Technology graduates will be technically competent and possess strong interpersonal skills. They will have the ability to communicate effectively, be able to solve problems, work in teams, and will have developed an understanding of the need for continued professional development.

The Automotive Technology bachelor's degree is designed as a "2+2" program building upon associate degree graduates who have received a degree in automotive service technology, heavy duty truck technology, collision repair, diesel technology, or similar programs. Students who have completed their associate degrees in one of these programs will be admitted as juniors and can complete their baccalaureate degree within two years.

Automotive Service Technology (AAS)

Program Prerequisite: An interview with the program coordinator or advisor in the desired track is necessary prior to acceptance into the program.

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 63-66 credit hours is required except for the Heavy Duty Truck track which requires a total of 68 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 the program coordinator or your advisor or your department for specific information regarding assessment.

Advisement

Automotive Service students should meet each semester with the program coordinator or faculty advisor for their specific track for advisement. Call 801-626-6579 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information) and meet with your specific program coordinator or faculty advisor.

National Institute for Automotive Service Excellence (ASE) Certification Requirement

Automotive Service students are required to take all eight automotive ASE exams. See www.asecert.org for testing information. ASE exam fees are included in the student fees for each course. Exams will be taken twice per year at the end of each semester. **Only** Collision Repair and Heavy Duty Truck Technology students will be exempt from this requirement.

General Education

Refer to Degree and General Education Requirements for Associate of Applied Science requirements. The following support courses required for this degree will also be applied toward general education requirements: CHEM 1010 (3) or CHEM 1110 (5), COMM 2110 (3), NTM 1700, NTM 1504 or LIBS 1704, and a Social Science general education course (3).

Major Course Requirements for AAS Degree

Automotive Service Courses Required for All Tracks except Collision Repair (6 credit hours)

- AUSV 1000 - Introduction to Automotive Service (3)
- AUSV 1300 - Technical Mathematics (3) or
- MATH 1030 QL - Contemporary Mathematics (3) *

Support Courses Required for All Tracks (19 credit hours)

- CHEM 1010 PS - Introductory Chemistry (3) or
- CHEM 1110 PS - Elementary Chemistry (5)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- ENGL 1010 EN - Introductory College Writing (3)
- NTM 1700 TE - Introduction to Microcomputer Applications (3) and
- NTM 1504 TD - Information Literacy Competency Exam (.5) or
- LIBS 1704 TD - Information Navigator (1) or equivalent exams - see *Computer Literacy as defined in this catalog*
- SST 3203 - Customer Service Techniques (3)
- Social Science General Education Course (3)

Elective Course (3 credit hours)

Choose one of the following

- BSAD 3000 - Small Business Management (3)
- SST 3363 - Contract and Sales Negotiation Techniques (3)
- SST 4203 - Ethical Sales and Service (3) *

* Students wishing to complete a Bachelor of Science (BS) in Automotive Technology after completing their Associate of Applied Science (AAS) degree should take the courses marked with an asterisk.

Track Requirements

Select one of the following tracks (see the track coordinator for a suggested course sequence):

Chrysler Cap Track

Automotive Service Courses Required (36 credit hours)

- AUSV 1050 - Chrysler Braking, Steering, Suspension and Climate Control Systems (8) or
- AUSV 1051 - Chrysler Braking Systems (3) and
- AUSV 1052 - Chrysler Steering and Suspension Systems (2) and
- AUSV 2350 - Chrysler Climate Control Systems (3)
- AUSV 1100 - Principles of Technology I (2) or
- PHYS 1010 PS - Elementary Physics (3)

- AUSV 1250 - Chrysler Manual Drivetrain Systems (3)
- AUSV 1355 - Chrysler Electronics, Electrical and Body Control Systems (7)
- AUSV 2550 - Chrysler Automatic Transmissions (4)
- AUSV 2655 - Chrysler Engine Mechanical and Engine Control Systems (6) or
- AUSV 1150 - Chrysler Engines (3) and
- AUSV 2050 - Chrysler Engine Control Systems (3)
- AUSV 2880 - Cooperative Practicum (3-8)
two sections of 3 credit hours each

General Motors ASEP Track

Automotive Service Courses Required (36 credit hours)

- AUSV 1040 - General Motors Braking, Steering, Suspension and Climate Control Systems (8) or
- AUSV 1041 - General Motors Braking Systems (3) and
- AUSV 1042 - General Motors Steering and Suspension Systems (2) and
- AUSV 2340 - General Motors Climate Control Systems (3)
- AUSV 1100 - Principles of Technology I (2) or
- PHYS 1010 PS - Elementary Physics (3)
- AUSV 1240 - General Motors Manual Drivetrain Systems (3)
- AUSV 1345 - General Motors Electronics, Electrical and Body Control Systems (7)
- AUSV 2540 - General Motors Automatic Transmissions (4)
- AUSV 2645 - General Motors Engine Mechanical and Engine Control Systems (6) or
- AUSV 1140 - General Motors Engines (3) and
- AUSV 2040 - General Motors Engine Control Systems (3)
- AUSV 2880 - Cooperative Practicum (3-8)
two sections of 3 credit hours each

Collision Repair Track

Automotive Service Courses Required (42 credit hours)

- AUSV 1001 - Collision Repair Fundamentals and Estimating (2)
- AUSV 1021 - Automotive Braking Systems (3)
- AUSV 1022 - Steering and Suspension Systems (2)
- AUSV 1080 - Non-Structural Analysis and Damage Repair 1 (4)
- AUSV 1085 - Painting and Refinishing 1 (4)
- AUSV 1180 - Structural Analysis and Damage Repair 1 (4)
- AUSV 1320 - Automotive Electronics (4)
- AUSV 2080 - Painting and Refinishing 2 (4)
- AUSV 2085 - Non-Structural Analysis and Damage Repair 2 (4)
- AUSV 2180 - Structural Analysis and Damage Repair 2 (3) (4 credit hours required)
- AUSV 2480 - Auto Body Business Practices (2)
- AUSV 2860 - Automotive Shop Practice (3-8)
two sections of 3 credit hours each

Toyota T-Ten Track

Automotive Service Courses Required (39 credit hours)

- AUSV 1061 - Toyota Braking Systems (3)

- AUSV 1062 - Toyota Steering and Suspension Systems (3)
- AUSV 1160 - Toyota Engines (4)
- AUSV 1260 - Toyota Manual Drivetrain Systems (3)
- AUSV 1360 - Toyota Automotive Electronics (4)
- AUSV 2060 - Toyota Engine Control Systems (6)
- AUSV 2160 - Toyota Electrical and Body Control Systems (3)
- AUSV 2360 - Toyota Climate Control Systems (3)
- AUSV 2560 - Toyota Automatic Transmissions (4)
- AUSV 2880 - Cooperative Practicum (3-8)
two sections of 3 credit hours each

Independent Shop ATEP Track

Automotive Service Courses Required (36 credit hours)

- AUSV 1020 - Braking, Steering, Suspension, and Climate Control Systems (8) or
- AUSV 1021 - Automotive Braking Systems (3) and
- AUSV 1022 - Steering and Suspension Systems (2) and
- AUSV 2320 - Automotive Climate Control Systems (3)
- AUSV 1100 - Principles of Technology I (2) or
- PHYS 1010 PS - Elementary Physics (3)
- AUSV 1220 - Automotive Manual Drivetrain Systems (3)
- AUSV 1325 - Automotive Electronics, Electrical and Body Control Systems (7)
- AUSV 2520 - Automatic Transmissions (4)
- AUSV 2625 - Engine Mechanical and Engine Control Systems (6) or
- AUSV 1120 - Automotive Engines (3) and
- AUSV 2020 - Engine Control Systems (3)
- AUSV 2860 - Automotive Shop Practice (3-8)
two sections of 3 credit hours each

Heavy Duty Truck Track

Automotive Service Courses Required (38 credit hours)

- AUSV 1071 - H D Truck Brakes (2)
- AUSV 1072 - H D Truck Steering & Suspension (3)
- AUSV 1100 - Principles of Technology I (2) or
- PHYS 1010 PS - Elementary Physics (3)
- AUSV 1170 - H D Truck Engines (5)
- AUSV 1270 - H D Truck Drive Mechanisms (8)
- AUSV 1320 - Automotive Electronics (4)
- AUSV 2170 - H D Truck Electrical Systems (3)
- AUSV 2270 - H D Truck Engine Diagnosis (3)
- AUSV 2370 - H D Truck Air Conditioning (2)
- AUSV 2860 - Automotive Shop Practice (3-8)
two sections of 3 credit hours each

Automotive Service Technology Institutional Certificate

The Institutional Certificate in Automotive Service Technology prepares students for entry level automotive technician positions in either Chrysler or Ford, Lincoln, or Mercury dealerships or at independent shops that repair either Chrysler or Ford vehicles.

For information call 801-626-6579

Program Prerequisite: There are no admission requirements. Students must meet with the program advisor before beginning the program.

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.

Course Requirements for Chrysler or Ford Option

Automotive Service Courses Required (15 credit hours)

- AUSV 1000 - Introduction to Automotive Service (3)
- AUSV 1021 - Automotive Braking Systems (3)
- AUSV 1022 - Steering and Suspension Systems (2)
- AUSV 1320 - Automotive Electronics (4)
- AUSV 2320 - Automotive Climate Control Systems (3)

Automotive Technology (BS)

Department Chairman: Vel Casler, 801-626-6324
Program Coordinator: John Kelly, 801-626-7183
Department Website: www.weber.edu/automotive

Program Prerequisite: An interview with the program coordinator is necessary prior to acceptance into the program. Students must provide evidence of completion of an Associate of Applied Science AAS or Associate of Science AS degree in automotive service technology or other related degree prior to entering upper division curriculum.

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).

Advisement

Automotive Technology students should meet annually with the program coordinator for course and program advisement. Call 801-626-6579 for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information) and meet with the program coordinator.

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements. The following general education courses not taken as part of the associate degree will need to be taken as part of the bachelor's degree: MATH

1030 or higher, PHYS 1010, NTM 1700, CHEM 1010, SOC 1020, and COMM 2110. The following courses required for the Automotive Technology major will also fulfill general education requirements: ENGL 2010, PSY 1010, ECON 1740, BTNY 1403, PHIL 1250, and NTM 1504 or LIBS 1704.

Major Course Requirements for BS Degree

Required Support Courses for all Emphases (15+ credit hours)

- BTNY 1403 LS - Environment Appreciation (3-4) (3 credit hours required)
- ENGL 2010 EN - Intermediate College Writing (3)
- ECON 1740 AI - Economic History of the United States (3)
- PHIL 1250 HU - Critical Thinking (3)
- PSY 1010 SS - Introductory Psychology (3)
- NTM 1504 TD - Information Literacy Competency Exam (.5) or
- LIBS 1704 TD - Information Navigator (1)

The following general education courses not taken as part of the associate degree will need to be taken as part of the bachelor's degree: MATH 1030 or higher, PHYS 1010, NTM 1700, CHEM 1010, SOC 1020, and COMM 2110.

Field Service Operations Emphasis

(Also available online)

Automotive Technology Courses Required (18 credit hours)

- ATTC 3000 - Introduction to Automotive Technology (1)
- ATTC 3020 - Introduction to Safety Management and Hazardous Materials (3)
- ATTC 3520 - Fleet Management (3)
- ATTC 3620 - Automotive Business Practices (3)
- ATTC 3760 - Advanced Automotive Technologies (3)
- ATTC 3880 - Cooperative Practicum (3)
- ATTC 4720 - Capstone Project (2)

Support Courses Required (23 credit hours)

- NTM 3070 - Advanced Spreadsheet Applications (1)
- NTM 3090 - Advanced Electronic Presentations (2)
- NTM 3250 - Business Communication (3)
- SST 1143 - Fundamental Selling Techniques (3)
- SST 3203 - Customer Service Techniques (3)
- SST 3363 - Contract and Sales Negotiation Techniques (3)
- SST 3563 - Principles of Sales Supervision (3)
- SST 3702 - Developing Team Leadership Skills (2)
- SST 4203 - Ethical Sales and Service (3)

Electives - Select one course (3 credit hours)

- BSAD 3000 - Small Business Management (3)
- COMM 3550 - Organizational Communication (3)

Collision Repair and Insurance Management Emphasis

Automotive Technology Courses Required (27 credit hours)

- ATTC 3000 - Introduction to Automotive Technology (1)
- ATTC 3020 - Introduction to Safety Management and Hazardous Materials (3)
- ATTC 3280 - Advanced Painting and Refinishing (3)
- ATTC 3480 - Advanced Structural Analysis and Damage Repair (3)
- ATTC 3680 - Automotive Damage Analysis and Estimating (3)
- ATTC 3760 - Advanced Automotive Technologies (3)
- ATTC 3880 - Cooperative Practicum (3)
- ATTC 4380 - Advanced Non-Structural Analysis and Damage Repair (3)
- ATTC 4720 - Capstone Project (2)
- ATTC 4780 - Insurance Industry Business Practices (3)

Support Courses Required (17 credit hours)

- NTM 3070 - Advanced Spreadsheet Applications (1)
- NTM 3090 - Advanced Electronic Presentations (2)
- NTM 3250 - Business Communication (3)
- BSAD 3000 - Small Business Management (3)
- SST 3203 - Customer Service Techniques (3)
- SST 3563 - Principles of Sales Supervision (3)
- SST 3702 - Developing Team Leadership Skills (2)

Advanced Vehicle Systems Emphasis

Automotive Technology Courses Required (24 credit hours)

- ATTC 3000 - Introduction to Automotive Technology (1)
- ATTC 3020 - Introduction to Safety Management and Hazardous Materials (3)
- ATTC 3260 - Advanced Electrical Systems (3)
- ATTC 3760 - Advanced Automotive Technologies (3)
- ATTC 3880 - Cooperative Practicum (3)
- ATTC 4560 - Advanced Propulsion Systems (3)
- ATTC 4720 - Capstone Project (2)
- ATTC 4760 - Alternate Fuel Systems (3)
- ATTC 4860 - Automotive Standards, Laws, and Regulations (3)

Support Courses Required (21 credit hours)

- NTM 2080 - Database Applications (1)
- NTM 3070 - Advanced Spreadsheet Applications (1)
- NTM 3090 - Advanced Electronic Presentations (2)
- NTM 3250 - Business Communication (3)
- ENGL 3100 - Professional and Technical Writing (3)
- MFET 2410 - Quality Concepts and Statistical Applications (3)
- SST 3563 - Principles of Sales Supervision (3)
- SST 3702 - Developing Team Leadership Skills (2)
- SST 4203 - Ethical Sales and Service (3)

Department of Computer Science

Department Chair: Brian Rague

Location: Technical Education Building, Room 110

Telephone Contact: Anita Proul 801-626-7929

Salt Lake Program Coordinator:

Ted Cowan 801-957-4769

Davis Program Coordinator:

Brad Peterson 801-395-3465

Associate Professors: Delroy Brinkerhoff, David Ferro, Richard Fry, Robert Hilton, Brian Rague; **Assistant Professors:** Ted Cowan, Garth Tuck, Drew Weidman; **Instructors:** Spencer Hilton, Joshua Jensen, Brad Peterson

The Department of Computer Science 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 Department 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.

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 63 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.

Advisement

It is strongly suggested that Computer Science students see the departmental advisor on a regular basis. Call the department secretary at 801-626-7929 for an appointment with the advisor.

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. However, students must successfully complete the CS 1030 - Foundations of Computer Science course with the grade of "C" or better. In lieu of taking this course, a student may elect to take a CS 1030 placement test, but must pass with a test score of 73% or better. The student will have two attempts to achieve the 73% score, before having to take the course. The last score received will be the score used to determine placement. The first official Computer Science course is CS 1400, which can be taken as a co-requisite to CS 1030.

General Education

Refer to Degree and General Education 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, PHYS 2210, MATH 1040 (or MATH 1210 or MATH 3410), and Computer Literacy as defined in this catalog (NTM 1501, NTM 1502, NTM 1503, and NTM 1504 or equivalent). In addition to these courses, students must take a Social Science course to fulfill the AAS general education requirements.

Students who pass the Computer Science Advanced Placement A exam with a score of 3 receive 8 hours of credit and specific credit for CS 1022 (4). Students who pass the Computer Science Advanced Placement A exam with a score of 4 or 5 receive 8 hours of credit and specific credit for CS 1400 (4) (If they already have the CS 1400 (4) course they may receive CS 1023 (4)).

Students who pass the Computer Science Advanced Placement A/B exam with a score of 3 receive 8 hours of credit and specific credit for CS 1400 (4) (If they already have the CS 1400 (4) course they may receive CS 1023(4)). Students who pass the Computer Science Advanced Placement A/B exam with a score of 4 or 5 receive 8 hours of credit and specific credit for CS 1400 (4) and CS 1023 (4) (If they already have the CS 1400 (4) course they may receive CS 1023 (4) and CS 1022 (4)).

Major Course Requirements for AAS Degree

Computer Science Courses Required (32 credit hours)

- CS 1400 - Fundamentals of Programming (4)
- CS 1410 - Object-Oriented Programming (4)
- CS 2350 - Web Development (4)
- CS 2420 - Introduction to Data Structures and Algorithms (4)
- CS 2450 - Software Engineering I (4)
- CS 2705 - Network Fundamentals and Design (4)
- CS 2550 - Database Design and Application Development (4)
- CS 2650 - Computer Architecture/Organization (4)

Support Courses Required (24-27 credit hours)

- ENGL 2010 EN - Intermediate College Writing (3)
prerequisite is ENGL 1010 Introductory College Writing (3) or equivalent
- PHYS 2210 PS - Physics for Scientists and Engineers I (5)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- MGMT 2400 - Project Management (3)
- MATH 1210 - Calculus I (4)
- MATH 1040 QL - Introduction to Statistics (3) or
- MATH 3410 - Probability and Statistics I (3)
- PHYS 2300 - Scientific Computing for Physical Systems (3)

In addition

Computer Literacy as defined in this catalog is also required for the AAS degree

- NTM 1501 TA - Word Processing Competency Exam (.5)
- NTM 1502 TB - Operating Systems and Digital Presentations Competency Exams (.5)
- NTM 1503 TC - Spreadsheets Competency Exam (.5)
- NTM 1504 TD - Information Literacy Competency Exam (.5) *or equivalent*

Game Development Institutional Certificate

A student may apply for a certificate of competency 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 Applied Science and Technology or any other accredited institution.
2. Completion of the following required courses with a grade of C or better.

(15-16 credit hours):

- CS 3610 - Introduction to Game Industry (4)
- CS 4640 - Game Development I (4)
- CS 4650 - Game Development II (4)
- MATH 2250 - Linear Algebra and Differential Equations (4) or
- MATH 2270 - Elementary Linear Algebra (3)

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 126 credit hours is required for graduation. The actual number of credit hours required for graduation with the customized option varies.

Advisement

It is strongly suggested that Computer Science students see an advisor on a regular basis. Call the department secretary at 801-626-7929 for an appointment with the advisor.

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 and General Education Requirements. If a Computer Science major does not have the prerequisite skills at entrance, NTM 1700 is recommended to fill a portion of the WSU Computer Literacy core general education requirement. The MATH 1040, or MATH 1210, or MATH 3410 course required for 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. It is recommended that Computer Science majors take CS 1010 for one of the CA general education requirements.

Students who pass the Computer Science Advanced Placement A exam with a score of 3 receive 8 hours of credit and specific credit for CS 1022 (4). Students who pass the Computer Science Advanced Placement A exam with a score of 4 or 5 receive 8 hours of credit and specific credit for CS 1400 (4) (If they already have the CS 1400 (4) course they may receive CS 1023(4)).

Students who pass the Computer Science Advanced Placement A/B exam with a score of 3 receive 8 hours of credit and specific credit for CS 1400 (4) (If they already have the CS 1400 (4) course they may receive CS 1023(4)). Students who pass the Computer Science Advanced Placement A/B exam with a score of 4 or 5 receive 8 hours of credit and specific credit for CS 1400 (4) and CS 1023 (4) (If they already have the CS 1400 (4) course they may receive CS 1023 (4) and CS 1022(4)).

Major Course Requirements for BS

To be taken in addition to the requirements for the AAS degree in Computer Science.
Computer Science Course Descriptions

Required Courses (20 credit hours)

- CS 3100 - Operating Systems (4)
- CS 3750 - Software Engineering II (4)
- CS 4110 - Concepts of Formal Languages and Algorithms for Computing (4)
- CS 4790 - N-Tier Web Programming (4) or
- CS 4230 - Java Application Development (4) or
- CS 4750 - Advanced Software Engineering (4)
- CS 3130 - Computational Structures (4)

Support Courses Required (7 credit hours)

- ENGL 3100 - Professional and Technical Writing (3) or
- NTM 3250 - Business Communication (3)
- MATH 1220 - Calculus II (4)

CS Electives (12 credit hours)

Choose 3 upper division computer science courses (see list of suggested electives). You may not use CS 4800 or CS 4890 for these electives.

Other Electives (5 credit hours)

Choose 5 credits of any upper division courses from CS, IS&T, NTM, CEET, PHYSICS, BSAD, AND MATH. This may include 1-2 credits of CS 4800 and CS 4890.

Suggested 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 3550 - Distributed Database Architecture Management and Application (4)
- CS 4280 - Computer Graphics (4)
- CS 4500 - Artificial Intelligence and Neural Networks (4)

Recommended electives for students desiring to specialize in Web Development

- CS 4230 - Java Application Development (4)
- CS 4350 - Advanced Internet Programming (4)
- CS 4790 - N-Tier Web Programming (4)
- CS 3620 - Server-Side Web Development (4)
- CS 3630 - Rich Internet Application Development (4)

Recommended electives for students desiring to specialize in Mobile Development

- CS 3230 - Internet Multimedia Services and Applications Using Java (4)
- CS 3260 - Mobile Development for the iPhone (4)
- CS 3270 - Mobile Development for Android (4)

Recommended electives for students desiring to specialize in Network Security

- CS 3030 - Scripting Languages (4)
- CS 3705 - Protocol Analysis (4)
- CS 3805 - Computer and Network Security (4)
- CS 3840 - Computer Forensics for Security Assurance (4)
- CS 4740 - Security Vulnerabilities and Attack Prevention (4)

Alternative Customized Option (31 credit hours) plus a minor or first bachelor's degree

Required Courses (24 credit hours)

- CS 4230 - Java Application Development (4) or
- CS 4750 - Advanced Software Engineering (4) or
- CS 4790 - N-Tier Web Programming (4)
- CS 3750 - Software Engineering II (4)
- CS 4110 - Concepts of Formal Languages and Algorithms for Computing (4)
- Any three computer science upper division electives (12)

- Complete a minor in any academic area or a concurrent second bachelor's degree, or have completed a first bachelor's degree

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).

Support Courses Required (7 credit hours)

- ENGL 3100 - Professional and Technical Writing (3) or
- NTM 3250 - Business Communication (3)
- MATH 1220 - Calculus II (4)

Computer Science for Minor, Teaching Minor or BIS Concentration

Program Prerequisite: There are no special admission or application requirements for these programs, with the exception of a mandatory placement exam. If a student passes the placement test with a score of 73% or better, then the student may enter these programs beginning with the first course of CS 1400. If the score of 73% is not achieved, then the student must take the CS 1030 - Foundations of Computer Science course as a prerequisite to begin course work for these programs. The student will have two attempts to achieve the 73% score. The last score received will be the score used to determine placement.

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: 24 hours for the Minor and BIS Concentration, and 22 hours for the Teaching Minor.

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 Minor or BIS Concentration (24 credit hours)

Required Courses (12 credit hours)

- CS 1400 - Fundamentals of Programming (4)
- CS 1410 - Object-Oriented Programming (4)
- CS 2420 - Introduction to Data Structures and Algorithms (4)

Electives (12 credit hours)

Select two of the following courses (8 credit hours)

- CS 2350 - Web Development (4)
- CS 2550 - Database Design and Application Development (4)
- CS 2650 - Computer Architecture/Organization (4)
- CS 2705 - Network Fundamentals and Design (4)
- CS 3040 - Windows/Unix/Linux Infrastructure and Administration (4)

Select one additional course (4 credit hours total)

In approved upper division Computer Science (CS courses numbered 3000 or higher) other than CS 4800 or CS 4890. An upper division programming language course (CS 3230, CS 4780 or CS 4790) is recommended.

Course Requirements for Teaching Minor (22 credit hours)

Required Courses (14 credit hours)

- CS 1400 - Fundamentals of Programming (4)
- CS 1410 - Object-Oriented Programming (4)
- CS 2650 - Computer Architecture/Organization (4)
- EDUC 3370 - Advanced Instructional Technology (2)

Electives (8 credit hours)

Select one of the following:

- CS 1022 - Software Development (4)
- CS 1023 - Selected Programming Language (4)
- CS 2350 - Web Development (4)
- CS 2420 - Introduction to Data Structures and Algorithms (4)
- CS 2550 - Database Design and Application Development (4)

Select one additional course (4 credit hours)

In approved upper division Computer Science (CS courses numbered 3000 or higher) other than CS 4800 or CS 4890. An upper division programming language course (CS 3230, CS 3750, CS 4780 or CS 4790) is recommended.

Computer Science Departmental Honors

Please contact the Computer Science Department for advisement and permission prior to enrolling in Honors courses.

To earn departmental honors in Computer Science, a student must:

1. Complete all requirements for a bachelor's degree in Computer Science.
2. Maintain an overall GPA of at least 3.85.
3. Take at least 12 upper-division hours of courses for Honors Credit with a grade of A or A-. Up to 4 hours can be from the Honors Department and the remainder from the Computer Science Department. Most upper-division Computer Science courses can be taken for Honors Credit by arranging for extra honors requirements with the instructor before the term begins.
4. Participate as an officer or committee leader in the Association for Computing Machinery (ACM) student chapter for one year or provide 20 hours of community service as coordinated and verified by the university's Community Involvement Center.
5. Make a public presentation of your own individual research or project work. This can be done at an ACM meeting, a public forum organized by the Computer Science Department or Weber State University, or at a regional or national conference.

It is recommended that all applicants take at least one General Education Requirement course designated as an Honors Course section.

Parson Construction Management Technology Department

Department Chair: Steven Peterson

Location: Engineering Technology Building, Room 236

Telephone Contact: Kelly Mecham 801-626-7761

Email: ParsonCMT@weber.edu

Professor: Steven Peterson; **Associate Professor:** Chris Soelberg; **Assistant Professors:** Kristen Park, Joseph Wolfe; **Instructor:** Pieter van der Have

The Parson Construction Management Technology program teaches the processes, procedures and management techniques necessary to function as a "Professional Constructor" as defined by the American Institute of Constructors and the American Council of Construction Education. 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 American Council of Construction Education (ACCE).

The Construction Management Program—Facilities Management Emphasis prepares graduates to manage and maintain the physical facilities for companies. Facilities managers are responsible for managing and overseeing building and physical plant maintenance, grounds upkeep, custodial services, recycling and waste management, the design and construction of new facilities, and the remodeling of existing facilities.

The Parson Construction Management Technology curriculum is a "2+2" design facilitating articulation with programs in architecture, building construction, design graphics, facilities and other construction-related degrees. In this regard, articulation agreements have been developed with Salt Lake Community College's Associate's Degree program in Architectural Technology. The partnership between the two schools gives construction management students more flexibility in earning WSU bachelor's degrees through the University Center at SLCC.

Construction Management Technology (AAS)

Grade Requirements: A grade of "C" or better in all major courses, business management 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 and General Education Requirements .

Credit Hour Requirements: 63 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 CMT major courses at WSU to obtain an AAS degree.

Advisement

All Construction Management Technology students are encouraged to meet with a faculty advisor at the beginning of their freshman year for course and program advisement. Call the CMT program secretary at 801-626-7761 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 program.

General Education

Refer to Degree and General Education Requirements for Associate of Applied Science requirements. The following courses required for the Construction Management Technology AAS degree will also fulfill general education requirements: COMM 2110 (Humanities), ECON 2010 (Social Science) and MATH 1080 (Quantitative Literacy). Computer and Information Literacy as defined in this catalog is also required for the AAS degree.

Major Course Requirements for AAS Degree

Construction Management Technology Courses Required (28 credit hours)

- CMT 1100 - Construction Management Orientation (1)
- CMT 1150 - Construction Graphics (3)
- CMT 1210 - Residential Construction Materials and Methods (3)
- CMT 1310 - Commercial Construction Materials & Methods (3)
- CMT 1500 - Computer Applications in Construction (3)
- CMT 2220 - Construction Contracts and Specifications (3)
- CMT 2330 - Concrete Technology (3)
- CMT 2340 - Construction Surveying (2)
- CMT 2360 - Building Codes and Inspection (2)
- CMT 2640 - Architectural Estimating (2)
- CMT 2880 - Internship (3) or
- DET 1340 - Architectural Board Drafting for Interior Design (3) *for students pursuing a Construction Management Technology—Facilities Management Emphasis BS degree*

Business & Management Courses Required (9 credit hours)

- ACTG 2010 - Survey of Accounting I (3)
- ECON 2010 SS - Principles of Microeconomics (3)
- BSAD 3200 - Legal Environment of Business (3)

Support Courses Required (20 credit hours)

- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- MATH 1080 QL - Pre-calculus (5)

- NTM 1700 TE - Introduction to Microcomputer Applications (3)
- LIBS 1704 TD - Information Navigator (1)
- PHYS 2010 PS - College Physics I (5)
- GEO 1060 PS - Environmental Geosciences (3)

Construction Management Emphasis, Construction Management Technology (BS)

Program Prerequisite: Declare a Program of Study in CMT

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 Degree and General Education Requirements.

Credit Hour Requirements: A total of 126 credit hours is required for graduation. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

Work Experience Requirements: A total of 800 hours of approved work experience is also required for graduation. There are provisions to recognize those with significant construction industry experience. Contact Karen Doutre at Career Services/College of Applied Science & Technology; Phone: 801-626-6877 (ksdoutre@weber.edu) for possible internships.

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.

Advisement

All Construction Management Technology students are encouraged to meet with a faculty advisor at the beginning of their freshman and junior years for course and program advisement. Call the CMT program secretary at 801-626-7761 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 program.

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements. Consult with an academic advisor for specific general education guidelines. The following courses required for the Construction Management Technology--Construction Management Emphasis BS degree will also fulfill general education requirements: COMM 1020/ COMM 2110 (Humanities), MATH 1080 (Quantitative Literacy), ECON 2010 (Social Science) and PHYS 2010, GEO

1060 (Physical Science), and BTNY 1403 (Life Science). Computer and Information Literacy as defined in this catalog is also required.

Major Course Requirements for BS Degree

Course requirements are subject to change. Check with program advisor for current requirements.

Construction Management Technology Courses Required (61 credit hours)

- CMT 1100 - Construction Management Orientation (1)
- CMT 1150 - Construction Graphics (3)
- CMT 1210 - Residential Construction Materials and Methods (3)
- CMT 1310 - Commercial Construction Materials & Methods (3)
- CMT 1500 - Computer Applications in Construction (3)
- CMT 2220 - Construction Contracts and Specifications (3)
- CMT 2330 - Concrete Technology (3)
- CMT 2340 - Construction Surveying (2)
- CMT 2360 - Building Codes and Inspection (2)
- CMT 2640 - Architectural Estimating (2)
- CMT 2880 - Internship (3)
- CMT 3115 - Construction Cost Estimating (3)
- CMT 3130 - Construction Planning & Scheduling (3)
- CMT 3210 - Construction Management (3)
- CMT 3260 - Mechanical and Electrical Systems (4)
- CMT 3350 - Applied Structures (4)
- CMT 4120 - Construction Accounting and Finance (3)
- CMT 4150 - Construction Equipment and Methods (3)
- CMT 4350 - Design of Construction Systems (2)
- CMT 4550 - Construction Safety (2)
- CMT 4610 - Senior Experience (2)
- CMT 4620 - Senior Project (2)
- CMT 4890 - Practicum (2)

Business Courses Required (21 credit hours)

- ACTG 2010 - Survey of Accounting I (3)
- ECON 2010 SS - Principles of Microeconomics (3)
- BSAD 3200 - Legal Environment of Business (3)
- MGMT 3010 - Organizational Behavior and Management (3)
- Approved Business Electives from list below (9)

Approved Business Elective Courses

Select 9 hours from the following recommended courses (6 hours must be upper division):

- ECON 2020 SS - Principles of Macroeconomics (3)
- ECON 3400 - Labor Economics (3)
- BSAD 3000 - Small Business Management (3)
- BSAD 3330 - Business Ethics & Environmental Responsibility (3)
- FIN 3200 - Financial Management (3)
- FIN 3400 - Real Estate Principles and Practices (3)
- MKTG 3010 - Marketing Concepts and Practices (3)
- MGMT 3300 - Human Resource Management (3)
- SST 3563 - Principles of Sales Supervision (3)
- SST 3702 - Developing Team Leadership Skills (2)
- Advisor Approved Elective (3)

Students desiring a minor in Business Administration should receive approval of their program by the Business Administration Department Chair.

Support Courses Required (19 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3) or
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- BTNY 1403 LS - Environment Appreciation (3-4) (3 credit hours required)
- GEO 1060 PS - Environmental Geosciences (3)
- PHYS 2010 PS - College Physics I (5)
- MATH 1080 QL - Pre-calculus (5)

Course Requirements for CMT BS Major with Business Administration Minor for Non-Business Majors

See the Business Administration Minor for Non-Business Majors.

Additional courses required to satisfy business minor requirements with CMT BS degree

- ECON 2020 SS - Principles of Macroeconomics (3) (satisfied with CMT Business Elective)
- QUAN 2600 - Business Statistics I (3)
- QUAN 3610 - Business Statistics II (3)
- Business Electives - Business/Management/Finance/Marketing Electives (6)
Check the college catalog under BSAD for possible selections.

Facilities Management Emphasis, Construction Management Technology (BS)

Program Prerequisite: Declare a Program of Study in CMT

Minor: Not required.

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 Degree and General Education Requirements.

Credit Hour Requirements: A total of 126 credit hours is required for graduation. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

Advisement

All Construction Management Technology students are encouraged to meet with a faculty advisor at the beginning of their freshman and junior years for course and program advisement. Call the CMT program secretary at 801-626-7761 to schedule an appointment. (Also refer to the Department Advisor Referral List).

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 and General Education Requirements for Bachelor of Science requirements. Consult with an academic advisor for specific general education guidelines. The following courses required for the Construction Management Technology--Facilities Management Emphasis BS degree will also fulfill general education requirements: COMM 1020/COMM 2110 (Humanities), ARTH 1100 (Creative Arts), MATH 1080 (Quantitative Literacy), ECON 2010 (Social Science), PHYS 2010 (Physical Science), GEO 1060 (Physical Science), and BTNY 1403 (Life Science). Computer and Information Literacy as defined in this catalog is also required.

Major Course Requirements for BS Degree

Course requirements are subject to change. Check with program advisor for current requirements.

Construction Management Technology Courses Required (63 credit hours)

- CMT 1100 - Construction Management Orientation (1)
- CMT 1150 - Construction Graphics (3)
- CMT 1210 - Residential Construction Materials and Methods (3)
- CMT 1310 - Commercial Construction Materials & Methods (3)
- CMT 1500 - Computer Applications in Construction (3)
- CMT 2220 - Construction Contracts and Specifications (3)
- CMT 2330 - Concrete Technology (3)
- CMT 2340 - Construction Surveying (2)
- CMT 2360 - Building Codes and Inspection (2)
- CMT 2640 - Architectural Estimating (2)
- CMT 3115 - Construction Cost Estimating (3)
- CMT 3130 - Construction Planning & Scheduling (3)
- CMT 3350 - Applied Structures (4)
- CMT 3510 - Building Mechanical & Electrical Systems (3)
- CMT 3540 - Facilities Management Administration (3)
- CMT 3630 - Environmental Issues in FM (3)
- CMT 3660 - Energy Management (3)
- CMT 3680 - FM Operations (3)
- CMT 4210 - Facility Planning and Layout (3)
- CMT 4270 - Computer Aided FM (3)
- CMT 4310 - Long-term Facility Planning (3)
- CMT 4550 - Construction Safety (2)
- CMT 4650 - FM Senior Project (2)

Business Courses Required (12 credit hours)

- ACTG 2010 - Survey of Accounting I (3)
- BSAD 3200 - Legal Environment of Business (3)
- ECON 2010 SS - Principles of Microeconomics (3)
- MGMT 3010 - Organizational Behavior and Management (3)

Support Courses Required (29 credit hours)

- ARTH 1100 CA - Art and Architecture of the World: AD 1000-Present (4)
- BTNY 1403 LS - Environment Appreciation (3-4) (3 credit hours required)
- COMM 1020 HU - Principles of Public Speaking (3) or
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- DET 1340 - Architectural Board Drafting for Interior Design (3)
- GEO 1060 PS - Environmental Geosciences (3)
- MATH 1080 QL - Pre-calculus (5)
- PHYS 2010 PS - College Physics I (5)
- SST 3563 - Principles of Sales Supervision (3)

Construction Management Technology 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 2.50 or better in all CMT courses.

Credit Hour Requirements: 21 total credit hours are required as listed below.

Advisement

The CMT Minor must be cleared with the CMT Program Coordinator. Call the CMT program secretary at 801-626-7761 to schedule an appointment.

Course Requirements for Minor

Construction Management Technology Courses Required (15 credit hours)

- CMT 1100 - Construction Management Orientation (1)
- CMT 1150 - Construction Graphics (3)
- CMT 1210 - Residential Construction Materials and Methods (3)
- CMT 1310 - Commercial Construction Materials & Methods (3)
- CMT 2220 - Construction Contracts and Specifications (3)
- CMT 2360 - Building Codes and Inspection (2)

Recommended Electives (6 credit hours)

Select 6 hours from the following courses as approved by the CMT program coordinator.

- CMT 1500 - Computer Applications in Construction (3)
- CMT 2330 - Concrete Technology (3)
- CMT 2340 - Construction Surveying (2)
- CMT 2640 - Architectural Estimating (2)
- CMT 3115 - Construction Cost Estimating (3)
- CMT 3130 - Construction Planning & Scheduling (3)
- CMT 3210 - Construction Management (3)
- CMT 3260 - Mechanical and Electrical Systems (4)
- CMT 3350 - Applied Structures (4)

- CMT 4120 - Construction Accounting and Finance (3)
- CMT 4150 - Construction Equipment and Methods (3)
- CMT 4350 - Design of Construction Systems (2)
- CMT 4550 - Construction Safety (2)

Department of Engineering

Department Chair: Kirk D. Hagen

Location: Building 4, Room 421

Telephone Contact: Susan Foss 801-626-6898

Email: sfoss@weber.edu

Professors: Kirk Hagen, Jennifer Smith; **Associate Professor:** Jeffrey Ward; **Assistant Professors:** Fon Brown, Justin Jackson

Engineering is the application of science and mathematics to the optimum conversion of the resources of nature to the uses of humankind. More specifically, engineering is the creative application of scientific principles to design and develop devices, systems and processes to satisfy the needs of society.

Engineering is a broad field, consisting of a variety of disciplines such as biomedical, chemical, civil, electrical and mechanical engineering. For example, biomedical engineers design artificial organs and diagnostic systems to detect and treat diseases. Chemical engineers design fuels, plastics and drugs. Civil engineers design roads, buildings, bridges and water treatment plants. Electrical and electronics engineers design computers, communication devices and power control systems. Mechanical engineers design machines, spacecraft, power plants and heating and air-conditioning systems.

The Department of Engineering houses two academic programs, Electronics Engineering and Pre-Engineering. The Electronics Engineering Program prepares the student to enter the engineering industry or graduate school in the discipline. The Pre-Engineering Program constitutes the first two years of a bachelor's program and prepares the student to transfer to another institution to complete the four-year engineering degree.

The Engineering Department offers a Bachelor of Science (BS) degree in Electronics Engineering and an Associate of Pre-Engineering (APE) degree.

Pre-Engineering (APE)

Grade Requirements: A minimum overall GPA of 2.00 is required.

Credit Hour Requirements: A minimum of 60 credit hours is required. A minimum of 20 hours in residence (for transfer students).

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 - 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 (18 credit hours)

1. Composition (6 credit hours)

- ENGL 1010 EN - Introductory College Writing (3)
- ENGL 2010 EN - Intermediate College Writing (3)

2. American Institutions (3 credit hours)

- POLS 1100 AI - American National Government (3) or
- HIST 1700 AI - American Civilization (3) or
- ECON 1740 AI - Economic History of the United States (3)

3. Computer and Information Literacy (2 to 5 credit hours)

Refer to the Computer and Information Literacy requirements listed under the General Requirements section of this catalog. The credit hours for this requirement do not count toward the 60 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 (2)
- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) (w lab)
- PHYS 2220 - Physics for Scientists and Engineers II (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 (5)
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4)
- CHEM 2320 - Organic Chemistry II (4)
- CHEM 3070 - Biochemistry I (4)
- CS 1023 - Selected Programming Language (4)
- CS 1030 - Foundations of Computer Science (4)
- CS 1400 - Fundamentals of Programming (4)
- CS 1410 - Object-Oriented Programming (4)
- DET 1060 - Fundamentals of Mechanical Drafting Using 3D CAD (3)
- ENGR 2010 - Statics (3)
- ENGR 2080 - Dynamics (4)
- ENGR 2140 - Strength of Materials (3)
- ENGR 2160 - Materials Science and Engineering (3)
- ENGR 2210 - Electrical Engineering for Non-majors (4)
- ENGR 2300 - Thermodynamics I (3)
- EE 1270 - Introduction to Electrical Circuits (4)
- EE 2260 - Fundamentals of Electrical Circuits (4)
- EE 2700 - Digital Circuits (4)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3) and
- GEO 1115 - Physical Geology Lab (1)
- MATH 2210 - Calculus III (4)

- MATH 2250 - Linear Algebra and Differential Equations (4)
- MATH 2270 - Elementary Linear Algebra (3)
- MATH 2280 - Ordinary Differential Equations (3)
- MATH 3410 - Probability and Statistics I (3)
- MICR 2054 LS - Principles of Microbiology (4)

Electronics Engineering (BS)

Program Prerequisite: Not required.

Minor: Not required.

Grade Requirements: A grade of "C" or better in all EE 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.

Electronics 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 Electronics 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.

Accreditation

Electronics Engineering is a new program at WSU and is not yet accredited by ABET. After the program has its first graduates in the 2011-2012 academic year, WSU will apply for accreditation to the Engineering Accreditation Commission (EAC) of ABET. Once accreditation is officially granted, our graduates will be retroactively included.

Advisement

All Electronics 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 the faculty advisor or department secretary to declare your program of study (major).

General Education

Refer to Degree and General Education 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 EE BS Degree

Electronics Engineering Required Courses (49 credit hours)

- EE 1000 - Introduction to Electronics Engineering (2) or
- ENGR 1000 - Introduction to Engineering (2)
- EE 1270 - Introduction to Electrical Circuits (4)
- EE 2260 - Fundamentals of Electrical Circuits (4)
- EE 2700 - Digital Circuits (4)
- EE 3000 - Engineering Seminar (1)
- EE 3110 - Microelectronics I (4)
- EE 3120 - Microelectronics II (4)
- EE 3210 - Signals and Systems (4)
- EE 3310 - Electromagnetics I (4)
- EE 3610 - Digital Systems (4)
- EE 3710 - Embedded Systems (4)
- EE 3890 - Internship (2)
- EE 4010 - Senior Project I (2)
- EE 4020 - Senior Project II (2)
- EE 4100 - Control Systems (4)

Electronics Engineering Elective Courses (6 credit hours)

Select 6 credit hours from the following 4000 level courses:

- EE 4210 - Digital Signal Processing (3)
- EE 4310 - Electromagnetics II (3)
- EE 4410 - Communication Circuits and Systems (3)
- EE 4800 - Individual Studies (1-4)
- EE 4900 - Special Topics (1-4)

Support Courses Required (minimum of 27 credit hours)

- CS 2250 - Structured Computing in a Selected Language (4)
or both
- CS 1400 - Fundamentals of Programming (4) and
- CS 1410 - Object-Oriented Programming (4)
- ENGL 3100 - Professional and Technical Writing (3) or
- NTM 3250 - Business Communication (3)
- MATH 1220 - Calculus II (4)
- MATH 2210 - Calculus III (4)
- MATH 2250 - Linear Algebra and Differential Equations (4)
or both
- MATH 2270 - Elementary Linear Algebra (3) and
- MATH 2280 - Ordinary Differential Equations (3)
- MATH 3410 - Probability and Statistics I (3)
- PHYS 2220 - Physics for Scientists and Engineers II (5)

General Education Courses Required (40-43 credit hours)

- ENGL 2010 EN - Intermediate College Writing (3)
prerequisite is ENGL 1010 Introductory College Writing (3) or equivalent
- American Institutions (AI) (3)
- MATH 1210 - Calculus I (4)
- Computer & Information Literacy (2)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- Humanities and Creative Arts (HU/CA) (6)

- ECON 2010 SS - Principles of Microeconomics (3)
- Social Science and Diversity (SS/DV) (3)
- CHEM 1210 PS - Principles of Chemistry I (5)
- PHYS 2210 PS - Physics for Scientists and Engineers I (5)
- Life Science (LS) (3)

Course Requirements for EE Major Second BS Degree

Students that have completed a BS EET from a TAC ABET accredited program are required to take the following courses to obtain a BS in Electronics Engineering.

- MATH 3410 - Probability and Statistics I (3)
- EE 3010 - Electronic Circuits (2)
- EE 3110 - Microelectronics I (4)
- EE 3120 - Microelectronics II (4)
- EE 3210 - Signals and Systems (4)
- EE 3310 - Electromagnetics I (4)
- EE 3610 - Digital Systems (4)

This assumes all prerequisite and University residency hours have been met. Refer to Second Bachelor's Degree under Graduation in the Academic Information section of this catalog.

Department of Engineering Technology

Department Chair: Rick Orr

Location: Engineering Technology Building, Room 214

Telephone Contact: Pat DeJong 801-626-6305

Email: mmetdepartment@weber.edu

Professors: George Comber, Kelly Harward, Daniel Magda, Rick Orr; **Associate Professors:** Mark Baugh, Kerry Tobin; **Assistant Professors:** Dustin Birch, Jeremy Farnar, Megumi Leatherbury, Julianne McCulley, Glen West

The Department of Engineering Technology offers Associate of Applied Science degrees in Design Engineering Technology, Electronics Engineering Technology, Manufacturing Engineering Technology, and Mechanical Engineering Technology; and Bachelor of Science degrees in Design Engineering Technology, Electronics Engineering Technology, Manufacturing Engineering Technology, and Mechanical Engineering Technology. Also offered is a Graduate Institutional Certificate in Quality and Lean Manufacturing that prepares students to take the ASQ green belt certification exam or to go on in the MSETM program at Oklahoma State University.

Manufacturing Engineering Technology

Location: Engineering Technology Building, Room 214

Telephone Contact: Pat DeJong 801-626-6305

Email: mfet@weber.edu

The Weber State Manufacturing Engineering Technology program has been recognized as one of the outstanding manufacturing technology programs in the country. Students may choose among three emphasis areas within the Manufacturing Engineering Technology Program; Production Operations and Control, Welding, or Plastics and Composites. The Production Operations and Control emphasis area 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 and processes. These include process planning, tool and machine design,

material selection and treatment, process automation, manufacturing resource planning, Six Sigma methods and tools in manufacturing, and lean manufacturing. State-of-the-art laboratories give the students hands-on experiences with CNC machine tools, robotics, programmable logic controllers, systems integration and the latest in a variety of CAD/ CAM systems. Year-long required senior projects have included satellites, hybrid electric vehicles and computer integrated manufacturing cells and others which help students gain confidence in their abilities while gaining additional insight and skills in both teamwork and human relations.

The Manufacturing Engineering Technology with Welding Emphasis 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 program has six main areas of study: welding and manufacturing, design and structural, metallurgical, quality assurance, electrical, and management. The 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 of the 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 Emphasis is designed to prepare the student 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 emphasis 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.

Mechanical Engineering Technology

Location: Engineering Technology Building, Room 214

Telephone Contact: Pat DeJong 801-626-6305

Email: met@weber.edu

Mechanical engineering technology is the practical application of mechanical engineering. Mechanical engineering technologists play an integral role in product design and manufacturing process cycles which include planning, design, analysis, testing and documentation. They utilize skills in materials science, engineering mechanics, thermal science, design, instrumentation and technical writing.

The curriculum includes problem-solving courses such as statics, strength of materials, dynamics, machine design, thermodynamics, fluid mechanics and heat transfer that are based on engineering science and mathematics. Integrated into many of the courses are laboratory and project oriented experiences that teach the practical, hands-on aspects of mechanical engineering technology. A balanced blend of

engineering science and practical applications provides the mechanical engineering technologist the knowledge and skills needed to be successful in today's technical workplace. Mechanical engineering technology has led to numerous opportunities for exciting, creative and rewarding careers in a wide range of industries including aerospace, automotive, electronics, manufacturing, medical equipment, mining and power generation.

Design Engineering Technology

Location: Engineering Technology Building, Room 214
Telephone Contact: Pat DeJong 801-626-6305
Email: designengineering@weber.edu

The Design Engineering Technology program prepares students to develop product design and development drawings and 3D models as well as architectural designs, construction documents and Building Information Models (BIM), 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, architectural, structural, and overall project management areas. Students will use calculators, computers, handbooks, and engineering reference materials while applying various mathematical concepts from geometry, algebra, and trigonometry.

Electronics Engineering Technology

Location: Engineering Technology Building, Room 214
Telephone Contact: Pat DeJong 801-626-6305
Email: jmcculley@weber.edu

The Electronics Engineering Technology AAS degree prepares graduates to specify, install, operate, troubleshoot, and modify computers, automated programmable controllers, and electronic systems. It is designed to give the student fundamental knowledge and basic skills in robotics, automation, electronic manufacturing, fabrication, testing, and troubleshooting.

The Electronics Engineering Technology Bachelor of Science (BS) degree is designed to continue a student's education beyond the associate's degree level. It is intended to provide the student with knowledge and skills in problem solving, critical thinking, project management, team building, and engineering research to identify, evaluate, analyze, and solve complex computer and electronic related technical problems.

Apprenticeship (AAS)

The Associate of Applied Science in Apprenticeship degree is a generic degree that is specifically designed for students who have completed or are completing an apprenticeship program under the auspices of the Office of Apprenticeship. This degree consists of the apprenticeship courses and on-the-job training from the Ogden Weber Applied Technology College (OWATC) coupled with general education and two additional required courses from Weber State University.

While the degree was developed for OWATC apprenticeship students, **it is open to anyone who meets the qualifications** of an apprentice with a certificate of proficiency from a post-secondary institution offering the Office of Apprenticeship (OA) certified program. Please see www.ucats.org for a list of other Utah College of Applied Technology locations.

For additional information and advisement, contact Geri Harames, College of Applied Science & Technology Academic Advisor (phone: 801-626-7552; email: geriharames@weber.edu).

In order for a student to receive this degree they must complete the course requirements listed below and provide one of the following:

- State of Utah Journeyperson's License
- Certificate of Completion from the Office of Apprenticeship (OA)
- Certificate of Completion from the post-secondary institution offering an OA certified program

Course Requirements for the AAS Degree

- ENGL 1010 EN - Introductory College Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- Social Science General Education (SS) Elective (3)
- AUSV 1300 - Technical Mathematics (3) *
- BTNY 1403 LS - Environment Appreciation (3-4) **
- NTM 1700 TE - Introduction to Microcomputer Applications (3)
- SST 3563 - Principles of Sales Supervision (3) ***
- SST 3702 - Developing Team Leadership Skills (2) ***

* *Recommended - MATH 1010 or above is acceptable.*

** *Recommended - Any general education science course is acceptable.*

****To register for these two courses, students must be in the third year of their apprenticeship program and have completed COMM 2110.*

Design Engineering Technology (AAS)

Grade Requirements: A grade of "C" or better in all DET, MFET, 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 are required (24) of which are required within the Design Engineering Technology AAS program.

Advisement

All Design Engineering Technology 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 Degree and General Education Requirements for Associate of Applied Science requirements. Computer and Information Literacy as defined in this catalog is also required for the AAS degree.

Major Course Requirements for AAS Degree

Design Engineering Technology Courses Required (24 credit hours)

- DET 1060 - Fundamentals of Mechanical Drafting Using 3D CAD (3)
- DET 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD (3)
- DET 1250 - Fundamentals of Architectural Drafting Using 2D CAD (3)
- DET 1350 - Residential Architectural Design (3)
- DET 2000 - Introduction to Building Information Modeling (BIM) (3)
- DET 2460 - Product Design Fundamentals Using 3D CAD (3)
- DET 2650 - Product Design & Development (3)
- DET 2660 - Architectural Structural Design & Detailing (BIM II) (3)

Technical Courses Required (9 credit hours)

- MFET 1210 - Machining Principles Lecture/Lab I (3)
- MFET 2360 - Manufacturing Processes and Materials (3)
- MFET 2410 - Quality Concepts and Statistical Applications (3)

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.

- CEET 1110 - Basic Electronics (2)
- MFET 2150 - Metal Forming, Casting and Welding (2) and
- MFET 2150L - Metal Forming, Casting & Welding Lab (1)
- MFET 2440 - Computer Numeric Control (CNC) in Manufacturing (2) and
- MFET 2440L - CNC in Manufacturing Lab (1)
- MFET 2670 - GMA, FCA and GTA Welding (1) and
- MFET 2670L - GMA, FCA and GTA Welding Lab (2)
- CMT 1210 - Residential Construction Materials and Methods (3)
- CMT 1310 - Commercial Construction Materials & Methods (3)
- CMT 1500 - Computer Applications in Construction (3)
- CMT 2220 - Construction Contracts and Specifications (3)
- CMT 2340 - Construction Surveying (2)
- CMT 2360 - Building Codes and Inspection (2)
- CMT 2640 - Architectural Estimating (2)

Support Courses Required (29-31 credit hours)

- ENGL 2010 EN - Intermediate College Writing (3)

- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- MATH 1080 QL - Pre-calculus (5) or
- MATH 1050 QL - College Algebra (4) **and**
- MATH 1060 - Trigonometry (3)
- PHYS 2010 PS - College Physics I (5)
- NTM 1700 TE - Introduction to Microcomputer Applications (3)
- LIBS 1704 TD - Information Navigator (1)
- **Creative Arts Elective (3)***
- **Social Science Elective (3)***
- **American Institutions (3)***

Note:

*These courses will also fulfill general education requirements.

Electronics Engineering Technology (AAS)

Grade Requirements: A grade of "C" or better in all CEET and support courses (a grade of "C-" is not acceptable). Students must have an overall GPA of 2.5 or higher to graduate.

Credit Hour Requirements: A minimum of 64 credit hours is required with a minimum of 35 credit hours in the major. Transfer students are required to take a minimum of 20 credit hours at Weber State University.

Advisement

All Electronics 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 and General Education Requirements for Associate of Applied Science requirements. Consult with your advisor for specific general education guidelines.

Course Requirements for EET AAS Degree

Required CEET Courses (35 credit hours)

- CEET 1110 - Basic Electronics (2)
- CEET 1130 - Digital Systems (4)
- CEET 1140 - AC and DC Circuits (4)
- CEET 2110 - Semiconductor Circuits (4)
- CEET 2120 - Power and Motors (4)
- CEET 2130 - PC Board Design (3)
- CEET 2140 - Communications Systems (4)
- CEET 2150 - Embedded Controllers (4)
- CEET 2160 - Troubleshooting (3)
- CEET 2170 - Industrial Controls (3)

Required Support Course (3 credit hours)

- MFET 2410 - Quality Concepts and Statistical Applications (3) or
- MATH 1040 QL - Introduction to Statistics (3)

Required General Education Courses (23-28 credit hours)

- Gen Ed COMM 2010 HU - Mass Media & Society (3)
- Gen Ed ENGL 2010 EN - Intermediate College Writing (3)
prerequisite is ENGL 1010 Introductory College Writing (3) or equivalent
- Gen Ed Life Science (4)
- Gen Ed Social Science (Diversity) (3)
- Gen Ed Creative Arts/Humanities (3)
- Computer Literacy (2)

Manufacturing Engineering Technology (AAS)

Areas of Emphasis

Select one of the following areas of emphasis

- Plastics and Composites Emphasis, Manufacturing Engineering Technology (AAS)
- Production Operations and Control Emphasis, Manufacturing Engineering Technology (AAS)
- Welding Emphasis, Manufacturing Engineering Technology (AAS)

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 and General Education 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 30 credit hours at Weber State University.

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 Enrollment Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree and General Education 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 (48 credit hours)

- MET 1000 - Introduction to Mechanical Engineering Technology and Design (3)
- MET 1500 - Mechanical Design Engineering (3)
- MET 2500 - Modern Engineering Technologies (3)
- MFET 2300 - Statics and Strength of Materials (5)
- MFET 2360 - Manufacturing Processes and Materials (3)
- CEET 1850 - Industrial Electronics (4)
- CHEM 1110 PS - Elementary Chemistry (5)
- DET 1060 - Fundamentals of Mechanical Drafting Using 3D CAD (3)
- Computer and Information Literacy (2)
- MATH 1040 QL - Introduction to Statistics (3)
- MATH 1080 QL - Pre-calculus (5)
- MATH 1210 - Calculus I (4)
- PHYS 2210 PS - Physics for Scientists and Engineers I (5)

Other General Education Support Courses Required (12-15 credit hours)

- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- ENGL 2010 EN - Intermediate College Writing (3)
prerequisite is ENGL 1010 Introductory College Writing (3) or equivalent
- ECON 1010 SS - Economics as a Social Science (3)
- Gen Ed Creative Arts Elective (3)

Plastics and Composites Emphasis, Manufacturing Engineering Technology (AAS)

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 and General Education Requirements.

Credit Hour Requirements: Credit hours vary as shown for different emphasis areas: the AAS in Manufacturing Engineering Technology with a Production Operations and Control Emphasis requires 64 credit hours, the AAS in Manufacturing Engineering Technology with a Welding Emphasis requires 63 credit hours, and the AAS in Manufacturing Engineering Technology with a Plastics and Composites Emphasis requires 64 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.

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 Enrollment Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree and General Education Requirements for Associate of Applied Science requirements. Computer and 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 (50 credit hours)

AAS Degree requirements for an AAS Degree in Manufacturing Engineering Technology, Production Operations and Control Emphasis, an AAS Degree in Manufacturing Engineering Technology with a Welding Emphasis, or an AAS Degree in Manufacturing Engineering Technology with a Plastics and Composites Emphasis will be met by completing the first two years of the respective BS Degree. All AAS Degrees will have the following courses in common.

Manufacturing Engineering Technology Courses Required (11 credit hours)

- MFET 1210 - Machining Principles Lecture/Lab I (3)
- MFET 2300 - Statics and Strength of Materials (5)
- MFET 2410 - Quality Concepts and Statistical Applications (3)

Technical Courses Required (8 credit hours)

- DET 1060 - Fundamentals of Mechanical Drafting Using 3D CAD (3)
- DET 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD (3)
- Computer and Information Literacy Exams (2) *

Support Courses Required (22 credit hours)

- COMM 2110 HU - Interpersonal & Small Group Communication (3) *
- CHEM 1110 PS - Elementary Chemistry (5) *
- MATH 1080 QL - Pre-calculus (5) *
- MATH 1210 - Calculus I (4)
- PHYS 2010 PS - College Physics I (5) * or

- PHYS 2210 PS - Physics for Scientists and Engineers I (5)

Other Courses Required (6-9 credit hours)

- ENGL 2010 EN - Intermediate College Writing (3) * *prerequisite is ENGL 1010 Introductory College Writing (3) or equivalent*
- ECON 1010 SS - Economics as a Social Science (3) *

Additional Courses Required by Emphasis Area

Plastics and Composites Emphasis (14 credit hours)

- CEET 1110 - Basic Electronics (2)
- MFET 2850 - CNC/CAM for Plastics and Composites Lecture/Lab (3)
- MFET 2860 - Plastics/Composites Materials & Properties (3)
- MFET 2870 - Design of Plastics/Composites Products (3)
- GenEd HU/CA Elective (3) *

* *These courses will also fulfill general education requirements.*

Production Operations and Control Emphasis, Manufacturing Engineering Technology (AAS)

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 and General Education Requirements.

Credit Hour Requirements: Credit hours vary as shown for different emphasis areas: the AAS in Manufacturing Engineering Technology with a Production Operations and Control Emphasis requires 64 credit hours, the AAS in Manufacturing Engineering Technology with a Welding Emphasis requires 63 credit hours, and the AAS in Manufacturing Engineering Technology with a Plastics and Composites Emphasis requires 64 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.

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 Enrollment Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree and General Education Requirements for Associate of Applied Science requirements. Computer and 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 (50 credit hours)**

AAS Degree requirements for an AAS Degree in Manufacturing Engineering Technology, Production Operations and Control Emphasis, an AAS Degree in Manufacturing Engineering Technology with a Welding Emphasis, or an AAS Degree in Manufacturing Engineering Technology with a Plastics and Composites Emphasis will be met by completing the first two years of the respective BS Degree. All AAS Degrees will have the following courses in common.

Manufacturing Engineering Technology Courses Required (11 credit hours)

- MFET 1210 - Machining Principles Lecture/Lab I (3)
- MFET 2300 - Statics and Strength of Materials (5)
- MFET 2410 - Quality Concepts and Statistical Applications (3)

Technical Courses Required (8 credit hours)

- DET 1060 - Fundamentals of Mechanical Drafting Using 3D CAD (3)
- DET 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD (3)
- Computer and Information Literacy Exams (2) *

Support Courses Required (22 credit hours)

- COMM 2110 HU - Interpersonal & Small Group Communication (3) *
- CHEM 1110 PS - Elementary Chemistry (5) *
- MATH 1080 QL - Pre-calculus (5) *
- MATH 1210 - Calculus I (4)
- PHYS 2010 PS - College Physics I (5) * or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5)

Other Courses Required (6-9 credit hours)

- ENGL 2010 EN - Intermediate College Writing (3) * *prerequisite is ENGL 1010 Introductory College Writing (3) or equivalent*
- ECON 1010 SS - Economics as a Social Science (3) *

Additional Courses Required by Emphasis Area**Production Operations and Control Emphasis (14 credit hrs)**

- CEET 1850 - Industrial Electronics (4)
- MFET 1150 - Pre-Professional Seminar in Manufacturing (1)
- MFET 2150 - Metal Forming, Casting and Welding (2) and
- MFET 2150L - Metal Forming, Casting & Welding Lab (1)
- MFET 2440 - Computer Numeric Control (CNC) in Manufacturing (2) and
- MFET 2440L - CNC in Manufacturing Lab (1)
- DET 2460 - Product Design Fundamentals Using 3D CAD (3)

* These courses will also fulfill general education requirements.

Welding Emphasis, Manufacturing Engineering Technology (AAS)

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 and General Education Requirements.

Credit Hour Requirements: Credit hours vary as shown for different emphasis areas: the AAS in Manufacturing Engineering Technology with a Production Operations and Control Emphasis requires 64 credit hours, the AAS in Manufacturing Engineering Technology with a Welding Emphasis requires 63 credit hours, and the AAS in Manufacturing Engineering Technology with a Plastics and Composites Emphasis requires 64 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.

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 Enrollment Services and Information). No special admission or application requirements are needed for this program.

General Education

Refer to Degree and General Education Requirements for Associate of Applied Science requirements. Computer and 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 (50 credit hours)

AAS Degree requirements for an AAS Degree in Manufacturing Engineering Technology, Production Operations and Control Emphasis, an AAS Degree in Manufacturing Engineering Technology with a Welding Emphasis, or an AAS Degree in Manufacturing Engineering Technology with a Plastics and Composites Emphasis will be met by completing the first two years of the respective BS Degree. All AAS Degrees will have the following courses in common.

Manufacturing Engineering Technology Courses Required (11 credit hours)

- MFET 1210 - Machining Principles Lecture/Lab I (3)
- MFET 2300 - Statics and Strength of Materials (5)
- MFET 2410 - Quality Concepts and Statistical Applications (3)

Technical Courses Required (8 credit hours)

- DET 1060 - Fundamentals of Mechanical Drafting Using 3D CAD (3)
- DET 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD (3)
- Computer and Information Literacy Exams (2) *

Support Courses Required (22 credit hours)

- COMM 2110 HU - Interpersonal & Small Group Communication (3) *
- CHEM 1110 PS - Elementary Chemistry (5) *
- MATH 1080 QL - Pre-calculus (5) *
- MATH 1210 - Calculus I (4)
- PHYS 2010 PS - College Physics I (5) * or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5)

Other Courses Required (6-9 credit hours)

- ENGL 2010 EN - Intermediate College Writing (3) * *prerequisite is ENGL 1010 Introductory College Writing (3) or equivalent*
- ECON 1010 SS - Economics as a Social Science (3) *

Additional Courses Required by Emphasis Area

Welding Emphasis (13 credit hours)

- CEET 1850 - Industrial Electronics (4)
- MFET 2150 - Metal Forming, Casting and Welding (2) and
- MFET 2150L - Metal Forming, Casting & Welding Lab (1)

- DET 2460 - Product Design Fundamentals Using 3D CAD (3)
- GenEd HU/CA Elective (3) *

* *These courses will also fulfill general education requirements.*

Quality and Lean Manufacturing Graduate Institutional 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 of Engineering Technology 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.

Course Requirements for Institutional Certificate

Required Courses (12 credit hours)

- ETM 5913 - Six Sigma Tools I (3)
- ETM 5923 - Six Sigma Tools II (3)
- ETM 5933 - Lean Tools (3)
- ETM 5943 - Lean-Sigma Implementation (3)

Design Engineering Technology (BS)

Program Prerequisite: Complete course work required for AAS degree in Design 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 DET, MFET, 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 and General Education Requirements section of this catalog.

Credit Hour Requirements: A total of 125 credit hours is required for graduation. A total of 40 upper division credit hours is required (courses numbered 3000 and above.)

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 admission or application requirements for this program.

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements. NTM 1700, Microcomputer Applications, will fill part of the Computer Literacy requirement and COMM 2110 will fulfill both program and general education requirements.

Social Science/Diversity Elective (3 credit hours minimum)

A minimum of 3 credit hours of Social Science/Diversity electives must be selected from the following list:

- ANTH 2010 SS/DV - Peoples and Cultures of the World (3)*
- GEOG 1300 SS/DV - Places and Peoples of the World (3)*
- HIST 1510 SS/DV - World History from 1500 C.E. to the Present (3)*

*These courses will also fulfill general education requirements.

Course Requirements for BS Degree

To be taken in addition to the requirements for the Design Engineering Technology (AAS).

Design Engineering Technology Courses Required (31 credit hours)

- DET 3000 - BIM & The Green Built Environment (BIM III) (3)
- DET 3100 - Tool Design (3)
- DET 3300 - Applied Kinematic Analysis (3)
- DET 3400 - Technical Illustration and Documentation I (3)
- DET 3470 - Introduction to CATIA V5 (3)
- DET 4350 - Integrated Project Delivery & File Management (BIM IV) (3)
- DET 4400 - Technical Illustration and Documentation II (3)
- DET 4470 - Advanced CATIA V5 (3)
- DET 4500 - Hydraulic and Pneumatic Applications (3)
- DET 4600 - Senior Project (2-2)
- DET 4610 - Senior Project (2-2)
- DET 4890 - Cooperative Work Experience (1-3)

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.

- CMT 3115 - Construction Cost Estimating (3)
- CMT 3130 - Construction Planning & Scheduling (3)
- CMT 3210 - Construction Management (3)
- CMT 3260 - Mechanical and Electrical Systems (4)
- CMT 4120 - Construction Accounting and Finance (3)
- DET 3460 - Parametric Design Graphics (3)
- DET 4890 - Cooperative Work Experience (1-3)
- MFET 3460 - Engineering Design using Solid Modeling (2) and
- MFET 3460L - Engineering Design using Solid Modeling Lab (1)
- MFET 3810 - Statistical Process Control and Reliability (3)
- NTM 3250 - Business Communication (3)

Support Courses Required (21 credit hours)

- MFET 2300 - Statics and Strength of Materials (5)
- MET 3400 - Machine Design (3)
- MFET 3550 - Manufacturing Supervision (3)
- MFET 4610 - Senior Project Planning & Estimating (3)
- Humanities Electives (3)*
- Life Science Elective (3)*

*These courses will also fulfill general education requirements.

Electronics Engineering Technology (BS)

Program Prerequisite: Not required.

Minor: Not required.

Grade Requirements: A grade of "C" or better in all CEET 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 123 credit hours is required for graduation. 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.

Advisement

All Electronics 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 and General Education Requirements for Bachelor of Science degrees. Consult with your advisor for specific general education guidelines.

Course Requirements for EET BS Degree

Required Lower-Division CEET Courses (35 credit hours)

- CEET 1110 - Basic Electronics (2)
- CEET 1130 - Digital Systems (4)
- CEET 1140 - AC and DC Circuits (4)
- CEET 2110 - Semiconductor Circuits (4)
- CEET 2120 - Power and Motors (4)
- CEET 2130 - PC Board Design (3)
- CEET 2140 - Communications Systems (4)
- CEET 2150 - Embedded Controllers (4)
- CEET 2160 - Troubleshooting (3)
- CEET 2170 - Industrial Controls (3)

Required Upper-Division CEET Courses (35 credit hours)

- CEET 3010 - Circuit Analysis (4)
- CEET 3040 - Instrumentation and Measurements (4)
- CEET 3060 - Real-Time Embedded Controllers (4)
- CEET 3090 - Project Management (2)
- CEET 4010 - Senior Project I (2)
- CEET 4020 - Senior Project II (2)
- CEET 4030 - Controls & Systems (4)
- CEET 4040 - Signals and Systems (4)
- CEET 4060 - Advanced Communications (4)
- CEET 4090 - Systems Design and Integration (3)
- CEET 4890 - Cooperative Work Experience (2)

Required Support and General Education Courses (47-52 credit hours)

- MATH 1080 QL - Pre-calculus (5) or *both*
- MATH 1050 QL - College Algebra (4) and
- MATH 1060 - Trigonometry (3)
- MATH 1210 - Calculus I (4)
- MFET 2410 - Quality Concepts and Statistical Applications (3) or
- MATH 1040 QL - Introduction to Statistics (3)
- BSAD 3000 - Small Business Management (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- PHYS 2210 PS - Physics for Scientists and Engineers I (5)
- ENGL 2010 EN - Intermediate College Writing (3) *prerequisite is ENGL 1010 Introductory College Writing (3) or equivalent*
- ENGL 3100 - Professional and Technical Writing (3) or
- NTM 3250 - Business Communication (3)
- Gen Ed Life Science (4)
- Gen Ed Social Science (Diversity) (6)
- Gen Ed Creative Arts/Humanities (Diversity) (6)
- Computer Literacy (2)

Manufacturing Engineering Technology (BS)

Areas of Emphasis

Select one of the following areas of emphasis

- Plastics and Composites Emphasis, Manufacturing Engineering Technology (BS)
- Production Operations and Control Emphasis, Manufacturing Engineering Technology (BS)
- Welding Emphasis, Manufacturing Engineering Technology (BS)

Mechanical Engineering Technology (BS)

Program Prerequisite: Complete the requirements for the AAS Degree in Mechanical Engineering Technology.

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 and General Education Requirements section of this catalog.

Credit Hour Requirements: A total of 126 credit hours is required for graduation, 57 of which are within the Manufacturing and Mechanical Engineering Technology Department. A total of 42 upper division credits is also required (courses numbered 3000 and above), 39 of which are within the Manufacturing and Mechanical Engineering Technology Department. Transfer students are required to take a minimum of 30 credit hours at Weber State University.

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 Enrollment 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 and General Education Requirements for Bachelor of Science requirements. Consult with your advisor for specific general education guidelines.

Major Course Requirements for BS Degree

To be taken in addition to the courses required for the AAS Degree in Mechanical Engineering Technology

Mechanical Engineering Technology Courses Required (33 credit hours)

- MET 3050 - Dynamics (3)
- MET 3150 - Engineering Technology Materials (3)
- MET 3300 - Computer Programming Applications of Mechanical Engineering Technology (3)
- MET 3400 - Machine Design (3)
- MET 3500 - Mechanical Measurements and Instrumentation (3)
- MET 3700 - Testing and Failure Analysis (3)

- MET 4200 - Mechanical Design with FEA (3)
- MET 4500 - Senior Project (3,3) or
- MET 4510 - Senior Project (3,3)
- MET 4650 - Thermal Science (3)
- MET 4990 - Seminar in Mechanical Engineering Technology (1)

Support Courses Required (9 credit hours)

- MFET 1210 - Machining Principles Lecture/Lab I (3)
- MFET 3340 - Applied Fluid Power (2) and
- MFET 3340L - Applied Fluid Power Lab (1)
- NTM 3250 - Business Communication (3) or
- ENGL 3100 - Professional and Technical Writing (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.

- DET 2650 - Product Design & Development (3)
- DET 3470 - Introduction to CATIA V5 (3)
- DET 4470 - Advanced CATIA V5 (3)
- MATH 2210 - Calculus III (4)
- MATH 2270 - Elementary Linear Algebra (3)
- MATH 2280 - Ordinary Differential Equations (3)
- MET 4300 - Heating, Ventilating & Air Conditioning (3)
- MFET 2410 - Quality Concepts and Statistical Applications (3)
- MFET 3010 - Tool Design (3)
- MFET 3350 - Plastic and Composite Manufacturing (2) and
- MFET 3350L - Plastic and Composite Manufacturing Lab (2)
- MFET 3460 - Engineering Design using Solid Modeling (2) and
- MFET 3460L - Engineering Design using Solid Modeling Lab (1)
- MFET 3750 - Welding Metallurgy I (2)
- MFET 3820 - Nondestructive Testing (3)
- MFET 4310 - Corrosion and Corrosion Control (2)
- PHYS 2220 - Physics for Scientists and Engineers II (5)

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)

Plastics and Composites Emphasis, Manufacturing Engineering Technology (BS)

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 and General Education Requirements section of this catalog.

Credit Hour Requirements: Credit hours vary as shown for different emphasis areas: the BS in Manufacturing Engineering Technology with a Production Operations and Control Emphasis requires 124 credit hours, the BS in Manufacturing Engineering Technology with a Welding Emphasis requires 126 credit hours, and the BS in Manufacturing Engineering Technology with a Plastics and Composites Emphasis requires 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.

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 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 and General Education Requirements for Bachelor of Science requirements. Consult with your advisor for specific general education guidelines.

Major Course Requirements for BS Degree

Plastics and Composites Emphasis

To be taken in addition to the courses required for the AAS Degree in Manufacturing Engineering Technology with a Plastics and Composites Emphasis.

Manufacturing Engineering Technology Courses Required (44 credit hours)

- MFET 3340 - Applied Fluid Power (2) and
- MFET 3340L - Applied Fluid Power Lab (1)
- MFET 3350 - Plastic and Composite Manufacturing (2) and
- MFET 3350L - Plastic and Composite Manufacturing Lab (2)
- MFET 3550 - Manufacturing Supervision (3)
- MFET 3810 - Statistical Process Control and Reliability (3)
- MFET 3830 - Reinforced Plastics/Advanced Composite Lecture/Lab (3)
- MFET 3870 - Mold Design and Process Strategies Lecture/Lab (3)
- MFET 3910 - Six Sigma Methods and Tools in Manufacturing (4)
- MFET 4580 - Process Automation (1) and
- MFET 4580L - Process Automation Lab (2)
- MFET 4610 - Senior Project Planning & Estimating (3)
- MFET 4610L - Senior Project Lab (2-2)
- MFET 4620L - Senior Project Lab (2-2)
- MFET 4850 - Integration of Automated Systems (3)
- MFET 4995 - Certified Manufacturing Technologist (CMfgT) Exam Review (1)

- MET 3150 - Engineering Technology Materials (3)
- MET 4650 - Thermal Science (3)

Technical Electives (2 credit hours minimum)

- *A minimum of 3 credit hours of technical electives chosen from the following list are required*
- DET 3470 - Introduction to CATIA V5 (3)
- MFET 3460 - Engineering Design using Solid Modeling (2) and
- MFET 3460L - Engineering Design using Solid Modeling Lab (1)
- MFET 3710 - Computer Aided Manufacturing and Rapid Prototyping (2) and
- MFET 3710L - Computer Aided Manufacturing and Rapid Prototyping Lab (1)
- MFET 3890 - Cooperative Work Experience (1-3) or
- MFET 4890 - Cooperative Work Experience (1-3)
- SST 3702 - Developing Team Leadership Skills (2)
- Other classes approved by your MFET advisor

Production Operations and Control Emphasis, Manufacturing Engineering Technology (BS)

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 and General Education Requirements section of this catalog.

Credit Hour Requirements: Credit hours vary as shown for different emphasis areas: the BS in Manufacturing Engineering Technology with a Production Operations and Control Emphasis requires 124 credit hours, the BS in Manufacturing Engineering Technology with a Welding Emphasis requires 126 credit hours, and the BS in Manufacturing Engineering Technology with a Plastics and Composites Emphasis requires 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.

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 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 and General Education Requirements for Bachelor of Science requirements. Consult with your advisor for specific general education guidelines.

Major Course Requirements for BS Degree

Production Operations and Control Emphasis

To be taken in addition to the courses required for the AAS Degree in Manufacturing Engineering Technology with a Production Operations and Control Emphasis.

Manufacturing Engineering Technology Courses Required (43 credit hours)

- MFET 3340 - Applied Fluid Power (2) and
- MFET 3340L - Applied Fluid Power Lab (1)
- MFET 3350 - Plastic and Composite Manufacturing (2) and
- MFET 3350L - Plastic and Composite Manufacturing Lab (2)
- MFET 3550 - Manufacturing Supervision (3)
- MFET 3710 - Computer Aided Manufacturing and Rapid Prototyping (2) and
- MFET 3710L - Computer Aided Manufacturing and Rapid Prototyping Lab (1)
- MFET 3810 - Statistical Process Control and Reliability (3)
- MFET 3910 - Six Sigma Methods and Tools in Manufacturing (4)
- MFET 4580 - Process Automation (1) and
- MFET 4580L - Process Automation Lab (2)
- MFET 4590 - Production Planning & Process Control (3)
- MFET 4610 - Senior Project Planning & Estimating (3)
- MFET 4610L - Senior Project Lab (2-2)
- MFET 4620L - Senior Project Lab (2-2)
- MFET 4995 - Certified Manufacturing Technologist (CMfgT) Exam Review (1)
- MET 3150 - Engineering Technology Materials (3)
- MET 3400 - Machine Design (3)
- DET 3100 - Tool Design (3)

Technical Electives (3 credit hours)

A minimum of 3 credit hours of technical electives chosen from the following list are required.

- DET 3460 - Parametric Design Graphics (3)
- DET 3470 - Introduction to CATIA V5 (3)
- MFET 2850 - CNC/CAM for Plastics and Composites Lecture/Lab (3)
- MFET 2860 - Plastics/Composites Materials & Properties (3)
- MFET 2870 - Design of Plastics/Composites Products (3)
- MFET 3460 - Engineering Design using Solid Modeling (2) and
- MFET 3460L - Engineering Design using Solid Modeling Lab (1)
- MFET 3830 - Reinforced Plastics/Advanced Composite Lecture/Lab (3)
- MFET 3890 - Cooperative Work Experience (1-3) or
- MFET 4890 - Cooperative Work Experience (1-3)

- MFET 4850 - Integration of Automated Systems (3)
- SST 3103 - Sales Personalities and Profiles (3)
- SST 4203 - Ethical Sales and Service (3)
- Other classes approved by your MFET advisor

Please note that there are additional General Education requirements to complete the degree.

Welding Emphasis, Manufacturing Engineering Technology (BS)

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 and General Education Requirements section of this catalog.

Credit Hour Requirements: Credit hours vary as shown for different emphasis areas: the BS in Manufacturing Engineering Technology with a Production Operations and Control Emphasis requires 124 credit hours, the BS in Manufacturing Engineering Technology with a Welding Emphasis requires 126 credit hours, and the BS in Manufacturing Engineering Technology with a Plastics and Composites Emphasis requires 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.

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 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 and General Education Requirements for Bachelor of Science requirements. Consult with your advisor for specific general education guidelines.

Major Course Requirements for BS Degree

Welding Emphasis

To be taken in addition to the courses required for the AAS Degree in Manufacturing Engineering Technology with a Welding Emphasis.

Manufacturing Engineering Technology Courses Required (46 credit hours)

- MFET 2670 - GMA, FCA and GTA Welding (1) and
- MFET 2670L - GMA, FCA and GTA Welding Lab (2)
- MFET 3060 - Codes, Weld Inspection, and Quality Assurance (3)
- MFET 3550 - Manufacturing Supervision (3)
- MFET 3630 - Fusion Joining and Brazing Processes (2) and
- MFET 3630L - Fusion Joining and Brazing Processes (1)
- MFET 3750 - Welding Metallurgy I (2) and
- MFET 3750L - Welding Metallurgy I Lab (1)
- MFET 3760 - Welding Metallurgy II (2) and
- MFET 3760L - Welding Metallurgy II Lab (1)
- MFET 3810 - Statistical Process Control and Reliability (3)
- MFET 3820 - Nondestructive Testing (3)
- MFET 3910 - Six Sigma Methods and Tools in Manufacturing (4)
- MFET 4090 - Welding Power Sources (2)
- MFET 4310 - Corrosion and Corrosion Control (2)
- MFET 4580 - Process Automation (1) and
- MFET 4580L - Process Automation Lab (2)
- MFET 4590 - Production Planning & Process Control (3)
- MFET 4610 - Senior Project Planning & Estimating (3)
- MFET 4610L - Senior Project Lab (2-2)
- MFET 4620L - Senior Project Lab (2-2)
- MFET 4995 - Certified Manufacturing Technologist (CMfgT) Exam Review (1)

Technical Electives (3 credit hours minimum)

A minimum of 3 credit hours of technical electives chosen from the following list are required.

- DET 3470 - Introduction to CATIA V5 (3)
- MFET 3350 - Plastic and Composite Manufacturing (2) and
- MFET 3350L - Plastic and Composite Manufacturing Lab (2)
- MFET 3460 - Engineering Design using Solid Modeling (2) and
- MFET 3460L - Engineering Design using Solid Modeling Lab (1)
- MFET 3890 - Cooperative Work Experience (1-3) or
- MFET 4890 - Cooperative Work Experience (1-3)
- MFET 4850 - Integration of Automated Systems (3)
- SST 3702 - Developing Team Leadership Skills (2)

Other classes approved by your MFET advisor Production and Inventory Control (APICS) Emphasis (BIS)

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 emphasis portion of this degree.

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 (2) *
- MFET 3550 - Manufacturing Supervision (3)
- MFET 4050 - Detailed Scheduling and Planning I (2) *
- MFET 4150 - Execution and Control of Operations (2) *
- MFET 4250 - Detailed Scheduling and Planning (2) *
- MFET 4750 - Master Planning of Resources (2) *
- MFET 4770 - Strategic Management of Resources (2) *
- Electives to be determined by an MFET Advisor (3)

* Online course

Electronics Engineering Technology Minor

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 22 credit hours of CEET courses.

This program offers students who major in another discipline the option to obtain a minor in Electronics Engineering Technology.

Course Requirements for Minor

CEET Courses Required (22 credit hours)

- CEET 1110 - Basic Electronics (2)
- CEET 1130 - Digital Systems (4)
- CEET 1140 - AC and DC Circuits (4)
- CEET 2110 - Semiconductor Circuits (4)
- CEET 2150 - Embedded Controllers (4)

and one of the following courses:

- CEET 3030 - FPGA and ASIC Design (4)
- CEET 3040 - Instrumentation and Measurements (4)
- CEET 3050 - Assembly Language & Device Drivers (4)
- CEET 3060 - Real-Time Embedded Controllers (4)
- CEET 3080 - Embedded Networks (4)

Electronics Engineering Technology Departmental Honors

Please contact the Engineering Technology Department for advisement and permission prior to enrolling in Honors courses.

To earn Departmental Honors in Electronics Engineering Technology, a student must:

1. Be an active member of Tau Alpha Phi Engineering Technology Honors Society
2. Complete all the BS requirements as a Electronics Engineering Technology major
3. Earn Cumulative GPA of 3.5
4. Earn an "A" in the CEET 4010 - Senior Project I and Senior Project II.
5. Either
Present a scholarly paper at a local or national conference;
Or
Demonstrate excellence in community service;
Or
Earn recognition in the career field.

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

Department Network Technology and Business Multimedia

Department Chair: Allyson Saunders

Location: Elizabeth Hall, Room 301

Telephone Contact: Angie Christensen 801-626-6059

Computer and Information Literacy Administrator: Carole Barrios Lapine

Professors: Diana Green, Allyson Saunders; **Associate Professors:** Kenneth Cuddeback, Laura MacLeod; **Instructors:** Laura Anderson, Joyce Porter

The Department of Network Technology and Business Multimedia offers an Associate of Applied Science Degree in Business/Multimedia Technologies or Network Management Technology, and a Bachelor's of Science Degree in Network Management Technology, Business Education Composite Teaching, and Business/Multimedia Technologies. Minors are offered in Network Management Technology, Business/Multimedia Technologies, Business/Marketing Education, and Business Education. The last two minors require an education major. Also offered are a Network Management Technology Certificate and a Network Technologies Certificate.

The department offers courses in word processing, spreadsheets, database management, network management technology, telecommunications, local area networks, desktop publishing, graphics, business communication, multimedia, web design, internetworking, 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.

The Business Education Composite Teaching major qualifies individuals to teach business and marketing-related subjects at the secondary school level.

Business/Multimedia Technologies students gain knowledge of multimedia software and business systems. Graduates work in advertising, public relations, training, magazine and catalog publishing, and web design. Graduates are prepared as multimedia developers, desktop publishers, print/web designers, office supervisors/managers, and software trainers.

Departmental Policies

Students for any degree from the Network Technology and Business Multimedia (NTM) programs are subject to the following policies:

1. To enroll in any intermediate or advanced department course, the student must have a grade of C- or better in the prerequisite course/s .
2. NTM credits earned more than seven (7) years earlier than the proposed date of graduation must be evaluated by the department or validated through a challenge examination.
3. Any deviation from the printed graduation requirements must be approved by the department chair PRIOR to taking the course(s) in question.

Business/Multimedia Technologies (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; 52 of these are required within the program. A total of 8 upper division credit hours (courses numbered 3000 or higher) is required within the program.

Advisement

All Business/Multimedia Technologies students should meet with a faculty advisor for course and program advisement. Call or email Laura MacLeod at 801-626-6822 (lmacleod@weber.edu) or call 801-626-6059 for more information or to schedule an appointment. Advisement may also be obtained in Elizabeth Hall 301.

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 and General Education Requirements for Associate of Applied Science requirements. Computer Literacy as defined in this catalog is also required for the AAS degree. NTM 1700, Introduction to Microcomputer Applications, will partially fill the Computer Literacy requirement and COMM 2110 and ECON 1010 will be applied to fill both program and general education requirements.

Major Course Requirements for AAS Degree

Core Courses Required (11-13 credit hours)

- ENGL 1010 EN - Introductory College Writing (3)
- ENGL 2010 EN - Intermediate College Writing (3)
- NTM 1700 TE - Introduction to Microcomputer Applications (3) and
- LIBS 1704 TD - Information Navigator (1) (equivalent)
- MATH 1040 QL - Introduction to Statistics (3)

General Education Courses Required (9 credit hours)

Refer to Degree and General Education Requirements for Associate of Applied Science requirements.

Specific Major Courses Required (30 credit hours)

Students must demonstrate computer competency by taking NTM 1700, Introduction to Microcomputer Applications, or equivalent courses or tests. Computer competency is a prerequisite for all courses listed below:

- NTM 2010 - Business English Applications (3)
- NTM 2080 - Database Applications (1)
- NTM 2200 - Microcomputer Operating Systems (3)
- NTM 2300 - Introduction to LAN Management (3) or
- NTM 2534 - Video Editing Techniques (3)
- NTM 2334 - Introduction to Multimedia Web Animation (3)
- NTM 2531 - Exploring Multimedia Applications (3)
- NTM 2532 - Web Page Design and Development (3)
- NTM 2533 - Image Editing Solutions (3)
- NTM 3000 - Advanced Word Processing (1)
- NTM 3070 - Advanced Spreadsheet Applications (1)
- NTM 3100 - Desktop Publishing (3)
- NTM 3250 - Business Communication (3)

Support Courses Required (9 credit hours)

- ECON 1010 SS - Economics as a Social Science (3)
- ACTG 2010 - Survey of Accounting I (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Network Management Technology (AAS)

Note: Network Management Technology is the new name for the Telecommunications Major.

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 Network Management Technology bachelor's degree.

Advisement

All two-year Network Management Technology students should meet with a faculty advisor for course and program advisement. Call or email Kenneth Cuddeback at 801-626-6026 (kcuddeback@weber.edu) or Diana Green at 801-626-6821 (djgreen@weber.edu) or call 801-626-6059 for more information or to schedule an appointment. Advisement may also be obtained in Elizabeth Hall 301.

Admission Requirements

Declare a 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 and General Education Requirements for Associate of Applied Science requirements. Computer Literacy as defined in this catalog is also required for the AAS degree. NTM 1700 TE - Introduction to Microcomputer Applications, will partially fill the Computer Literacy requirement and COMM 2110 and ECON 1010 will be applied to fill both program and general education requirements.

Major Course Requirements for AAS Degree

Core Courses Required (11-13 credit hours)

- ENGL 1010 EN - Introductory College Writing (3)
- ENGL 2010 EN - Intermediate College Writing (3)
- MATH 1040 QL - Introduction to Statistics (3)
- NTM 1700 TE - Introduction to Microcomputer Applications (3) and
- LIBS 1704 TD - Information Navigator (1) (or equivalent)

Specific Major Courses Required (41 credit hours)

NTM 1700 TE - Introduction to Microcomputer Applications, or University Computer Literacy Exams (NTM 1501, NTM 1502 and NTM 1503) are a prerequisite for all NTM courses listed below.

- NTM 2200 - Microcomputer Operating Systems (3)
- NTM 2300 - Introduction to LAN Management (3)
- NTM 2415 - Cisco TCP/IP Routing Protocols and Router Configuration (3)

- NTM 2435 - Cisco Advanced LAN and WAN Switching and Routing Theory and Design (3)
- NTM 2532 - Web Page Design and Development (3)
- NTM 2710 - Switching and Transmission Network Systems Management (3)
- NTM 2720 - Transport Media & Emerging Technologies (3)
- NTM 2730 - Transmission Network Applications (3)
- NTM 3250 - Business Communication (3)
- CEET 1110 - Basic Electronics (2)
- CS 1400 - Fundamentals of Programming (4)
- CS 2550 - Database Design and Application Development (4)
- CS 2650 - Computer Architecture/Organization (4)

Support Courses Required (6 credit hours)

- ECON 1010 SS - Economics as a Social Science (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Network Management Technology Institutional Certificate

Note: Network Management Technology is the new name for the Telecommunications Institutional Certificate.

Grade Requirements: A minimum overall GPA of 2.00 or "C".

Credit Hour Requirements: A total of 18 credit hours is required in addition to Computer Competency (at least 10 of which must be residence hours taken from WSU).

Course Requirements for Institutional Certificate

Courses Required (18 credit hours)

Students must demonstrate computer competency by taking NTM 1700 TE - Introduction to Microcomputer Applications, or equivalent courses or tests. Computer competency is a prerequisite for all courses listed below:

- NTM 2300 - Introduction to LAN Management (3)
- NTM 2710 - Switching and Transmission Network Systems Management (3)
- NTM 2720 - Transport Media & Emerging Technologies (3)
- NTM 2730 - Transmission Network Applications (3)
- NTM 3200 - Linux Systems Administration (3)
- NTM 4700 - Data Network Design (3) or
- NTM 4710 - Traffic Technology & Voice Network Design (3)

Network Technologies Institutional Certificate

Grade Requirements: A minimum overall GPA of 2.00 or "C".

Credit Hour Requirements: A total of 12-14 credit hours is required (at least 10 of which must be residence hours taken from WSU).

Course Requirements for Institutional Certificate

Courses Required (12-14 credit hours)

- NTM 2300 - Introduction to LAN Management (3) or
- CS 2705 - Network Fundamentals and Design (4)
- NTM 2415 - Cisco TCP/IP Routing Protocols and Router Configuration (3)
- NTM 2435 - Cisco Advanced LAN and WAN Switching and Routing Theory and Design (3)
- NTM 3300 - Advanced LAN Security Management (3) or
- CS 3705 - Protocol Analysis (4)

Business Education Composite Teaching (BS)

Program Prerequisite: Completion or equivalent of a Weber State AAS Degree in Business/Multimedia Technologies. Composite Teaching majors 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 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 minimum of 120 credit hours is required for graduation; 118 of these are required within the major. A total of 40 upper-division credit hours is required (courses numbered 3000 and above).

Advisement

Business Education Composite Teaching Major students should meet with a faculty advisor for course and program advisement. Call Dr. Allyson Saunders at 801-626-6823 (asaunders@weber.edu) or call 801-626-6059 for more information or to schedule an appointment. Advisement may also be obtained in Elizabeth Hall 301. Teaching majors should also consult with an advisor in the Jerry and Vickie Moyes College of Education (call 801-626-6269).

Admission Requirements

Complete the AAS Degree in Business/Multimedia Technologies or equivalent. Declare your program of study (see Enrollment Services and Information) with the department secretary (Elizabeth Hall 301). Composite Teaching majors must also satisfy Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements. The following courses required for the Business Education Composite teaching major (taken as part of the AAS) will also be applied to fill general education requirements: CHF 1500, COMM 2110, and ECON 1010.

Major Course Requirements for BS Degree

To be taken in addition to the requirements for the AAS Degree in Business/Multimedia Technologies.

Specific Major Courses Required (6 credit hours)

- NTM 3600 - Principles of Business/ Marketing Education (3) or
- NTM 6600 - Principles of Business/ Marketing Education (3)
- NTM 3610 - Methods of Teaching Business/ Marketing Education Subjects (3) or
- NTM 6610 - Methods of Teaching Business/ Marketing Education (3)

Support Courses Required (12 credit hours)

The following requirements must be completed with a grade of "C-" or higher.

- MGMT 3010 - Organizational Behavior and Management (3)
- MKTG 3010 - Marketing Concepts and Practices (3)
- BSAD 3200 - Legal Environment of Business (3)
- FIN 1010 - Personal Finance (3)

Secondary Education Requirements for the Jerry and Vickie Moyes College of Education must also be met (27-30 credit hours).

All courses required for this major must be completed before student teaching.

NTM 3250 - Business Communication (3), will meet the requirement for Secondary Education Licensure.

Business/Multimedia Technologies (BS)

Program Prerequisite: Completion or equivalent of a Weber State AAS Degree in Business/Multimedia Technologies.

Minor: Not required.**Grade Requirements:** A grade of "C-" or better in courses required for this major in addition to an overall 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 minimum of 120 credit hours is required for graduation; 111 of these are required within the major. A total of 40 upper-division credit hours is required (courses numbered 3000 and above).

Advisement

Business/Multimedia Technologies major students should meet with a faculty advisor for course and program advisement. Call Laura MacLeod at 801-626-6822 (lmacleod@weber.edu) or call 801-626-6059 for more information or to schedule an appointment. Advisement may also be obtained in Elizabeth Hall 301.

Admission Requirements

Complete the AAS Degree in Business/Multimedia Technologies or equivalent. Declare a 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 and General Education Requirements for the Bachelor of Science requirements. The following courses required for the Business/Multimedia Technologies major (taken as part of the AAS) will also be applied to fill general education requirements: COMM 2110 and ECON 1010.

Major Course Requirements for BS Degree

To be taken in addition to the requirements for the AAS Degree in Business/Multimedia Technologies.

Specific Major Courses Required (26 credit hours)

- NTM 3090 - Advanced Electronic Presentations (2)
- NTM 3400 - Training the Trainer (3)
- NTM 3532 - Internet/Database Integration (3)
- NTM 3534 - Advanced Multimedia Applications (3)
- NTM 3535 - Creating Computer Illustrations (3)
- NTM 3550 - Supervising Information Technology (3)
- NTM 3634 - Computer Animation and Motion (3)
- NTM 4860 - Business/Multimedia Technologies Internship (3)
- NTM 4890 - Multimedia e-Portfolio (3)

Support Courses Required (9 credit hours)

- MKTG 3010 - Marketing Concepts and Practices (3)
- BSAD 3200 - Legal Environment of Business (3)
- ART 2450 - Foundations of Photography: Color/Digital (3)

Network Management Technology (BS)

Note: Network Management Technology is the new name for the Telecommunications Administration Major.

Program Prerequisite: Completion or equivalent of a Weber State AAS Degree in Network Management Technology.

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.

Advisement

All Network Management Technology students should meet with a faculty advisor for course and program advisement. Call or email Kenneth Cuddeback at 801-626-6026 (kcuddeback@weber.edu) or Diana Green at 801-626-6821 (djgreen@weber.edu) or call 801-626-6059 for more information or to schedule an appointment. Advisement may also be obtained in Elizabeth Hall 301.

Admission Requirements

Complete an AAS Degree in Network Management Technology or equivalent. Declare a 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 and General Education Requirements for the Bachelor of Science requirements. NTM 1700 TE - Introduction to Microcomputer Applications, will partially fill the Computer Literacy requirement. 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).

Major Course Requirements for BS Degree

To be taken in addition to the requirements for the Network Management Technology (AAS).

Specific Major Courses Required (40 credit hours)

- NTM 3200 - Linux Systems Administration (3)
- NTM 3300 - Advanced LAN Security Management (3)
- NTM 3310 - Network Server Administration (3)
- NTM 3532 - Internet/Database Integration (3)
- NTM 3550 - Supervising Information Technology (3)
- NTM 3720 - Advanced Transport Media (3)
- NTM 3730 - Cyber Policy and Ethics (3)
- NTM 4700 - Data Network Design (3)
- NTM 4710 - Traffic Technology & Voice Network Design (3)
- NTM 4760 - Network/Telecommunications Internship (1-4)
- NTM 4790 - Network/Telecommunications Senior Project (2)
- CS 3030 - Scripting Languages (4)
- CS 3705 - Protocol Analysis (4)

Business/Multimedia Technologies (BIS)

For the BIS emphasis, refer to Bachelor of Integrated Studies Program 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 18 credit hours.

Students must have a correct keyboarding ability of at least 40 wpm proficiency.

The NTM Department accepts transfer of a maximum of nine (9) hours from another institution. Courses older than seven (7) years will not be accepted.

Advisement

Students should meet with a faculty advisor for course and program advisement. Call or email Laura MacLeod (for the Minor) at 801-626-6822 (lmacleod@weber.edu) or Laura Anderson (for the BIS) at 801-626-6429 (lsanderson@weber.edu) or call 801-626-6059 for more information or to schedule an appointment. Advisement may also be obtained in Elizabeth Hall 301.

Course Requirements for Minor or BIS Emphasis

Students must demonstrate computer competency by taking NTM 1700, Introduction to Microcomputer Applications, or equivalent courses or tests. Computer competency is a prerequisite for all courses listed below:

Required Courses (18 credit hours)

Select 18 credit hours from the following courses:

- NTM 2334 - Introduction to Multimedia Web Animation (3)
- NTM 2531 - Exploring Multimedia Applications (3)
- NTM 2532 - Web Page Design and Development (3)
- NTM 2533 - Image Editing Solutions (3)
- NTM 2534 - Video Editing Techniques (3)
- NTM 3100 - Desktop Publishing (3)
- NTM 3250 - Business Communication (3)
- NTM 3532 - Internet/Database Integration (3)
- NTM 3534 - Advanced Multimedia Applications (3)
- NTM 3535 - Creating Computer Illustrations (3)
- NTM 3634 - Computer Animation and Motion (3)
- DET 3400 - Technical Illustration and Documentation I (3)
(NTM 2533 recommended prerequisite for DET 3400)

Network Management Technology Minor

Note: Network Management Technology is the new name for the Telecommunications Minor.

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 23 credit hours in TBE courses as listed below.

Advisement

Students should meet with a faculty advisor for course and program advisement. Call Kenneth Cuddeback at 801-626-6026 (kcuddeback@weber.edu) or Diana Green at 801-626-

6821 (djgreen@weber.edu) or call 801-626-6059 for more information or to schedule an appointment. Advisement may also be obtained in Elizabeth Hall 301.

Course Requirements for Minor

Students must demonstrate computer competency by taking NTM 1700 TE - Introduction to Microcomputer Applications, or equivalent courses or tests. Computer competency is a prerequisite for all courses listed below:

Courses Required (23 credit hours)

- NTM 2200 - Microcomputer Operating Systems (3)
- NTM 2300 - Introduction to LAN Management (3)
- NTM 2710 - Switching and Transmission Network Systems Management (3)
- NTM 2720 - Transport Media & Emerging Technologies (3)
- NTM 2730 - Transmission Network Applications (3)
- NTM 3200 - Linux Systems Administration (3)
- NTM 4700 - Data Network Design (3) or
- NTM 4710 - Traffic Technology & Voice Network Design (3)
- CEET 1110 - Basic Electronics (2)

Business Education Teaching Minor

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. Students must have correct keyboarding ability with at least 40 wpm proficiency.

Credit Hour Requirements: A minimum of 25 credit hours.

Advisement

The Business Education Teaching Minor should be cleared with the NTM Department by the beginning of a student's junior year. Students should meet with a faculty advisor for course and program advisement. Call or email Allyson Saunders at 801-626-6823 (asaunders@weber.edu) or call 801-626-6059 for more information or to schedule an appointment. Advisement may also be obtained in Elizabeth Hall 301.

Students who select the Business Education Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education in this catalog) and must have a teaching major. They must also student teach at least one class in relation to the minor.

Course Requirements for Minor

Students must demonstrate computer competency by taking NTM 1700 TE - Introduction to Microcomputer Applications, or equivalent courses or tests. Computer competency is a prerequisite for all courses listed below:

Required Courses (22 credit hours)

- ACTG 2010 - Survey of Accounting I (3)
- NTM 2200 - Microcomputer Operating Systems (3)
- NTM 2531 - Exploring Multimedia Applications (3)
- NTM 2532 - Web Page Design and Development (3)

- NTM 3000 - Advanced Word Processing (1)
- NTM 3250 - Business Communication (3)
- NTM 3600 - Principles of Business/Marketing Education (3) or
- NTM 6600 - Principles of Business/Marketing Education (3)
- NTM 3610 - Methods of Teaching Business/Marketing Education Subjects (3) or
- NTM 6610 - Methods of Teaching Business/Marketing Education (3)

Elective Courses (3 credit hours)

Select 3 credit hours not previously taken from the following:

- NTM 2334 - Introduction to Multimedia Web Animation (3)
- NTM 2533 - Image Editing Solutions (3)
- NTM 3100 - Desktop Publishing (3)
- FIN 1010 - Personal Finance (3)

Business/Marketing Education Teaching Minor

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. Students must have correct keyboarding ability with at least 40 wpm proficiency.

Credit Hour Requirements: A minimum of 31 credit hours.

Advisement

The Business/Marketing Education Teaching Minor must be cleared with the NTM Department by the beginning of a student's junior year. Students should meet with a faculty advisor for course and program advisement. Call or email Allyson Saunders at 801-626-6823 (asaunders@weber.edu) or call 801-626-6059 for more information or to schedule an appointment. Advisement may also be obtained in Elizabeth Hall 301.

Students who select the Business/Marketing Education Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education in this catalog) and must have a teaching major. They must also student teach at least one class in relation to the minor.

Course Requirements for Minor

Students must demonstrate computer competency by taking NTM 1700 TE - Introduction to Microcomputer Applications, or equivalent courses or tests. Computer competency is a prerequisite for all courses listed below:

Required Courses (31 credit hours)

- NTM 2200 - Microcomputer Operating Systems (3)
- NTM 2531 - Exploring Multimedia Applications (3)
- NTM 2532 - Web Page Design and Development (3)
- NTM 3000 - Advanced Word Processing (1)
- NTM 3250 - Business Communication (3)
- NTM 3600 - Principles of Business/Marketing Education (3) or
- NTM 6600 - Principles of Business/Marketing Education (3)
- NTM 3610 - Methods of Teaching Business/Marketing Education Subjects (3) or
- NTM 6610 - Methods of Teaching Business/Marketing Education (3)
- ACTG 2010 - Survey of Accounting I (3)
- MKTG 3010 - Marketing Concepts and Practices (3)
- SST 2443 - Advertising Methods (3)
- SST 3203 - Customer Service Techniques (3)

Department of Sales and Service Technology

Department Chair: Vel Casler

Location: Technical Education Building, Room 101

Telephone: Rane Dearden 801-626-6913

Professors: Vel Casler, Desiree Cooper Larsen, Steven Eichmeier, Carl Grunander; **Associate Professor:** Rick Dove; **Assistant Professors:** Tim Border, Jo Ellen Jonsson; **Instructors:** Kristen Arnold, Shauna Morris

The Department of Sales and Service Technology offers associate of applied science degrees in the areas of Interior Design Technology and Sales & Merchandising Technology and bachelor's degrees in Technical Sales and Interior Design – Technical Sales.

Interior Design Technology

*Advisors: Kristen Arnold 801-626-7935
Shauna Morris 801-626-7940*

Interior Design Technology is a program offered under the Department of Sales & Service Technology. Interior Design Technology is a two-year program that prepares students for the four-year Interior Design Technical Sales degree. The two-year AAS degree provides students academic preparation for employment as assistant designers, wholesale showrooms, and retail sales positions.

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.

Technical Sales

This program prepares individuals to serve as agents or sales representatives in selling technical products/services to other businesses, plants, professionals, and public and private institutions. This program offers a technical sales emphasis tailored toward specific technical fields such as:

Manufacturing Rep
Pharmaceutical Rep
Financial Planning
Technology Sales
Wholesale Rep
Electronic Rep

Communication System Rep
Medical Equipment Rep
Real Estate
Financial Services Marketing
Broker
Small Business Owner

Interior Design Technology (AAS)

Grade Requirements: An overall GPA of 3.0 or "B"

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.

Advisement

All Interior Design students are required to meet with a faculty advisor each semester for course and program advisement. Call 801- 626-6913 or 801-626-7935 for more information or to schedule an appointment.

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 and General Education Requirements for Associate of Applied Science requirements. The following required support courses will also be applied toward general education requirements: COMM 2110 (3), MATH 1030 (3) and ART 1010 (3) or ART 1030 (3). Students also need to complete 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.

Major Course Requirements for AAS Degree

Interior Design Courses Required (33 credit hours)

- IDT 1010 - Introduction to Interior Design (3)
- IDT 1020 - Presentation Techniques (3)
- IDT 2010 - Sustainability I: Textiles and Soft Materials (3)
- IDT 2020 - Computer-aided Design and Drafting (3)
- IDT 2035 - Design Process/Space Planning (3)
- IDT 2040 - Architectural Detailing (3)
- IDT 2050 - Codes (2)
- IDT 2860 - Practicum (1-2)
- IDT 2990 - Interior Design Seminar (1)
- IDT 3010 - Historical Interiors (3)
- IDT 3020 - American and Modern Interiors (3)
- IDT 3030 - Sustainability II: Materials, Hard Surfaces, and Specifications (3)

Support Courses Required (27 credit hours)

- ART 1010 CA - Introduction to the Visual Arts (3) or
- ART 1030 CA - Studio Art for the Non-Art Major (3)
- ART 1140 - Color Theory (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- DET 1340 - Architectural Board Drafting for Interior Design (3)
- ENGL 1010 EN - Introductory College Writing (3)
- MATH 1030 QL - Contemporary Mathematics (3)
- SST 1143 - Fundamental Selling Techniques (3)
- SST 3103 - Sales Personalities and Profiles (3)

Computer and Information Literacy as defined in this catalog is also required.

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.

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 and General Education 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.

Major Course Requirements for AAS Degree

Courses Required (15 credit hours)

- SST 1143 - Fundamental Selling Techniques (3)
- SST 1303 - Sales Channels (3)
- SST 2603 - Advanced Selling Techniques (3)
- SST 3203 - Customer Service Techniques (3)
- SST 3563 - Principles of Sales Supervision (3)

Support Courses (34 credit hours)

- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- IDT 2010 - Sustainability I: Textiles and Soft Materials (3)
- SST 1503 - Introduction to Fashion Merchandising (3)
- SST 1890 - Work Experience (1-3)
- SST 2182 - Credit and Collection Methods (2)
- SST 2383 - Retail Merchandising and Buying Methods (3)
- SST 2443 - Advertising Methods (3)
- SST 2703 - Internet Sales and Service (3)
- SST 2991 - Sales/Service Technology Seminar (1-3)
- SST Electives (8)

Computer and Information Literacy as defined in this catalog is also required.

Interior Design - Technical Sales (BS)

The four-year Interior Design--Technical Sales degree provides the student academic preparation for professional certification and employment in kitchen & bath, lighting, residential, commercial, hospitality, and healthcare design.

Students develop skills in the design process, technical sales, professional practice, Auto CAD, Revit Architecture, 2D/2D, hand drafting, sketching, manual and computer-generated rendering techniques, presentation, space planning, specification of materials, building codes, history and theory. Drafting and technical skills are heavily emphasized.

In addition to classroom projects, students participate in various community projects tours, workshops and network with professional interior design organizations as well as compete in local and national competitions.

Students graduating with the Interior Design Technical Sales degree 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--Technical Sales Bachelor of Science degree is accredited by the Council for Interior Design Accreditation (CIDA) and 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, design and sales skills necessary for professional practice. The program seeks to prepare students to qualify for professional certification.

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.

Transfer students and students coming into the program with an AAS, AA, or AS will take six semesters to complete the program. No courses older than 10 years will be accepted for transfer credit toward a degree in this program.

Advisement

All Interior Design students are required to meet with a faculty advisor each semester for course and program advisement. Call 801-626-6913 or 801-626-7935 for more information or to schedule an appointment.

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 and General Education 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).

Major Course Requirements for BS Degree

Interior Design Courses Required (60 credit hours)

- IDT 1010 - Introduction to Interior Design (3)
- IDT 1020 - Presentation Techniques (3)
- IDT 2010 - Sustainability I: Textiles and Soft Materials (3)
- IDT 2020 - Computer-aided Design and Drafting (3)
- IDT 2035 - Design Process/Space Planning (3)
- IDT 2040 - Architectural Detailing (3)
- IDT 2050 - Codes (2)
- IDT 2860 - Practicum (1-2)
- IDT 2990 - Interior Design Seminar (1)
- IDT 3000 - Lighting Design (3)
- IDT 3010 - Historical Interiors (3)
- IDT 3020 - American and Modern Interiors (3)
- IDT 3025 - Professional Practice (3)
- IDT 3030 - Sustainability II: Materials, Hard Surfaces, and Specifications (3)
- IDT 3040 - Perspective/Rendering (2)
- IDT 3045 - Residential Design (3)
- IDT 3060 - Kitchen & Bath (3)
- IDT 4020 - Commercial Design (3)
- IDT 4025 - Senior Program Development (2)
- IDT 4030 - Senior Project (3)
- IDT 4040 - Portfolio Design (2)
- IDT 4830 - Directed Readings (1-3)
- IDT 4860 - Internship for Interior Design (3)

Support Courses Required (29 credit hours)

- ART 1010 CA - Introduction to the Visual Arts (3) or
- ART 1030 CA - Studio Art for the Non-Art Major (3)
- ART 1140 - Color Theory (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- DET 1340 - Architectural Board Drafting for Interior Design (3)
- SST 1143 - Fundamental Selling Techniques (3)

- SST 3103 - Sales Personalities and Profiles (3)
- SST 3203 - Customer Service Techniques (3)
- SST 3363 - Contract and Sales Negotiation Techniques (3)
- SST 3702 - Developing Team Leadership Skills (2)
- SST 3903 - Sales Presentation Strategies and Techniques (3)

Students are required to attend activities outside of the classroom and at least one workshop per year, for which a fee may be attached.

Technical Sales (BS)

Program Prerequisite: An interview with the department chair or designee 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 45 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.

Advisement

All Technical 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.

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 and General Education Requirements for Bachelor of Science requirements. MATH 1030 (3) is recommended to fulfill the Quantitative Literacy requirement.

Major Course Requirements for BS Degree

Courses Required (45 credit hours)

- SST 1143 - Fundamental Selling Techniques (3)
- SST 1303 - Sales Channels (3)
- SST 1401 - Introduction to Sales and Service Technology (1)
- SST 2383 - Retail Merchandising and Buying Methods (3)
- SST 2603 - Advanced Selling Techniques (3)
- SST 3103 - Sales Personalities and Profiles (3)
- SST 3203 - Customer Service Techniques (3)
- SST 3363 - Contract and Sales Negotiation Techniques (3)
- SST 3563 - Principles of Sales Supervision (3)
- SST 3702 - Developing Team Leadership Skills (2)
- SST 3803 - Sales Proposals (2 contact, 1 lab)
- SST 3903 - Sales Presentation Strategies and Techniques (3)

- SST 4203 - Ethical Sales and Service (3)
- SST 4610 - Senior Project I (3)
- SST 4620 - Senior Project II (3)
- SST 4993 - Sales Career Seminar (3)

Technical Sales Concentration (minimum 20 credit hours)

Select a minimum of 20 hours in consultation with the department chair.

Support Course Electives (minimum 10 credit hours)

Select from the following:

- ACTG 2010 - Survey of Accounting I (3)
- ACTG 2020 - Survey of Accounting II (3)
- ATTC 3520 - Fleet Management (3)
- ATTC 3620 - Automotive Business Practices (3)
- BSAD 1010 - Introduction to Business (3)
- BSAD 3000 - Small Business Management (3)
- CHF 1500 SS - Human Development (3)
- CHF 2100 - Family Resource Management (3)
- CHF 2400 - Family Relations (3)
- CHF 3150 - Consumer Rights and Responsibilities (3)
- CHF 4400 - The Family in Stress (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 3850 - Advertising (3)
- ENGL 3100 - Professional and Technical Writing (3)
- GERT 3120 - Aging: Adaptation and Behavior (3)
- GERT 4650 - Retirement: Adjustment/Planning (3)
- IDT 1010 - Introduction to Interior Design (3)
- PSY 2000 SS - Interpersonal Relationships (3)
- PSY 3000 - Child Psychology (3)
- PSY 3100 DV - Psychology of Diversity (3)
- PSY 3460 - Social Psychology (3)
- PSY 4510 - Industrial and Organizational Behavior (3)
- SOC 3110 - Sociology of Family (3)
- SST 1503 - Introduction to Fashion Merchandising (3)
- SST 2182 - Credit and Collection Methods (2)
- SST 2443 - Advertising Methods (3)
- SST 2703 - Internet Sales and Service (3)
- SST 2903 - Professional Selling on the Internet (3)
- SST 4830 - Directed Readings (1-3)
- SST 4920 - Short Courses, Workshops, etc (1-2)
- NTM 2080 - Database Applications (1)
- NTM 3070 - Advanced Spreadsheet Applications (1)
- NTM 3090 - Advanced Electronic Presentations (2)
- NTM 3100 - Desktop Publishing (3)
- NTM 3250 - Business Communication (3)
- NTM 3400 - Training the Trainer (3)

Interior Design Technology Emphasis (BIS)

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.

Courses Required for the Interior Design BIS Emphasis

Required Courses (21 credit hours)

Note: The following are required courses for the BIS degree. No substitutions are allowed.

- IDT 1010 - Introduction to Interior Design (3)
- IDT 2020 - Computer-aided Design and Drafting (3)
- IDT 2035 - Design Process/Space Planning (3)
- IDT 2050 - Codes (2)
- IDT 3025 - Professional Practice (3)
- IDT 3030 - Sustainability II: Materials, Hard Surfaces, and Specifications (3)
- IDT 4040 - Portfolio Design (2)

Elective Courses

Students should choose 3 hours from the following courses to compliment the required courses listed above.

- IDT 1020 - Presentation Techniques (3)
- IDT 2010 - Sustainability I: Textiles and Soft Materials (3)
- IDT 2040 - Architectural Detailing (3)
- IDT 2860 - Practicum (1-2)
- IDT 2990 - Interior Design Seminar (1)
- IDT 3000 - Lighting Design (3)
- IDT 3010 - Historical Interiors (3)
- IDT 3060 - Kitchen & Bath (3)
- DET 1340 - Architectural Board Drafting for Interior Design (3)
- Study Abroad program (3)

Business/Multimedia Technologies Minor

For the BIS emphasis, refer to Bachelor of Integrated Studies Program 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 18 credit hours.

Students must have a correct keyboarding ability of at least 40 wpm proficiency.

The NTM Department accepts transfer of a maximum of nine (9) hours from another institution. Courses older than seven (7) years will not be accepted.

Advisement

Students should meet with a faculty advisor for course and program advisement. Call or email Laura MacLeod (for the Minor) at 801-626-6822 (lmacleod@weber.edu) or Laura

Anderson (for the BIS) at 801-626-6429 (lsanderson@weber.edu) or call 801-626-6059 for more information or to schedule an appointment. Advisement may also be obtained in Elizabeth Hall 301.

Course Requirements for Minor or BIS Emphasis

Students must demonstrate computer competency by taking NTM 1700, Introduction to Microcomputer Applications, or equivalent courses or tests. Computer competency is a prerequisite for all courses listed below:

Required Courses (18 credit hours)

Select 18 credit hours from the following courses:

- NTM 2334 - Introduction to Multimedia Web Animation (3)
- NTM 2531 - Exploring Multimedia Applications (3)
- NTM 2532 - Web Page Design and Development (3)
- NTM 2533 - Image Editing Solutions (3)
- NTM 2534 - Video Editing Techniques (3)
- NTM 3100 - Desktop Publishing (3)
- NTM 3250 - Business Communication (3)
- NTM 3532 - Internet/Database Integration (3)
- NTM 3534 - Advanced Multimedia Applications (3)
- NTM 3535 - Creating Computer Illustrations (3)
- NTM 3634 - Computer Animation and Motion (3)
- DET 3400 - Technical Illustration and Documentation I (3)
(NTM 2533 recommended prerequisite for DET 3400)

Fashion Merchandising Minor

Grade Requirements: A grade of "C" or better in all courses used toward the minor except for Interior Design which requires a "B" grade or better for all courses used toward the Interior Design minor.

Credit Hour Requirements: A total of 21 credit hours required.

This program offers students who major in another field the option to obtain a minor in one of the areas in Sales and Service Technology. 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 SST Department for approval of substitute courses.

Course Requirements for Fashion Merchandising Minor

Courses Required (21 credit hours)

- IDT 2010 - Sustainability I: Textiles and Soft Materials (3)
- SST 1143 - Fundamental Selling Techniques (3)
- SST 1503 - Introduction to Fashion Merchandising (3)
- SST 2383 - Retail Merchandising and Buying Methods (3)
- SST 2443 - Advertising Methods (3)
- SST 2703 - Internet Sales and Service (3)
- THEA 3243 - Costume History (3)

Interior Design Minor

Grade Requirements: A grade of “C” or better in all courses used toward the minor except for Interior Design which requires a “B” grade or better for all courses used toward the Interior Design minor.

Credit Hour Requirements: A total of 21 credit hours required.

This program offers students who major in another field the option to obtain a minor in one of the areas in Sales and Service Technology. 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 SST Department for approval of substitute courses.

Course Requirements for Interior Design Minor

Courses Required (minimum of 21 credit hours)

- IDT 1010 - Introduction to Interior Design (3)
- IDT 1020 - Presentation Techniques (3)
- IDT 2020 - Computer-aided Design and Drafting (3)
- IDT 2035 - Design Process/Space Planning (3)
- IDT 2990 - Interior Design Seminar (1)
- IDT 3010 - Historical Interiors (3)
- IDT 3020 - American and Modern Interiors (3)
- IDT 3025 - Professional Practice (3)
- IDT 3030 - Sustainability II: Materials, Hard Surfaces, and Specifications (3)
- IDT 4020 - Commercial Design (3)
- DET 1340 - Architectural Board Drafting for Interior Design (3)

Sales Minor

Grade Requirements: A grade of “C” or better in all courses used toward the minor except for Interior Design which requires a “B” grade or better for all courses used toward the Interior Design minor.

Credit Hour Requirements: A total of 21 credit hours required.

This program offers students who major in another field the option to obtain a minor in one of the areas in Sales and Service Technology. 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 SST Department for approval of substitute courses.

Course Requirements for Sales Minor

Courses Required (minimum of 21 credit hours)

- SST 1143 - Fundamental Selling Techniques (3)
- SST 1303 - Sales Channels (3)
- SST 2603 - Advanced Selling Techniques (3)
- SST 3103 - Sales Personalities and Profiles (3)
- SST 3203 - Customer Service Techniques (3)

- SST 3363 - Contract and Sales Negotiation Techniques (3)
- SST 3803 - Sales Proposals (2 contact, 1 lab) (3 credit hours required)
- SST 3903 - Sales Presentation Strategies and Techniques (3)

Interior Design Technology Departmental Honors

Marilyn Diamond, Honors Assistant, 801-626-6165

Kristen Arnold, IDT Departmental Honors Advisor
801-626-7935, Bldg 3, Rm 302, kristenarnold@weber.edu

Criteria for Interior Design Honors:

- Maintain a cumulative overall GPA of 3.5 and a GPA of 3.7 in the Interior Design major.
- Complete all required course work for the Interior Design major.
- Attend at least two major speakers or workshops offered by the WSU Interior Design Chapter not associated with course curriculum.
- Show two years membership in the WSU Interior Design Chapter.
- Show two years of membership and activity in a professional interior design organization such as IIDA, ASID, or NKBA. Activity is defined as attending monthly activities, compete in student contests, or serve as officer or liaison.
- Compete in at least 1 national or regional interior design or kitchen and bath competition such as IDEC, ASID, NKBA kitchen or bath competition, Sub-Zero or Wolf competitions.
- Show significant (at least 15 hours) service contributions within the design community, WSU Chapter, or community at large.
- Letter of Recommendation from any interior design faculty member.

To become an IDT Departmental Honors, please follow the process outlined below:

1. Complete the **Entrance Application Form** with the Departmental Honors Advisor in the department, no later than the **semester prior to the semester in which you graduate**. You are strongly encouraged to apply for Departmental Honors as early as possible.
2. Visit with the Honors Academic Advisor, Marilyn Diamond, in the Honors Center, 2nd floor of the Stewart Library, with the completed and signed entrance form to be admitted to the program.
3. Meet the criteria listed above.
4. Meet with Departmental Honors Advisor for graduation clearance and to complete the **Exit Application Form**.
5. Apply for graduation from the Graduation Office by the university due date.
6. Visit with Marilyn Diamond for Honors clearance. (Bring completed and signed **Exit form prior to Fall Break if you plan to graduate in the fall, or prior to Spring Break if you plan to graduate in the spring**).

Students earning departmental honors will be recognized in the following ways:

- Departmental Honors medallion to wear at commencement.
- "IDT Departmental Honors" designation on official transcript.
- "IDT Departmental Honors" printed on degree diploma.
- Personalized certificate signed by the President of Weber State University and the Honors Director.
- Invitation to Honors educational and social events.
- Invitation to Honors Nye-Cortez banquet at the end of each academic semester (excluding summer).

Departmental Honors is separate from university recognition based on GPA. For a student to receive Departmental Honors, they must be a member of the WSU Honors Program. Weber State University also acknowledges students at commencement by awarding cords based solely on GPA.

Sales and Service Technology Departmental Honors

Please contact the Sales and Service Technology Department for advisement and permission prior to enrolling in Honors courses.

To earn Departmental Honors in Sales and Service Technology, a student must:

1. Be declared as a SST major earning a Bachelor of Arts or Bachelor of Science Degree
2. Must apply for SST Departmental Honors prior to the beginning of the last semester before graduation
3. Complete all of the requirements for a BS or BA degree in Sales and Service Technology
4. Earn a 3.7 GPA in the Major
5. Earn an "A" in the SST 4610 and SST 4620 Senior Project Classes
6. Compete in the Collegiate DECA State Career Development Conference and finish in the top 6 of the chosen event. Or
Compete in the International Career Development Conference and finish in the top ten of the chosen event.

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

Telitha E. Lindquist College of Arts & Humanities

Dr. Madonne M. Miner, 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: Catherine Zublin

Location: Val A. Browning Center, Room 312
Telephone Contact: Susie Lane 801-626-6424

College Advisor: Debra Murphy 801-626-6631
Location: Elizabeth Hall, Room 437

Department Chairs/Directors

Communication: Dr. Sheree Josephson 801-626-6164

Communication Master's Program:
Dr. Kathy Edwards 801-626-6571

English Language & Literature:
Dr. Kathleen Herndon 801-626-6217

English Master's Program:
Dr. Hal Crimmel 801-626-8044

Foreign Languages:
Dr. Craig Bergeson 801-626-7111

Performing Arts
Sid and Mary Foulger School of Music:
Dr. Thomas Priest 801-626-7181

Visual Arts:
Mr. Matthew Choberka 801-626-7270

Weber: The Contemporary West

Editor: Dr. Michael Wutz
Telephone: 801-626-6616

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 has a national editorial board. For more information see weberjournal.weber.edu.

Master of Professional Communication Program

Communication Department Chair: Sheree Josephson
Location: Elizabeth Hall, north end of third floor
Telephone Contact: Virginia Stevens, 801-626-8924
E-mail Contact: mpc@weber.edu
Program Director: Kathy Edwards, 801-626-6571

Employers rank communication as the top skill they seek in employees and say it is a must for career development. 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 receive instruction in team building and facilitation, organizational leadership, strategic communication, and in the measurement and evaluation of communication messages. They will also develop or continue to develop their proficiency in professional writing, presenting, communicating visually, and in using new media. The program allows students to customize their curriculum and facilitate development of a plan of study uniquely tailored to personal career goals by selecting a number of elective courses of their choosing within the field of communication or from related fields such as business, education, and health professions. The MPC degree culminates with a professional project or thesis designed specifically to enhance students' career goals. Courses in the two-year program blend classroom instruction with online educational tools to fit into the schedules of busy professionals.

Master of Professional Communication (MPC)

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. They must also have completed the prerequisites of COMM 3000 (Communication Theory) and COMM 3150 (Communication Research Methods) or close equivalents before enrolling in any MPC course.

Applicants will submit:

1. Completed application with personal essay
2. Current resume
3. Official transcripts from every institution of higher education attended
4. Three letters of academic and/or professional recommendation
5. Scores from the GRE taken within the last five years

Additional Admission 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 550 (paper-based) or 213 (computer-based). The score may not be more than two years old. Equivalent IELTS score is also accepted in place of TOEFL. Students who do not

have these scores may be admitted provisionally to the program upon review. If they are able to perform satisfactorily in their first semester, their provisional status may be amended.

Acceptance into Program

Each applicant is accepted on an individual basis. Ideal applicants will present a strong overall previous academic record, positive letters of recommendation, professional accomplishment, and an appropriate GRE score. An ideal class will consist of working professionals with a wide variety of backgrounds in for-profit, government or non-profit organizations. Ethnic diversity is a plus. The MPC program will have limited enrollment.

Elective Courses from Other Universities

Related graduate-level courses from other universities may be accepted with permission of the MPC director.

Transfer Credit

Transfer credit must be approved by the program director and cannot exceed 12 hours. Transfer classes must be at an appropriate level and fulfill the objectives of the MPC. No courses for which credit was used to fulfill requirements of another degree may be used toward the MPC degree.

Grade Requirements

To earn the MPC degree, candidates must complete all MPC courses with a grade of B- or higher and a grade of C or better in all non-MPC graduate courses. 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 C- has been earned, will result in academic probation in accordance with departmental policies.

Graduation Requirements

1. 37 credit hours, at least 28 at the 6000-level.
2. Grades of B- or better in all MPC courses and grades of C or better in all non-MPC courses.
3. Overall GPA of at least 3.0.
4. Successful completion of thesis/project.

Time for Degree Completion

MPC students have a maximum of six 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. Students who fail to enroll in MPC courses for three consecutive semesters must apply for readmission to the program. In order to ensure timely progress through the program, students must consult with an MPC advisor every Fall Semester. 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 every semester.

Course Requirements for MPC

Prerequisites to WSU's MPC program (6 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3) or equivalent

These two courses must be taken within five years of admission to MPC program.

Required Core WSU MPC Courses (22 credit hours)

- MPC 6000 - Introduction to Graduate Studies for a Master in Professional Communication (1)
- MPC 6100 - Team Building and Facilitation (3)
- MPC 6150 - Writing for Professional Communicators (3)
- MPC 6200 - Presentational Speaking and Visual Communication for the Workplace (2)
- MPC 6300 - New Media in Professional Communication (3)
- MPC 6400 - Communicating Organizational Leadership (3)
- MPC 6600 - Strategic Communication (3)
- MPC 6700 - Research Methods for Professional Communication (3)
- MPC 6800 - Advanced Communication Research and Writing (1)

Required Thesis or Project Courses (6 credit hours)

- MPC 6900 - Thesis/Project I (3)
- MPC 6950 - Thesis/Project II (3)

Elective Master's-level Courses (9 credit hours)

Elective Variable Topic Course

- MPC 6500 - Topics in Professional Communication (3)

Elective Interdisciplinary Courses

Students may select no more than three courses (nine credit hours) from the following WSU master's program courses (with the permission of the MPC director and/or fulfillment of prerequisite courses).

- MBA 6140 - Marketing Management (3)
- MBA 6170 - Corporate Communications (3)
- MBA 6530 - E-Business (3)
- MBA 6540 - Negotiations (3)
- MHA 6000 - Health Systems & the Healthcare Economy (3)
- MHA 6400 - Strategic Health Planning and Marketing (3)
- MED 6110 - Introduction to Classroom Management (3)
- MED 6120 - Advanced Classroom Management (3)

Elective Dual-designation Courses

Students may select no more than two courses (six credit hours) from the following communication courses (with permission of the MPC director and/or fulfillment of prerequisite courses).

- MPC 5080 - Intercultural Communication (3) [*strongly recommended*]
- MPC 5090 - Gender and Communication (3)
- MPC 5100 - Small Group Facilitation and Leadership (3)
- MPC 5220 - Editing (3) [*strongly recommended*]
- MPC 5440 - Public Relations Media and Campaigns (3)
- MPC 5500 - Topics in Communication (3)
- MPC 5550 - Organizational Communication (3)
- MPC 5650 - Communication Law (3)

- MPC 5810 - Persuasive Communication (3)
- MPC 5850 - Advertising (3)

Master of Arts in English Program

English Department Chair: Kathleen Herndon
Program Director: Hal Crimmel 801-626-8044
Location: Elizabeth Hall, Room 443
Telephone Contact: Genevieve Bates 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

Master of Arts in English (MA)

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 Graduate Record Examination (GRE) or Millers Analogies Test (MAT) scores or other appropriate entry test
- 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 550 (paper-based) or 213 (computer-based). Other appropriate tests may be used as an alternative to the TOEFL, such as IELTS and the WSU LEAP Special Examination. The score may not be more than two years old.

Transfer Credits

- Transfer credit must be approved by the program director and cannot exceed 12 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.

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 a fourth semester 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 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.

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 options.

CORE REQUIREMENTS

Core Research Methods

- MENG 6010 - Bibliography and Research Methods (3)

One course in three of the following four areas (3 courses).

Core Literature

- MENG 6030 - Studies in Literary Theory and Criticism (3) *
- MENG 6610 - Advanced Studies in Genre (2-3) *
- MENG 6710 - Variable Topics (2-3) *

Core Seminars

- MENG 6510 - Seminar in Eminent Writers: (2-3) *
- MENG 6520 - Seminar in Shakespeare (3)

Core Language

- MENG 6310 - Language and Linguistics for Teachers (3)
- MENG 6320 - World Languages (3)
- MENG 6330 - Literary and Rhetorical Stylistics (3)
- MENG 6410 - Strategies and Methodology of Teaching ESL/Bilingual (3)
- MENG 6420 - English Phonology and Syntax for ESL/Bilingual Teachers (3)

- MENG 6450 - ESL/Bilingual Assessment: Theory, Methods, and Practices **(3)**

Core Teaching

- MENG 6110 - Writing for Teachers **(3)**
- MENG 6120 - Teaching Traditional and Contemporary Young Adult Literature **(4)**
- MENG 6230 - Wasatch Range Writing Project Summer Institute **(1-6)**
- MENG 6280 - TESOL Practicum **(3)**
- MENG 6400 - Multicultural Perspectives on Literature for Young People **(3)**
- MENG 6821 - Teaching Developmental Reading and Writing **(2)**
- MENG 6822 - Teaching College Writing **(2)**
- MENG 6823 - Teaching Practicum **(1)**

*May be repeated for elective credit with different content.

Electives

- Elective courses may be taken to fulfill the minimum 33 credit hours required to graduate. All program courses not taken as a required course may be taken as electives.
- No more than three hours of directed readings credit (MENG 6830) may apply toward the Master of Arts in English degree unless approved by the program director.
- The following three courses may be taken only by students who are teaching writing for WSU for the first time: MENG 6821, MENG 6822, and MENG 6823.

LITERATURE OPTION

All MENG students will be required to complete the Core Requirement as part of their degree.

Seminars in Literature

Three courses from at least two of the following repeatable seminars (9 credit hours):

- MENG 6240 - Seminar in American Literature **(3)**
- MENG 6250 - Seminar in British Literature **(3)**
- MENG 6260 - Seminar in World Literature **(3)**

Electives

Elective courses may be taken to fulfill the minimum 33 credit hours required to graduate.

SECONDARY LICENSURE OPTION

All MENG students will be required to complete the Core Requirements as part of their degree.

Literature

One of the following courses (may be used to also fulfill the Core Literature).

- MENG 6030 - Studies in Literary Theory and Criticism **(3)**
- MENG 6610 - Advanced Studies in Genre **(2-3)**
- MENG 6710 - Variable Topics **(2-3)**

Seminars

One of the following courses (may be used to also fulfill the Core Seminars).

- MENG 6510 - Seminar in Eminent Writers: **(2-3)**
- MENG 6520 - Seminar in Shakespeare **(3)** *
*Strongly recommended

Linguistics

One of the following courses (may be used to also fulfill the Core Language).

- MENG 6310 - Language and Linguistics for Teachers **(3)**
- MENG 6410 - Strategies and Methodology of Teaching ESL/Bilingual **(3)**

Writing

One of the following courses (3 credit hour minimum; may be used to also fulfill the Core Teaching).

- MENG 6110 - Writing for Teachers **(3)**
- MENG 6230 - Wasatch Range Writing Project Summer Institute **(1-6)**

Seminars in Literature

One course in two of the three following seminars (6 credit hours).

- MENG 6240 - Seminar in American Literature **(3)**
- MENG 6250 - Seminar in British Literature **(3)**
- MENG 6260 - Seminar in World Literature **(3)**

Electives

Elective courses may be taken to fulfill the minimum 33 credit hours required to graduate if the secondary licensure is not pursued.

Secondary Licensure Teaching

MED 6060 must be taken prior to MENG 5210/MENG 6120; MENG 5210 and MENG 6120 must be taken concurrently. It is strongly recommended that MENG 6110 or MENG 6230 be taken prior to MENG 5210/MENG 6120.

- MENG 5210 - Practicum in Teaching English **(2)**
- MENG 6120 - Teaching Traditional and Contemporary Young Adult Literature **(4)**

Students seeking to fulfill the secondary licensure requirements through the Utah State Office of Education must also apply and be accepted into the Master of Education (MEd) Secondary Licensure Track. For all requirements related to pursuing a secondary licensure, please refer to the Master of Education Secondary Licensure Track in this catalog and contact the MEd Program offices. A minimum of 16 credit hours will be required from MEd for licensure with additional credit in student teaching also required. Credit taken in the MEd Program will meet elective requirements for the 33 credit hour minimum in MENG.

TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES OPTION (TESOL)

The TESOL Option is planned but is currently unavailable.

All MENG students will be required to complete the Core Requirements as part of their degree.

TESOL Foundations

All of the following:

- MED 6250 - Second Language Acquisition: Theories and Implementation (3)
- MED 6270 - Literacy Strategies for Teaching English Language Learners (3)
- MENG 6005 - Intercultural Classroom Discourse (3)
- MENG 6280 - TESOL Practicum (3)
- MENG 6410 - Strategies and Methodology of Teaching ESL/Bilingual (3)
- MENG 6420 - English Phonology and Syntax for ESL/Bilingual Teachers (3)
- MENG 6450 - ESL/Bilingual Assessment: Theory, Methods, and Practices (3)

One of the following:

- MENG 6310 - Language and Linguistics for Teachers (3)
- MENG 6320 - World Languages (3)
- MENG 6330 - Literary and Rhetorical Stylistics (3)

Electives

Elective courses may be taken to fulfill the minimum 33 credit hours required to graduate.

Department of Communication

Department Chair: Sheree Josephson

Location: Elizabeth Hall, Room 330

Telephone Contact: Virginia Stevens 801-626-8924

Professors: Susan Hafen, Rebecca Johns, Sheree Josephson; **Associate Professors:** Kathy Edwards, Colleen Packer Garside, Ty Sanders; **Assistant Professors:** Anne Bialowas, Yeonsoo Kim, Sarah Steimel; **Instructors:** Cynthia Bishop, Ryan Cheek, Shane Farver, Omar Guevara, Mark Merkley, Andrew Tyler

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 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 which prepares graduates for entry-level

employment in Communication and Communication-related careers. The major also serves to prepare 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 student-operated organization: *The Signpost*, our student-operated radio station, KWCR-FM, student-produced video productions, and by our nationally prominent intercollegiate forensics program.

Communication majors may select one of six interdisciplinary concentrations: Civic Advocacy, Electronic Media, Interpersonal & Family Communication, Journalism, Organizational Communication and Public Relations & Advertising. A Communication Teaching Major with concentrations in either Communication Studies or Journalism also is available. Depending upon future plans, individual needs and preferences, 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 the student with knowledge and skills in Communication that complement the student's major or other concentrations of study. These curricula, characterized by both required and elective upper division course work after completion of a required core, also are designed to complement the student's overall program of study and to be compatible with the student's career goals.

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 our 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 ten (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.

Cocurricular and Extracurricular Activities

Scholarships

Activity scholarships are available to WSU forensics competitors and to *The Signpost*, KWCR-FM and digital video production staff members. Contact the department office at 626-8924 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. See the faculty advisor for each organization for more information:

Delta Sigma Rho-Tau Kappa Alpha—Forensics
Omar Guevara

National Broadcasting Society/AERho—Electronic Media
Ty Sanders

Society of Professional Journalists—Journalism
Shane Farver

Public Relations Student Society of America
Yeonsoo Kim

Lambda Pi Eta Honor Society
Cynthia Bishop

Departmental Honors
Susan Hafen

Forensics

Participation in intercollegiate forensic activities is conducted in conjunction with the instructional program in debate, public speaking, and oral interpretation of literature. Students take active part in regional and national forensic meets under the direction of the debate coach.

High School Speech and Debate Contests

The Department of Communication hosts the annual Weber State Leland H. Monson High School Debate and Individual Event Tournaments each year. Now in their eighth decade, these tournaments attract hundreds of competitors from Utah and neighboring states. A generous grant from the Keystone Foundation supports speaker awards for outstanding students.

Weber State Student Media

The Signpost

Journalism students have the opportunity to polish reporting, writing and multimedia skills at *The Signpost*, Weber State University's student-run news organization that is disseminated online and via newspaper.

Digital Audio and Video Production

Students practice and develop their knowledge and resumes by joining Weber State's student-run media operations

- Radio station KWCR-FM 88.1 broadcasts music, local sports, news and specialty programs. Spanish-language programming every Sunday serves as an important connection to the Hispanic community.
- Students produce and disseminate original digital video productions.

Interdisciplinary Minors

The Communication 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 and Interdisciplinary Programs section of this catalog.)

Civic Advocacy Concentration, Communication (BA)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation*, *core*, *depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of all Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Core Courses for all Majors (15 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (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 & Debate (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3650 - Communication Law (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 3810 - Persuasive Communication (3)

- COMM 4130 - In-depth and Investigative Journalism (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- COMM 4160 - Contemporary Rhetorical and Communication Theories (3)

Civic Advocacy Interdisciplinary Concentration (45 credit hours)

The mission of the Civic Advocacy interdisciplinary concentration is to educate students who wish to serve as advocates in the interest of the public good. Those who might benefit from this interdisciplinary concentration 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.

Depth Courses (24 credit hours)

- COMM 2010 HU - Mass Media & Society (3)
- COMM 2270 - Argumentation & Debate (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- COMM 3080 DV - Intercultural Communication (3) or
- COMM 3090 DV - Gender and Communication (3)

Two of the following courses (6 credit hours):

- COMM 3060 - Listening and Interviewing (3)
- COMM 3070 - Performance Studies (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3550 - Organizational Communication (3)
- COMM 4500 - Topics in Communication (3) *only when taught as "Political Communication"*

Breadth Courses (21 credit hours)

See department advisor for an approved list of additional non-Communication Department elective breadth courses (18 credit hours)

- POLS 4750 - Public Policy Analysis (3)

Electronic Media Concentration, Communication (BA)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation, core, depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of **all** Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)

- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- Core Courses for all Majors (15 credit hours)
- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (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 & Debate (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3650 - Communication Law (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4130 - In-depth and Investigative Journalism (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- COMM 4160 - Contemporary Rhetorical and Communication Theories (3)

Electronic Media Interdisciplinary Concentration (44-45 credit hours)

A concentration in Electronic 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. The Electronic Media interdisciplinary concentration includes emphases in:

Audio Production: gain skills in digital editing, on-air performance, management and sales primarily in preparation for a career in radio and audio production.

Broadcast News: gain skills in reporting, editing, shooting, anchoring, directing and studio production for careers both in front of and behind the camera in television news.

Entertainment: acquire skills in production, writing and content development to prepare to pursue further graduate study and careers within the entertainment industry.

Video Production: acquire skills in studio and field production and writing to create institutional, educational and commercial video productions.

Depth Courses (27 credit hours)

- COMM 1500 - Introduction to Mass Comm (3)
- COMM 1560 - Audio Production & Performance (3)
- COMM 2200 - In-studio Video Production and Performance (3)
- COMM 3740 - Copy Writing for Audio and Video (3)

One of the following courses (3 credit hours):

- COMM 3730 - Media Programming & Audiences (3)
- COMM 4760 - Electronic Media Management (3)

Four of the following courses (12 credit hours):_

- COMM 2010 HU - Mass Media & Society (3)
- COMM 2730 - Radio Production Workshop (1) (3 semesters at 1 credit hour each)
- COMM 2751 - Field Video Production & Performance (3)
- COMM 3070 - Performance Studies (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3400 - Public Relations (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3460 - Public Relations & Social Media (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 3850 - Advertising (3)
- COMM 3890b - Advanced Cooperative Work Experience with KWCR (1-3)
- COMM 3890d - Advanced Cooperative Work Experience with Television Broadcasting (1-3)
- COMM 4130 - In-depth and Investigative Journalism (3)
- COMM 4440 - Developing and Evaluating Health Communication Campaigns (3)
- COMM 4500 - Topics in Communication (3) *only when taught as electronic media-related topic and with permission of instructor*
- COMM 4750 - Advanced Audio and Video Production (3)
- COMM 4800 - Special Study and Individual Projects (1-3)

Breadth Courses (17-18 credit hours)

One of the following courses (2-3 credit hours):

See department advisor about which of these three courses to take for the specific program of study, and for an approved list of additional non-Communication Department elective breadth courses (15 credit hours).

- CEET 1110 - Basic Electronics (2)
- POLS 3760 - State Government and Politics (3)
- MKTG 3010 - Marketing Concepts and Practices (3)

Interpersonal & Family Communication Concentration, Communication (BA)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation, core, depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of all Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Core Courses for all Majors (15 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (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 & Debate (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3650 - Communication Law (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 3810 - Persuasive Communication (3)

- COMM 4130 - In-depth and Investigative Journalism (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- COMM 4160 - Contemporary Rhetorical and Communication Theories (3)

Interpersonal & Family Communication Interdisciplinary Concentration (45 credit hours)

The Interpersonal and Family Communication Interdisciplinary concentration 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 the complex, dynamic relationships.

Depth Courses (21 credit hours)

- COMM 2010 HU - Mass Media & Society (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3060 - Listening and Interviewing (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3085 - Family Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3550 - Organizational Communication (3)

Breadth Courses (24 credit hours)

See department advisor for an approved list of additional non-Communication Department elective breadth courses (15 credit hours)

- CHF 1400 - Marriage as an Interpersonal Process (3)
- CHF 2400 - Family Relations (3)
- WS 1500 SS/DV - Introduction to Women's Studies (3)

Journalism Concentration, Communication (BA)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation, core, depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of **all** Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Core Courses for all Majors (15 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (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 & Debate (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3650 - Communication Law (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4130 - In-depth and Investigative Journalism (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- COMM 4160 - Contemporary Rhetorical and Communication Theories (3)

Journalism Interdisciplinary Concentration (45 credit hours)

The Journalism Interdisciplinary concentration teaches students how to collect and write information regarding current events, including trends, issues and people, for publication in a newspaper, magazine or Web site. The curriculum emphasizes writing skills, but students also learn about research, interviewing, editing, layout and design, and legal and ethical issues in journalism. Students can specialize in one of four multi-disciplinary areas: technical writing, web publishing, literary journalism, or general reporting.

Depth Courses (24 credit hours)

- COMM 1500 - Introduction to Mass Communication (3)
- COMM 2350 - Communication Graphic Design (3)
- COMM 2890 - Cooperative Work Experience for The Signpost (1)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3890a - Advanced Cooperative Work Experience - Signpost (1-3) (2 credit hours required)
- COMM 4130 - In-depth and Investigative Journalism (3)

One of the following courses
(3 credit hours):

- COMM 2200 - In-studio Video Production and Performance (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3780 - Broadcast News Writing & Production (3)

One of the following courses (3 credit hours):

- COMM 3060 - Listening and Interviewing (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3400 - Public Relations (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3460 - Public Relations & Social Media (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 3890a - Advanced Cooperative Work Experience - Signpost (1-3)
- COMM 4400 - Public Relations Media and Campaigns (3)
- COMM 4440 - Developing and Evaluating Health Communication Campaigns (3)
- COMM 4500 - Topics in Communication (3) *only when taught as journalism-related topic and with permission of instructor*

Breadth Courses (21 credit hours)

NOTE: students may select a traditional minor in lieu of these breadth courses.

One of the following courses (3 credit hours);

See department advisor for an approved list of additional non-Communication Department elective breadth courses (18 credit hours).

- ART 2250 - Foundations of Photography: Black & White/Analog (3)
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing (3)
- ENGL 3270 - Magazine Article Writing (3)

Journalism Concentration, Communication Teaching (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 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 concentration. A total of 40 upper division credit hours is required (courses numbered 3000 and above); a minimum of 24-36 of these is required within the major, depending on the selected concentration.

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).

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 and General Education 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 or COMM 2010 and COMM 2110.

Concentration 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 concentrations: Communication Studies (Speech) and Journalism. All Communication Teaching Majors must complete one of these two concentrations:

Major Course Requirements for BS or BA Degree

Communication Courses Required of all Communication Teaching Majors (21 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3) or
- COMM 2110 HU - Interpersonal & Small Group Communication (3) *
- COMM 1130 - Media Writing (3)
- COMM 2010 HU - Mass Media & Society (3)
- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4990 - Senior Seminar (3)

Students must take either COMM 1020 or COMM 2110 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 & Debate (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3650 - Communication Law (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4130 - In-depth and Investigative Journalism (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- COMM 4160 - Contemporary Rhetorical and Communication Theories (3)

Journalism Concentration (26 credit hours)

Required Courses (20 credit hours)

- COMM 1500 - Introduction to Mass Communication (3)
- COMM 2350 - Communication Graphic Design (3)
- COMM 2890 - Cooperative Work Experience for The Signpost (1) (2 credit hours required) *
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 4840 - Teaching Journalism and Advising Student Media in the Secondary School (3)

*One credit per semester

Electives (6 credit hours)

Select 6 credit hours of electives from the following with approval from the department's communication education advisor for the Journalism concentration.

- COMM 1560 - Audio Production & Performance (3)
- COMM 2200 - In-studio Video Production and Performance (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3100 - Small Group Facilitation & Leadership (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4130 - In-depth and Investigative Journalism (3)

Organizational Communication Concentration, Communication (BA)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation, core, depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of all Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Core Courses for all Majors (15 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (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 & Debate (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3650 - Communication Law (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 3810 - Persuasive Communication (3)

- COMM 4130 - In-depth and Investigative Journalism (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- COMM 4160 - Contemporary Rhetorical and Communication Theories (3)

Organizational Communication Interdisciplinary Concentration (44-46 credit hours)

An Organizational Communication concentration provides students with a foundation employers seek—effective professional communicators in the workplace, with particular knowledge and skills needed for:

Technical Writing:

Synthesize 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:

Conduct training needs assessments for diverse groups; design workshops; write training manuals; evaluate classroom technology and equipment needs; and evaluate training.

Depth Courses (18-21 credit hours)

Required depth courses for all Organizational Communication students (9 credit hours):

- COMM 2010 HU - Mass Media & Society (3)
- COMM 3550 - Organizational Communication (3)

One of the following:

- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)

Additional required depth courses for Technical Writing specialization only (12 credit hours):

- COMM 3400 - Public Relations (3) *Prerequisite required—see Department Advisor*
- COMM 3440 - Public Relations Writing (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3810 - Persuasive Communication (3)

Additional required depth courses for Training & Development specialization only (9 credit hours):

- COMM 2200 - In-studio Video Production and Performance (3)
- COMM 3100 - Small Group Facilitation & Leadership (3)

One of the following courses:

- COMM 2350 - Communication Graphic Design (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3060 - Listening and Interviewing (3)
- COMM 3070 - Performance Studies (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3220 - Editing (3)
- COMM 3400 - Public Relations (3) *Prerequisite required—see Department Advisor*

- COMM 3440 - Public Relations Writing (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4500 - Topics in Communication (3)
only when taught as training & development-related topic and with permission of instructor
- COMM 4800 - Special Study and Individual Projects (1-3) (3 credit hours required)

Breadth Courses (23-25 credit hours)

Required breadth course for all Organizational Communication students (3 credit hours):

- ENGL 3100 - Professional and Technical Writing (3)

Additional required breadth courses for Technical Writing specialization only (17-19 credit hours):

- ENGL 3140 - Professional and Technical Editing (3)
- ENGL 4100 - Issues in Professional and Technical Writing (3)
- ENGL 4120 - Seminar and Practicum in Professional and Technical Writing (3)
- NTM 2532 - Web Page Design and Development (3)
- NTM 3100 - Desktop Publishing (3)

One of the following:

One of the following "technical language" courses, with approval of the major advisor, is required based on the kind of technical writing career anticipated.

- BSAD 1010 - Introduction to Business (3)
- HTHS 1101 - Medical Terminology (2)

Additional required breadth courses for Training & Development specialization only (15 credit hours):

- BSAD 1010 - Introduction to Business (3)
- ACTG 2010 - Survey of Accounting I (3)
- MGMT 3010 - Organizational Behavior and Management (3)
- MGMT 3300 - Human Resource Management (3)

One of the following:

- MGMT 4350 - Training (3)
- NTM 3400 - Training the Trainer (3)

Elective Breadth course(s) for all Organizational Communication students (3-9 credit hours):

In consultation with their Communication Department advisors, students with a Technical Writing specialization will select 1 additional course (3 credit hours) from a department other than Communication to enhance their knowledge base as an organizational technical writer. Students with a Training & Development specialization will select 3 courses (9 credit hours) from departments other than Communication to provide them with an appropriate knowledge base related to Organizational Communication—Training & Development.

Public Relations & Advertising Concentration, Communication (BA)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation*, *core*, *depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of **all** Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Core Courses for all Majors (15 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (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 & Debate (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3650 - Communication Law (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 3810 - Persuasive Communication (3)

- COMM 4130 - In-depth and Investigative Journalism (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- COMM 4160 - Contemporary Rhetorical and Communication Theories (3)

Public Relations & Advertising Interdisciplinary Concentration (44 credit hours)

The Public Relations & Advertising interdisciplinary concentration provides students with theoretical and practical skills in writing, critical thinking, marketing, advertising and communicating to influence public opinion across a range of media. In the Public Relations concentration students must specialize in one of the following five emphases: (1) Copywriting, (2) Health Care Public Relations, (3) International Public Relations, (4) Marketing, or (5) Visual Communication.

Depth Courses (23 credit hours)

- COMM 1500 - Introduction to Mass Comm (3)
- COMM 2350 - Communication Graphic Design (3)
- COMM 2890 - Cooperative Work Experience for The Signpost (1) (2 credit hours required) *
- COMM 3400 - Public Relations (3)
- COMM 3850 - Advertising (3)
- COMM 4400 - Public Relations Media and Campaigns (3) or
- COMM 4440 - Developing and Evaluating Health Communication Campaigns (3)

*One credit per semester

One of the following courses (3 credit hours)

- COMM 3440 - Public Relations Writing (3)
- COMM 3740 - Copy Writing for Audio and Video (3)

One of the following courses (3 credit hours)

- COMM 2200 - In-studio Video Production and Performance (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3460 - Public Relations and Social Media (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4500 - Topics in Communication (3) *only when taught as public relations-related topic and with permission of instructor*

Breadth Courses (21 credit hours)

NOTE: students may select a traditional minor in lieu of remaining breadth courses.

- MKTG 3010 - Marketing Concepts and Practices (3)
- See department advisor for an approved list of additional non-Communication Department elective courses (18 credit hours).

Civic Advocacy Concentration, Communication (BS)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation, core, depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of **all** Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Core Courses for all Majors (15 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (3)

Courses Required to fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Note that only one lower division course [3 credit hours] can be used toward completion of the BS degree.

- COMM 3150 - Communication Research Methods (3)
- COMM 4990 - Senior Seminar (3)
- ANTH 4300 - Anthropological Research Methods (3)
- ENGL 3010 - Introduction to Linguistics (3)
- POLS 3990 - Quantitative Analysis (3)
- PSY 3600 - Statistics in Psychology (3)
- PSY 3610 - Research Methods in Psychology (4)
- SOC 3600 - Social Statistics (3)
- SOC 3660 - Sociological Research (3)
- WS 4830 - Directed Readings (1-3)
- CHEM 1360 PS - Principles of Physical Science (3)
- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1350 PS - Principles of Earth Science (3)
- HNRS 1500 PS - Perspectives in the Physical Sciences (3)
- PHYS 1010 PS - Elementary Physics (3)
- BTNY 1370 LS - Principles of Life Science (3)
- HNRS 1510 LS - Perspectives in the Life Sciences (3)
- HLTH 1020 LS - Science and Application of Human Nutrition (3)
- ZOOL 1020 LS - Human Biology (3)
- ZOOL 1030 LS - The Nature of Sex (3)
- ZOOL 1370 LS - Principles of Life Science (3)

Civic Advocacy Interdisciplinary Concentration (45 credit hours)

The mission of the Civic Advocacy interdisciplinary concentration is to educate students who wish to serve as advocates in the interest of the public good. Those who might benefit from this interdisciplinary concentration 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.

Depth Courses (24 credit hours)

- COMM 2010 HU - Mass Media & Society (3)
- COMM 2270 - Argumentation & Debate (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- COMM 3080 DV - Intercultural Communication (3) or
- COMM 3090 DV - Gender and Communication (3)

Two of the following courses (6 credit hours):

- COMM 3060 - Listening and Interviewing (3)
- COMM 3070 - Performance Studies (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3550 - Organizational Communication (3)
- COMM 4500 - Topics in Communication (3) *only when taught as "Political Communication"*

Breadth Courses (21 credit hours)

See department advisor for an approved list of additional non-Communication Department elective breadth courses (18 credit hours)

- POLS 4750 - Public Policy Analysis (3)

Communication Studies Concentration, Communication Teaching (BS)

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 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 concentration. A total of 40 upper division credit hours is required (courses numbered 3000 and above); a minimum of 24-36 of these is required within the major, depending on the selected concentration.

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).

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 and General Education 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 or COMM 2010 and COMM 2110.

Concentration 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 concentrations: Communication Studies (Speech) and Journalism. All Communication Teaching Majors must complete one of these two concentrations:

Major Course Requirements for BS or BA Degree

Communication Courses Required of all Communication Teaching Majors (21 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3) or
- COMM 2110 HU - Interpersonal & Small Group Communication (3) *
- COMM 1130 - Media Writing (3)
- COMM 2010 HU - Mass Media & Society (3)
- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4990 - Senior Seminar (3)

*Students must take either COMM 1020 or COMM 2110 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. Note that only one lower division course [3 credit hours] can be used toward completion of the BS degree.

- COMM 3150 - Communication Research Methods (3)
- COMM 4990 - Senior Seminar (3)
- ANTH 4300 - Anthropological Research Methods (3)

- ENGL 3010 - Introduction to Linguistics (3)
- POLS 3990 - Quantitative Analysis (3)
- PSY 3600 - Statistics in Psychology (3)
- PSY 3610 - Research Methods in Psychology (4)
- SOC 3600 - Social Statistics (3)
- SOC 3660 - Sociological Research (3)
- WS 4830 - Directed Readings (1-3)
- CHEM 1360 PS - Principles of Physical Science (3)
- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1350 PS - Principles of Earth Science (3)
- HNRS 1500 PS - Perspectives in the Physical Sciences (3)
- PHYS 1010 PS - Elementary Physics (3)
- BTNY 1370 LS - Principles of Life Science (3)
- HNRS 1510 LS - Perspectives in the Life Sciences (3)
- HLTH 1020 LS - Science and Application of Human Nutrition (3)
- ZOOL 1020 LS - Human Biology (3)
- ZOOL 1030 LS - The Nature of Sex (3)
- ZOOL 1370 LS - Principles of Life Science (3)

Communication Studies Concentration (27 credit hours)

Courses Required (21 credit hours)

- COMM 2270 - Argumentation & Debate (3)
- COMM 3060 - Listening and Interviewing (3)
- COMM 3070 - Performance Studies (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- COMM 4850 - Teaching Speech and Directing Speech Activities in the Secondary School (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 Communication Studies concentration.

- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3100 - Small Group Facilitation & Leadership (3)
- COMM 3550 - Organizational Communication (3)

Electronic Media Concentration, Communication (BS)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation, core, depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of **all** Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Core Courses for all Majors (15 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (3)

Courses Required to fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Note that only one lower division course [3 credit hours] can be used toward completion of the BS degree.

- COMM 3150 - Communication Research Methods (3)
- COMM 4990 - Senior Seminar (3)
- ANTH 4300 - Anthropological Research Methods (3)
- ENGL 3010 - Introduction to Linguistics (3)
- POLS 3990 - Quantitative Analysis (3)
- PSY 3600 - Statistics in Psychology (3)
- PSY 3610 - Research Methods in Psychology (4)
- SOC 3600 - Social Statistics (3)
- SOC 3660 - Sociological Research (3)
- WS 4830 - Directed Readings (1-3)
- CHEM 1360 PS - Principles of Physical Science (3)
- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1350 PS - Principles of Earth Science (3)
- HNRS 1500 PS - Perspectives in the Physical Sciences (3)
- PHYS 1010 PS - Elementary Physics (3)
- BTNY 1370 LS - Principles of Life Science (3)
- HNRS 1510 LS - Perspectives in the Life Sciences (3)
- HLTH 1020 LS - Science and Application of Human Nutrition (3)
- ZOOL 1020 LS - Human Biology (3)
- ZOOL 1030 LS - The Nature of Sex (3)
- ZOOL 1370 LS - Principles of Life Science (3)

Electronic Media Interdisciplinary Concentration (44-45 credit hours)

A concentration in Electronic 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. The Electronic Media interdisciplinary concentration includes emphases in:

Audio Production: gain skills in digital editing, on-air performance, management and sales primarily in preparation for a career in radio and audio production.

Broadcast News: gain skills in reporting, editing, shooting, anchoring, directing and studio production for careers both in front of and behind the camera in television news.

Entertainment: acquire skills in production, writing and content development to prepare to pursue further graduate study and careers within the entertainment industry.

Video Production: acquire skills in studio and field production and writing to create institutional, educational and commercial video productions.

Depth Courses (27 credit hours)

- COMM 1500 - Introduction to Mass Comm (3)
- COMM 1560 - Audio Production & Performance (3)
- COMM 2200 - In-studio Video Production and Performance (3)
- COMM 3740 - Copy Writing for Audio and Video (3)

One of the following courses (3 credit hours):

- COMM 3730 - Media Programming & Audiences (3)
- COMM 4760 - Electronic Media Management (3)

Four of the following courses (12 credit hours):

- COMM 2010 HU - Mass Media & Society (3)
- COMM 2730 - Radio Production Workshop (1) (3 semesters at 1 credit hour each)
- COMM 2751 - Field Video Production & Performance (3)
- COMM 3070 - Performance Studies (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3400 - Public Relations (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3460 - Public Relations & Social Media (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 3850 - Advertising (3)
- COMM 3890b - Advanced Cooperative Work Experience with KWCR (1-3)
- COMM 3890d - Advanced Cooperative Work Experience with Television Broadcasting (1-3)
- COMM 4130 - In-depth and Investigative Journalism (3)
- COMM 4440 - Developing and Evaluating Health Communication Campaigns (3)
- COMM 4500 - Topics in Communication (3) *only when taught as electronic media-related topic and with permission of instructor*
- COMM 4750 - Advanced Audio and Video Production (3)
- COMM 4800 - Special Study & Individual Projects (1-3)

Breadth Courses (17-18 credit hours)

One of the following courses (2-3 credit hours):

See department advisor about which of these three courses to take for the specific program of study, and for an approved list of additional non-Communication Department elective breadth courses (15 credit hours).

- CEET 1110 - Basic Electronics (2)
- POLS 3760 - State Government and Politics (3)
- MKTG 3010 - Marketing Concepts and Practices (3)

Interpersonal & Family Communication Concentration, Communication (BS)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation, core, depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of **all** Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Core Courses for all Majors (15 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (3)

Courses Required to fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Note that only one lower division course [3 credit hours] can be used toward completion of the BS degree.

- COMM 3150 - Communication Research Methods (3)
- COMM 4990 - Senior Seminar (3)
- ANTH 4300 - Anthropological Research Methods (3)
- ENGL 3010 - Introduction to Linguistics (3)
- POLS 3990 - Quantitative Analysis (3)
- PSY 3600 - Statistics in Psychology (3)
- PSY 3610 - Research Methods in Psychology (4)
- SOC 3600 - Social Statistics (3)
- SOC 3660 - Sociological Research (3)
- WS 4830 - Directed Readings (1-3)
- CHEM 1360 PS - Principles of Physical Science (3)
- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1350 PS - Principles of Earth Science (3)
- HNRS 1500 PS - Perspectives in the Physical Sciences (3)
- PHYS 1010 PS - Elementary Physics (3)
- BTNY 1370 LS - Principles of Life Science (3)
- HNRS 1510 LS - Perspectives in the Life Sciences (3)

- HLTH 1020 LS - Science and Application of Human Nutrition (3)
- ZOOL 1020 LS - Human Biology (3)
- ZOOL 1030 LS - The Nature of Sex (3)
- ZOOL 1370 LS - Principles of Life Science (3)

Interpersonal & Family Communication Interdisciplinary Concentration (45 credit hours)

The Interpersonal and Family Communication Interdisciplinary concentration 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 the complex, dynamic relationships.

Depth Courses (21 credit hours)

- COMM 2010 HU - Mass Media & Society (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3060 - Listening and Interviewing (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3085 - Family Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3550 - Organizational Communication (3)

Breadth Courses (24 credit hours)

See department advisor for an approved list of additional non-Communication Department elective breadth courses (15 credit hours)

- CHF 1400 - Marriage as an Interpersonal Process (3)
- CHF 2400 - Family Relations (3)
- WS 1500 SS/DV - Introduction to Women's Studies (3)

Journalism Concentration, Communication (BS)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation*, *core*, *depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of all Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Core Courses for all Majors (15 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (3)

Courses Required to fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Note that only one lower division course [3 credit hours] can be used toward completion of the BS degree.

- COMM 3150 - Communication Research Methods (3)
- COMM 4990 - Senior Seminar (3)
- ANTH 4300 - Anthropological Research Methods (3)
- ENGL 3010 - Introduction to Linguistics (3)
- POLS 3990 - Quantitative Analysis (3)
- PSY 3600 - Statistics in Psychology (3)
- PSY 3610 - Research Methods in Psychology (4)
- SOC 3600 - Social Statistics (3)
- SOC 3660 - Sociological Research (3)
- WS 4830 - Directed Readings (1-3)
- CHEM 1360 PS - Principles of Physical Science (3)
- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1350 PS - Principles of Earth Science (3)
- HNRS 1500 PS - Perspectives in the Physical Sciences (3)
- PHYS 1010 PS - Elementary Physics (3)
- BTNY 1370 LS - Principles of Life Science (3)
- HNRS 1510 LS - Perspectives in the Life Sciences (3)
- HLTH 1020 LS - Science and Application of Human Nutrition (3)
- ZOOL 1020 LS - Human Biology (3)
- ZOOL 1030 LS - The Nature of Sex (3)
- ZOOL 1370 LS - Principles of Life Science (3)

Journalism Interdisciplinary Concentration (45 credit hours)

The Journalism Interdisciplinary concentration teaches students how to collect and write information regarding current events, including trends, issues and people, for publication in a newspaper, magazine or Web site. The curriculum emphasizes writing skills, but students also learn about research, interviewing, editing, layout and design, and legal and ethical issues in journalism. Students can specialize in one of four multi-disciplinary areas: technical writing, web publishing, literary journalism, or general reporting.

Depth Courses (24 credit hours)

- COMM 1500 - Introduction to Mass Comm (3)
- COMM 2350 - Communication Graphic Design (3)
- COMM 2890 - Cooperative Work Experience for The Signpost (1)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3890a - Advanced Cooperative Work Experience - Signpost (1-3) (2 credit hours required)
- COMM 4130 - In-depth and Investigative Journalism (3)

One of the following courses (3 credit hours):

- COMM 2200 - In-studio Video Production and Performance (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3780 - Broadcast News Writing & Production (3)

One of the following courses (3 credit hours):

- COMM 3060 - Listening and Interviewing (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3400 - Public Relations (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3460 - Public Relations & Social Media (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 3890a - Advanced Cooperative Work Experience - Signpost (1-3)
- COMM 4400 - Public Relations Media and Campaigns (3)
- COMM 4440 - Developing and Evaluating Health Communication Campaigns (3)
- COMM 4500 - Topics in Communication (3) *only when taught as journalism-related topic and with permission of instructor*

Breadth Courses (21 credit hours)

NOTE: students may select a traditional minor in lieu of these breadth courses.

One of the following courses (3 credit hours);

See department advisor for an approved list of additional non-Communication Department elective breadth courses (18 credit hours).

- ART 2250 - Foundations of Photography: Black & White/Analog (3)
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing (3)
- ENGL 3270 - Magazine Article Writing (3)

Journalism Concentration, Communication Teaching (BS)

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 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 concentration. A total of 40 upper division credit hours is required (courses numbered 3000 and above); a minimum of 24-36 of these is required within the major, depending on the selected concentration.

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).

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 and General Education 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 or COMM 2010 and COMM 2110.

Concentration 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 concentrations: Communication Studies (Speech) and Journalism. All Communication Teaching Majors must complete one of these two concentrations:

Major Course Requirements for BS or BA Degree

Communication Courses Required of all Communication Teaching Majors (21 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3) or
- COMM 2110 HU - Interpersonal & Small Group Communication (3) *
- COMM 1130 - Media Writing (3)
- COMM 2010 HU - Mass Media & Society (3)
- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4990 - Senior Seminar (3)

Students must take either COMM 1020 or COMM 2110 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. Note that only one lower division course [3 credit hours] can be used toward completion of the BS degree.

- COMM 3150 - Communication Research Methods (3)
- COMM 4990 - Senior Seminar (3)

- ANTH 4300 - Anthropological Research Methods (3)
- ENGL 3010 - Introduction to Linguistics (3)
- POLS 3990 - Quantitative Analysis (3)
- PSY 3600 - Statistics in Psychology (3)
- PSY 3610 - Research Methods in Psychology (4)
- SOC 3600 - Social Statistics (3)
- SOC 3660 - Sociological Research (3)
- WS 4830 - Directed Readings (1-3)
- CHEM 1360 PS - Principles of Physical Science (3)
- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1350 PS - Principles of Earth Science (3)
- HNRS 1500 PS - Perspectives in the Physical Sciences (3)
- PHYS 1010 PS - Elementary Physics (3)
- BTNY 1370 LS - Principles of Life Science (3)
- HNRS 1510 LS - Perspectives in the Life Sciences (3)
- HLTH 1020 LS - Science and Application of Human Nutrition (3)
- ZOOL 1020 LS - Human Biology (3)
- ZOOL 1030 LS - The Nature of Sex (3)
- ZOOL 1370 LS - Principles of Life Science (3)

Journalism Concentration (26 credit hours)

Required Courses (20 credit hours)

- COMM 1500 - Introduction to Mass Comm (3)
- COMM 2350 - Communication Graphic Design (3)
- COMM 2890 - Cooperative Work Experience for The Signpost (1) (2 credit hours required) *
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 4840 - Teaching Journalism and Advising Student Media in the Secondary School (3)

**One credit per semester*

Electives (6 credit hours)

Select 6 credit hours of electives from the following with approval from the department's communication education advisor for the Journalism concentration.

- COMM 1560 - Audio Production & Performance (3)
- COMM 2200 - In-studio Video Production and Performance (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3100 - Small Group Facilitation & Leadership (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4130 - In-depth and Investigative Journalism (3)

Organizational Communication Concentration, Communication (BS)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation, core, depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of **all** Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Core Courses for all Majors (15 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (3)

Courses Required to fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Note that only one lower division course [3 credit hours] can be used toward completion of the BS degree.

- COMM 3150 - Communication Research Methods (3)
- COMM 4990 - Senior Seminar (3)
- ANTH 4300 - Anthropological Research Methods (3)
- ENGL 3010 - Introduction to Linguistics (3)
- POLS 3990 - Quantitative Analysis (3)
- PSY 3600 - Statistics in Psychology (3)
- PSY 3610 - Research Methods in Psychology (4)
- SOC 3600 - Social Statistics (3)
- SOC 3660 - Sociological Research (3)
- WS 4830 - Directed Readings (1-3)
- CHEM 1360 PS - Principles of Physical Science (3)
- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1350 PS - Principles of Earth Science (3)
- HNRS 1500 PS - Perspectives in the Physical Sciences (3)
- PHYS 1010 PS - Elementary Physics (3)
- BTNY 1370 LS - Principles of Life Science (3)
- HNRS 1510 LS - Perspectives in the Life Sciences (3)

- HLTH 1020 LS - Science and Application of Human Nutrition (3)
- ZOOL 1020 LS - Human Biology (3)
- ZOOL 1030 LS - The Nature of Sex (3)
- ZOOL 1370 LS - Principles of Life Science (3)

Organizational Communication Interdisciplinary Concentration (44-46 credit hours)

An Organizational Communication concentration provides students with a foundation employers seek—effective professional communicators in the workplace, with particular knowledge and skills needed for:

Technical Writing:

Synthesize 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:

Conduct training needs assessments for diverse groups; design workshops; write training manuals; evaluate classroom technology and equipment needs; and evaluate training.

Depth Courses (18-21 credit hours)

Required depth courses for all Organizational Communication students (9 credit hours):

- COMM 2010 HU - Mass Media & Society (3)
- COMM 3550 - Organizational Communication (3)

One of the following:

- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)

Additional required depth courses for Technical Writing specialization only (12 credit hours):

- COMM 3400 - Public Relations (3) *Prerequisite required—see Department Advisor*
- COMM 3440 - Public Relations Writing (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3810 - Persuasive Communication (3)

Additional required depth courses for Training & Development specialization only (9 credit hours):

- COMM 2200 - In-studio Video Production and Performance (3)
- COMM 3100 - Small Group Facilitation & Leadership (3)

One of the following courses:

- COMM 2350 - Communication Graphic Design (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3060 - Listening and Interviewing (3)
- COMM 3070 - Performance Studies (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3220 - Editing (3)
- COMM 3400 - Public Relations (3) *Prerequisite required—see Department Advisor*
- COMM 3440 - Public Relations Writing (3)

- COMM 3810 - Persuasive Communication (3)
- COMM 4500 - Topics in Communication (3) *only when taught as training & development-related topic and with permission of instructor*
- COMM 4800 - Special Study and Individual Projects (1-3) (3 credit hours required)

Breadth Courses (23-25 credit hours)

Required breadth course for all Organizational Communication students (3 credit hours):

- ENGL 3100 - Professional and Technical Writing (3)

Additional required breadth courses for Technical Writing specialization only (17-19 credit hours):

- ENGL 3140 - Professional and Technical Editing (3)
- ENGL 4100 - Issues in Professional and Technical Writing (3)
- ENGL 4120 - Seminar and Practicum in Professional and Technical Writing (3)
- NTM 2532 - Web Page Design and Development (3)
- NTM 3100 - Desktop Publishing (3)

One of the following:

One of the following “technical language” courses, with approval of the major advisor, is required based on the kind of technical writing career anticipated.

- BSAD 1010 - Introduction to Business (3)
- HTHS 1101 - Medical Terminology (2)

Additional required breadth courses for Training & Development specialization only (15 credit hours):

- BSAD 1010 - Introduction to Business (3)
- ACTG 2010 - Survey of Accounting I (3)
- MGMT 3010 - Organizational Behavior and Management (3)
- MGMT 3300 - Human Resource Management (3)

One of the following:

- MGMT 4350 - Training (3)
- NTM 3400 - Training the Trainer (3)

Elective Breadth course(s) for all Organizational Communication students (3-9 credit hours):

In consultation with their Communication Department advisors, students with a Technical Writing specialization will select 1 additional course (3 credit hours) from a department other than Communication to enhance their knowledge base as an organizational technical writer. Students with a Training & Development specialization will select 3 courses (9 credit hours) from departments other than Communication to provide them with an appropriate knowledge base related to Organizational Communication—Training & Development.

Public Relations & Advertising Concentration, Communication (BS)

Program Prerequisite: Not required.

Minor: There is no minor required for students majoring in Communication, although a minor is an option for students who choose to concentrate in Journalism or 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 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 and 35 of these are required within the major, depending on the selected concentration.

To enroll in upper division Communication courses, a student must be admitted as a major or hold upper division standing in the university.

Students must successfully 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 interdisciplinary concentration. Refer to the Communication Department Web page 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 and General Education 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.

Interdisciplinary Concentration

select one of the following:

- Civic Advocacy
- Electronic Media
- Interpersonal & Family Communication
- Journalism
- Organizational Communication
- Public Relations & Advertising

Major Course Requirements for BS or BA Degree

Students must successfully complete a series of *foundation*, *core*, *depth* and *breadth* courses.

Foundation Courses – Communication courses required for admission to the major.

Core Courses – Communication courses required of all Communication majors regardless of their chosen concentrations.

Depth Courses – required and elective Communication courses that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Breadth Courses – required and elective courses from non-Communication departments within the University that are specified and vary based on the interdisciplinary concentration and area of specialization selected.

Foundation Courses for all Majors (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

Core Courses for all Majors (15 credit hours)

- COMM 3000 - Communication Theory (3)
- COMM 3150 - Communication Research Methods (3)
- COMM 3650 - Communication Law (3)
- COMM 4890 - Communication Internship (1-3)
- COMM 4990 - Senior Seminar (3)

Courses Required to fulfill the BS (12 credit hours)

Select 4 courses (12 credit hours) from the following. Note that only one lower division course [3 credit hours] can be used toward completion of the BS degree.

- COMM 3150 - Communication Research Methods (3)
- COMM 4990 - Senior Seminar (3)
- ANTH 4300 - Anthropological Research Methods (3)
- ENGL 3010 - Introduction to Linguistics (3)
- POLS 3990 - Quantitative Analysis (3)
- PSY 3600 - Statistics in Psychology (3)
- PSY 3610 - Research Methods in Psychology (4)
- SOC 3600 - Social Statistics (3)
- SOC 3660 - Sociological Research (3)
- WS 4830 - Directed Readings (1-3)
- CHEM 1360 PS - Principles of Physical Science (3)
- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1350 PS - Principles of Earth Science (3)
- HNRS 1500 PS - Perspectives in the Physical Sciences (3)
- PHYS 1010 PS - Elementary Physics (3)
- BTNY 1370 LS - Principles of Life Science (3)
- HNRS 1510 LS - Perspectives in the Life Sciences (3)
- HLTH 1020 LS - Science and Application of Human Nutrition (3)
- ZOOL 1020 LS - Human Biology (3)
- ZOOL 1030 LS - The Nature of Sex (3)
- ZOOL 1370 LS - Principles of Life Science (3)

Public Relations & Advertising Interdisciplinary Concentration (44 credit hours)

The Public Relations & Advertising interdisciplinary concentration provides students with theoretical and practical skills in writing, critical thinking, marketing, advertising and communicating to influence public opinion across a range of media. In the Public Relations concentration students

must specialize in one of the following five emphases: (1) Copywriting, (2) Health Care Public Relations, (3) International Public Relations, (4) Marketing, or (5) Visual Communication.

Depth Courses (23 credit hours)

- COMM 1500 - Introduction to Mass Comm (3)
- COMM 2350 - Communication Graphic Design (3)
- COMM 2890 - Cooperative Work Experience for The Signpost (1) (2 credit hours required) *
- COMM 3400 - Public Relations (3)
- COMM 3850 - Advertising (3)
- COMM 4400 - Public Relations Media and Campaigns (3)
- or
- COMM 4440 - Developing and Evaluating Health Communication Campaigns (3)

*One credit per semester

One of the following courses (3 credit hours)

- COMM 3440 - Public Relations Writing (3)
- COMM 3740 - Copy Writing for Audio and Video (3)

One of the following courses (3 credit hours)

- COMM 2200 - In-studio Video Production and Performance (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3460 - Public Relations & Social Media (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4500 - Topics in Communication (3) *only when taught as public relations-related topic and with permission of instructor*

Breadth Courses (21 credit hours)

NOTE: students may select a traditional minor in lieu of remaining breadth courses.

See department advisor for an approved list of additional non-Communication Department elective courses (18 credit hours).

- MKTG 3010 - Marketing Concepts and Practices (3)

Communication (BIS)

Grade Requirements: A grade of "C" or better in all courses.

Credit Hour Requirements: A minimum of 24 credit hours.

Course Requirements for BIS Concentration

Communication Courses Required (12 credit hours)

Select three of the following courses

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 1500 - Introduction to Mass Comm (3) or
- COMM 2010 HU - Mass Media & Society (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- *And complete the following course*
- COMM 3000 - Communication Theory (3)

Additional Electives (12 credit hours)

The required courses listed constitute up to 12 credits. The rest of your contract will consist of at least 4 elective courses you negotiate with the Department Chair.

Communication Minor

Grade Requirements: A grade of "C" or better in all courses.

Credit Hour Requirements: A minimum of 24 credit hours.

Course Requirements for Minor

Communication Courses Required (15 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 1130 - Media Writing (3)
- COMM 1500 - Introduction to Mass Communication (3) or
- COMM 2010 HU - Mass Media & Society (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- COMM 3000 - Communication Theory (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.

A maximum of 3 credit hours total from the following Communication courses may be counted for the minor: COMM 2210, COMM 2730, COMM 2890, COMM 3890a, COMM 3890b, COMM 3890c, COMM 3890d, COMM 4210. Enrollment in COMM 4800, Special Study and Individual Projects, COMM 4890 (1-3) Internship and COMM 4990 (3) Senior Seminar are limited to Communication majors.

Communication Teaching Minor

Grade Requirements: A grade of "C" or better in minor courses.

Credit Hour Requirements: A minimum of 23-24 credit hours, depending on selected concentration.

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 Concentration (24 credit hours)

Communication Courses Required (18 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3) or
- COMM 2110 HU - Interpersonal & Small Group Communication (3) *
- COMM 1130 - Media Writing (3)
- COMM 2010 HU - Mass Media & Society (3)
- COMM 2270 - Argumentation & Debate (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4850 - Teaching Speech and Directing Speech Activities in the Secondary School (3)

** 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 concentration.

- COMM 3000 - Communication Theory (3)
- COMM 3050 - Interpersonal Communication and Conflict Management (3)
- COMM 3060 - Listening and Interviewing (3)
- COMM 3070 - Performance Studies (3)
- COMM 3100 - Small Group Facilitation & Leadership (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3550 - Organizational Communication (3)
- COMM 3650 - Communication Law (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)

Journalism Concentration, Communication Teaching Minor

Grade Requirements: A grade of "C" or better in minor courses.

Credit Hour Requirements: A minimum of 23-24 credit hours, depending on selected concentration.

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

Journalism Concentration (23 credit hours)

Communication Courses Required (17 credit hours)

- COMM 1020 HU - Principles of Public Speaking (3) or
- COMM 2110 HU - Interpersonal & Small Group Communication (3) *
- COMM 1130 - Media Writing (3)
- COMM 1500 - Introduction to Mass Comm (3) or
- COMM 2010 HU - Mass Media & Society (3)
- COMM 2890 - Cooperative Work Experience for The Signpost (1) (2 credit hours required) **
- COMM 3650 - Communication Law (3)
- COMM 4840 - Teaching Journalism and Advising Student Media in the Secondary School (3)

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.*

***One credit per semester*

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 Journalism concentration.

- COMM 1560 - Audio Production & Performance (3)
- COMM 2200 - In-studio Video Production and Performance (3)
- COMM 2350 - Communication Graphic Design (3)
- COMM 3130 - News Reporting and Writing (3)
- COMM 3220 - Editing (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- COMM 3780 - Broadcast News Writing & Production (3)
- COMM 4130 - In-depth and Investigative Journalism (3)

Communication Departmental Honors

Please contact the Communication Department for advisement and permission prior to enrolling in Honors courses.

To earn Departmental Honors in Communication, a student WILL:

1. Earn a cumulative GPA of 3.5 and a GPA of 3.7 in the major.
2. Complete COMM 4990 - Senior Seminar with a grade of A on both the portfolio and thesis.
3. Present a paper or product in a professional setting, such as WSU's undergraduate research symposium, Utah Communication Association, Western States Communication Association, or a regional broadcasting or journalism conference.
4. Attend at least one Honors activity (Issues Forum, Food for Thought, or service or social activity) each year after being accepted into the Honors program.

Although not required, students are ENCOURAGED:

- To join a professional association, such as Public Relations Society Student Society of America (PRSSA), Society of Human Resource Management (SHRM), Society of Professional Journalists (SPJ), National Broadcasting Society (NBS), Broadcast Education Association (BEA), etc.
- To actively engage in a communication student organization, such as the Signpost, WSU News, KWCR radio station, the Forensics team, Lambda Pi Eta (the national undergraduate communication honor society for communication), etc.

Department of English Language and Literature

Department Chair: Kathleen Herndon

Location: Elizabeth Hall, Room 413

Telephone Contact: Kimberly Webb 801-626-6251

Professors: James Russell Burrows, Shannon Butler, Hal Crimmel, Gary Dohrer, Judith Elsley, Kathleen Herndon, Mark LeTourneau, Becky Jo McShane, Karen Marguerite Moloney, Victoria Ramirez, John Schwiebert, Sally Bishop Shigley, Mahalingam Subbiah, Mikel Vause, Michael Wutz, James E. Young; **Associate Professors:** Timothy Conrad, Susan McKay, Scott Rogers, Shelley Thomas; **Assistant Professor:** Sian Griffiths; **Instructors:** Toni Asay, Christy Call, Giana Curtis, Ronald Deeter, Jan Hamer, Kyra Hudson, Brooke Kelly, Becky Marchant, Sylvia Newman, Holly Nicholes, Mark Peterson, William Pollett, Amy Reimann, Deborah Sheridan, Gail Yngve

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, and English majors with creative writing emphasis, 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 has also designed courses for the general student in 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 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 with a grade of "C" or higher. Students placed in developmental English courses ENGL 0900 and ENGL 0955 must also pass those courses with grades 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 2010 with a grade of C or better satisfies the University core requirement for Composition. Entrance into ENGL 2010 can be accomplished in the following ways: 1) passing ENGL 1010 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.

ACT Sub-scores*	Accuplacer Scores	Course Placement
ACT English and Reading sub-score 29 or higher	Not Applicable	ENGL 2010
ACT English and Reading sub-scores both 17 or above	Reading Comprehension and Sentence Skills scores both 90 or above	ENGL 1010
Lowest ACT English or Reading score from 13-16	Lowest Reading Comprehension or Sentence Skill score from 40-89	ENGL 0955 or referred to the ESL office for non-native English speakers
Lowest ACT English or Reading score 12 or below	Lowest Reading Comprehension or Sentence Skill score 39 or below	ENGL 0900 or referred to the ESL office for non-native English speakers

*ACT scores in English and Reading expire after 2 years. ENGL 0960 does not satisfy the Developmental English Requirement for students admitted to Weber State University after Fall Semester 2005. Students admitted after Fall Semester 2005 who take ENGL 0960 will still be required to take ENGL 0900 and/or ENGL 0955, depending on their English placement.

International students who meet the University's TOEFL and IELTS requirements for admission are cleared to register for ENGL 1010.

International students who do not meet the University's TOEFL or IELTS requirements for admission and resident students for whom English is a second language who score

89 or below on the Accuplacer Test are required to take the LEAP Placement Test and complete appropriate ESL courses according to the test results. ESL classes fulfill foreign language credit toward a BA and AA degree or elective credit toward a BS and AS degree. Refer to the Learning English for Academic Purposes (LEAP) section of this catalog.

Interdisciplinary Minors

The English Department participates in the Asian Studies, Environmental Studies and Linguistics 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 and Interdisciplinary Programs section of this catalog.)

Professional and Technical Writing Institutional Certificate

Program Prerequisite: Concurrent or previous completion of a Bachelor's Degree from Weber State University or other regionally accredited institution.

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.

Course Requirements for Institutional Certificate

Professional and Technical Writing Courses Required (18 credit hours)

- ENGL 3100 - Professional and Technical Writing (3)
- ENGL 3140 - Professional and Technical Editing (3)
- ENGL 3190 - Document Design (3)
- ENGL 4100 - Issues in Professional and Technical Writing (3)
- ENGL 4110 - Content Management (3)
- ENGL 4120 - Seminar and Practicum in Professional and Technical Writing (3)

Creative Writing Emphasis, 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 English courses. A total of 40 upper division credit hours is required (courses numbered 3000 and above); a minimum of 36 of these must be English courses.

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.

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 and General Education 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.

Major Course Requirements for BA Degree

A minimum of 39 credit hours is required in valid English courses, of which at least 36 credit hours must be upper division.

English Courses Required (36 credit hours)

The following course (early in major)

- ENGL 3080 - Critical Approaches to Literature (3)

Writing (two of the following)

- ENGL 3250 - Advanced Fiction Writing (3)
- ENGL 3260 - Poetry Writing (3)
- ENGL 3270 - Magazine Article Writing (3)
- ENGL 3280 - Biographical Writing (3)

Language (one of the following)

- ENGL 3010 - Introduction to Linguistics (3)
- ENGL 3030 - Structure of English (3)
- ENGL 3040 - History of the English Language (3)
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing (3)

American Literature (one of the following)

- ENGL 4520 - American Literature: Early and Romantic (3)
- ENGL 4530 - American Literature: Realism and Naturalism (3)

American Literature (one of the following)

- ENGL 4540 - American Literature: Modern (3)
- ENGL 4550 - American Literature: Contemporary (3)

British Literature (one of the following)

- ENGL 4610 - British Literature: Medieval (3)
- ENGL 4620 - British Literature: Renaissance (3)
- ENGL 4630 - British Literature: Neoclassical and Romantic (3)

British Literature (one of the following)

- ENGL 4640 - British Literature: Victorian (3)
- ENGL 4650 - British Literature: Modern (3)
- ENGL 4660 - British Literature: Contemporary (3)

World Literatures (one of the following)

- ENGL 3510 HU/DV - World Literature (3)
- ENGL 3730 DV - Literatures of Cultures and Places (3)
- ENGL 3880 - Philosophy and Literature (3)
- ENGL 4750 - Classical Literature (3)
- ENGL 4760 - Irish Literature (3)

Studies in Genre (two of the following)

- ENGL 3350 - Studies in Literary Genres: Writing Poetic Forms (3)
- ENGL 3350 - Studies in Literary Genres: Writing the Novel (3)
- ENGL 3350 - Studies in Literary Genres: Writing Plays (3)
- ENGL 3350 - Studies in Literary Genres: Writing Creative Nonfiction (3)
- ENGL 3350 - Studies in Literary Genres: Notebooks, Journals, & Creativity (3)
- Other Genre Writing courses as approved.

Workshop (minimum of 3 credit hours)

- ENGL 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- ENGL 4940 - Writer's Workshop (3)
- ENGL 4960 - Metaphor: Editing the Student Literary Journal (3)

English Elective Courses (minimum of 3 credit hours)

To complete the required 39 credit hours, English Creative Writing Emphasis majors may choose as electives any 3000 and 4000 level English courses, including those listed above, or one of the following.

- ENGL 2100 - Technical Writing (3)
- ENGL 2200 HU/DV - Introduction to Literature (3)
- ENGL 2220 HU/DV - Introduction to Fiction (3)
- ENGL 2240 HU/DV - Introduction to Poetry (3)
- ENGL 2250 CA - Creative Writing (3)
- ENGL 2260 CA - Introduction to Writing Short Fiction (3)
- ENGL 2290 HU/DV - Introduction to Drama (3)
- ENGL 2510 HU/DV - Masterpieces of Literature (3)
- ENGL 2710 HU/DV - Perspectives on Women's Literature (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 English class above ENGL 2010 may be used as a language arts course.

Portfolio and Public Reading

Before or during the final semester English Creative Writing Majors are required

1. to submit a PORTFOLIO of finished work which includes all required elements described in Portfolio guidelines,
2. to participate in a PUBLIC READING arranged by the department, and

3. be signed off by Creative Writing Program Director, an advisor and department chair.

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 36 of these must be English courses.

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 and General Education 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.

Major Course Requirements for BA Degree

A minimum of 39 credit hours is required in valid English courses, of which at least 36 credit hours must be upper division.

English Courses Required (24 credit hours)

The following course (early in major)

- ENGL 3080 - Critical Approaches to Literature (3)

Writing (one of the following)

- ENGL 3100 - Professional and Technical Writing (3)
- ENGL 3210 - Advanced College Writing (3)
- ENGL 3250 - Advanced Fiction Writing (3)
- ENGL 3270 - Magazine Article Writing (3)
- ENGL 3280 - Biographical Writing (3)

Language (one of the following)

- ENGL 3010 - Introduction to Linguistics (3)
- ENGL 3030 - Structure of English (3)
- ENGL 3040 - History of the English Language (3)

- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing (3)

American Literature (one of the following)

- ENGL 4520 - American Literature: Early and Romantic (3)
- ENGL 4530 - American Literature: Realism and Naturalism (3)

American Literature (one of the following)

- ENGL 4540 - American Literature: Modern (3)
- ENGL 4550 - American Literature: Contemporary (3)

British Literature (one of the following)

- ENGL 4610 - British Literature: Medieval (3)
- ENGL 4620 - British Literature: Renaissance (3)
- ENGL 4630 - British Literature: Neoclassical and Romantic (3)

British Literature (one of the following)

- ENGL 4640 - British Literature: Victorian (3)
- ENGL 4650 - British Literature: Modern (3)
- ENGL 4660 - British Literature: Contemporary (3)

World Literatures (one of the following)

- ENGL 3510 HU/DV - World Literature (3)
- ENGL 3730 DV - Literatures of Cultures and Places (3)
- ENGL 3880 - Philosophy and Literature (3)
- ENGL 4750 - Classical Literature (3)
- ENGL 4760 - Irish Literature (3)

English Elective Courses (minimum of 15 credit hours)

To complete the required 39 credit hours, English majors may choose as electives any 3000 and 4000 level English course, including those listed above. In addition, majors may take as an elective only one of the following:

- ENGL 2100 - Technical Writing (3)
- ENGL 2200 HU/DV - Introduction to Literature (3)
- ENGL 2220 HU/DV - Introduction to Fiction (3)
- ENGL 2240 HU/DV - Introduction to Poetry (3)
- ENGL 2250 CA - Creative Writing (3)
- ENGL 2260 CA - Introduction to Writing Short Fiction (3)
- ENGL 2290 HU/DV - Introduction to Drama (3)
- ENGL 2510 HU/DV - Masterpieces of Literature (3)
- ENGL 2710 HU/DV - Perspectives on Women's Literature (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 English class above ENGL 2010 may be used as a language arts course.

English Teaching (BA)

Program Prerequisite: Must meet the Teacher Education admission and licensure requirements (see Teacher Education Department).

Minor: A teaching minor is required.

Grade Requirements: A 2.0 or better in all courses required for this major.

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 36 of these must be English courses.

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.

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 and General Education Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

PSY 1010 (3) in the Social Science area is recommended. Consult with a departmental advisor for other detailed general education guidelines.

English Teaching Methodology Block

English Teaching Majors must enroll in ENGL 3020, ENGL 3400, ENGL 3410, and ENGL 3420 concurrently following completion of their Secondary Education Core course work and just prior to Student Teaching. As part of this 12-hour block of methods course work, students will be required to complete a grades 7-12 school field experience.

Student Teaching

Student teaching takes place during Teacher Education Level III. Before student teaching, English majors must have completed all required Education courses and at least 33 credit hours from required English courses, including ENGL 3080 - Critical Approaches to Literature, and the Methodology Block. Students must apply for student teaching through Teacher Education according to deadlines set by that department.

Major Course Requirements for BA Degree

Minimum of 39 credit hours in valid English courses.

English Courses Required (33 credit hours)

The following course (early in major)

- ENGL 3080 - Critical Approaches to Literature (3)

Methodology Block (all of the following)

- ENGL 3020 - Introduction to the Study of Language for Teachers **(3)**
- ENGL 3400 - The Teaching of Literature **(3)**
- ENGL 3410 - The Teaching of Writing **(3)**
- ENGL 3420 - Teaching With Young Adult Literature **(3)**

Writing (one of the following)

- ENGL 3100 - Professional and Technical Writing **(3)**
- ENGL 3210 - Advanced College Writing **(3)**
- ENGL 3250 - Advanced Fiction Writing **(3)**
- ENGL 3270 - Magazine Article Writing **(3)**
- ENGL 3280 - Biographical Writing **(3)**

American Literature (one of the following)

- ENGL 4520 - American Literature: Early and Romantic **(3)**
- ENGL 4530 - American Literature: Realism and Naturalism **(3)**

American Literature (one of the following)

- ENGL 4540 - American Literature: Modern **(3)**
- ENGL 4550 - American Literature: Contemporary **(3)**

British Literature (one of the following)

- ENGL 4610 - British Literature: Medieval **(3)**
- ENGL 4620 - British Literature: Renaissance **(3)**
- ENGL 4630 - British Literature: Neoclassical and Romantic **(3)**

British Literature (one of the following)

- ENGL 4640 - British Literature: Victorian **(3)**
- ENGL 4650 - British Literature: Modern **(3)**
- ENGL 4660 - British Literature: Contemporary **(3)**

World Literatures (one of the following)

- ENGL 3510 HU/DV - World Literature **(3)**
- ENGL 3730 DV - Literatures of Cultures and Places **(3)**
- ENGL 3880 - Philosophy and Literature **(3)**
- ENGL 4750 - Classical Literature **(3)**
- ENGL 4760 - Irish Literature **(3)**

English Elective Courses (minimum of 6 credit hours)

To complete the required 39 credit hours, English Teaching majors may choose as electives any 3000 and 4000 level English courses, **including those listed above**. Either ENGL 3500 HU - Introduction to Shakespeare, or ENGL 4730 - Studies in Shakespeare, is recommended.

In addition, majors may take as an elective **only one** of the following:

- ENGL 2100 - Technical Writing **(3)**
- ENGL 2200 HU/DV - Introduction to Literature **(3)**
- ENGL 2220 HU/DV - Introduction to Fiction **(3)**
- ENGL 2240 HU/DV - Introduction to Poetry **(3)**
- ENGL 2250 CA - Creative Writing **(3)**
- ENGL 2260 CA - Introduction to Writing Short Fiction **(3)**
- ENGL 2290 HU/DV - Introduction to Drama **(3)**
- ENGL 2510 HU/DV - Masterpieces of Literature **(3)**
- ENGL 2710 HU/DV - Perspectives on Women's Literature **(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 English class above ENGL 2010 may be used as a language arts course.

Professional & Technical Writing Emphasis, 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 or above); a minimum of 36 must be English courses.

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 and General Education 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.

Major Course Requirements for BA Degree

A minimum of 39 credit hours is required in valid English courses, of which at least 36 credit hours must be upper division.

English Courses Required (36 credit hours)

The following course (early in major)

- ENGL 3080 - Critical Approaches to Literature **(3)**

Professional and Technical Writing (all of the following)

- ENGL 3100 - Professional and Technical Writing (3)
- ENGL 3140 - Professional and Technical Editing (3)
- ENGL 3190 - Document Design (3)
- ENGL 4100 - Issues in Professional and Technical Writing (3)
- ENGL 4120 - Seminar and Practicum in Professional and Technical Writing (3)
- ENGL 4110 - Content Management (3)

Language (one of the following)

- ENGL 3010 - Introduction to Linguistics (3)
- ENGL 3030 - Structure of English (3)
- ENGL 3040 - History of the English Language (3)
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing (3)

American Literature (one of the following)

- ENGL 4520 - American Literature: Early and Romantic (3)
- ENGL 4530 - American Literature: Realism and Naturalism (3)

American Literature (one of the following)

- ENGL 4540 - American Literature: Modern (3)
- ENGL 4550 - American Literature: Contemporary (3)

British Literature (one of the following)

- ENGL 4610 - British Literature: Medieval (3)
- ENGL 4620 - British Literature: Renaissance (3)
- ENGL 4630 - British Literature: Neoclassical and Romantic (3)

British Literature (one of the following)

- ENGL 4640 - British Literature: Victorian (3)
- ENGL 4650 - British Literature: Modern (3)
- ENGL 4660 - British Literature: Contemporary (3)

World Literatures (one of the following)

- ENGL 3510 HU/DV - World Literature (3)
- ENGL 3730 DV - Literatures of Cultures and Places (3)
- ENGL 3880 - Philosophy and Literature (3)
- ENGL 4750 - Classical Literature (3)
- ENGL 4760 - Irish Literature (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 English class above ENGL 2010 may be used as a language arts course.

English (BIS)

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.

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 1010, ENGL 2010, and lower division HU general education literature courses do not count toward an English minor.

Course Requirements for Minor**English Courses Required (15 credit hours)**

- ENGL 3080 - Critical Approaches to Literature (3) (early in minor)

Writing (one of the following)

- ENGL 3100 - Professional and Technical Writing (3)
- ENGL 3210 - Advanced College Writing (3)
- ENGL 3250 - Advanced Fiction Writing (3)
- ENGL 3270 - Magazine Article Writing (3)
- ENGL 3280 - Biographical Writing (3)

Language (one of the following)

- ENGL 3010 - Introduction to Linguistics (3)
- ENGL 3030 - Structure of English (3)
- ENGL 3040 - History of the English Language (3)
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing (3)

American Literature (one of the following)

- ENGL 4520 - American Literature: Early and Romantic (3)
- ENGL 4530 - American Literature: Realism and Naturalism (3)
- ENGL 4540 - American Literature: Modern (3)

- ENGL 4550 - American Literature: Contemporary (3)

British Literature (one of the following)

- ENGL 4610 - British Literature: Medieval (3)
- ENGL 4620 - British Literature: Renaissance (3)
- ENGL 4630 - British Literature: Neoclassical and Romantic (3)
- ENGL 4640 - British Literature: Victorian (3)
- ENGL 4650 - British Literature: Modern (3)
- ENGL 4660 - British Literature: Contemporary (3)

Course Electives (minimum of 6 credit hours)

To complete the required 21 credit hours, English minors may choose as electives any 3000 and 4000 level English courses, including those listed above.

Professional and Technical Writing Minor

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.

Course Requirements for Minor

Professional and Technical Writing Courses Required (18 credit hours)

- ENGL 3100 - Professional and Technical Writing (3)
- ENGL 3140 - Professional and Technical Editing (3)
- ENGL 3190 - Document Design (3)
- ENGL 4100 - Issues in Professional and Technical Writing (3)
- ENGL 4110 - Content Management (3)
- ENGL 4120 - Seminar and Practicum in Professional and Technical Writing (3)

English Teaching Minor

Grade Requirements: A grade of 2.0 or better in all courses used toward the minor.

Credit Hour Requirements: Minimum of 24 credit hours of English courses. ENGL 1010, ENGL 2010, and lower division HU general education literature courses do not count toward an English teaching minor.

Students who select the English Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education in this catalog).

Methodology Block

English teaching minors must enroll in ENGL 3020, ENGL 3400, ENGL 3410, and ENGL 3420 concurrently following completion of their Teacher Education Level II course work and just prior to Teacher Education Level III (student teaching). As part of this 12-hour block of methods course work, students will be required to complete a ten-week public school field experience.

Student Teaching

Student teaching takes place during Teacher Education Level III. Before student teaching, English teaching minors must have completed all required Education courses and at least 21 credit hours from required English courses, including ENGL 3080 - Critical Approaches to Literature, and the Methodology Block. Students must apply for student teaching through Teacher Education according to deadlines set by that department.

Course Requirements for Minor

English Courses Required (24 credit hours)

- ENGL 3080 - Critical Approaches to Literature (3) (early in minor)

Methodology Block (all of the following)

- ENGL 3020 - Introduction to the Study of Language for Teachers (3)
- ENGL 3400 - The Teaching of Literature (3)
- ENGL 3410 - The Teaching of Writing (3)
- ENGL 3420 - Teaching With Young Adult Literature (3)

Writing (one of the following)

- ENGL 3100 - Professional and Technical Writing (3)
- ENGL 3210 - Advanced College Writing (3)
- ENGL 3250 - Advanced Fiction Writing (3)
- ENGL 3270 - Magazine Article Writing (3)
- ENGL 3280 - Biographical Writing (3)

American Literature (one of the following)

- ENGL 4520 - American Literature: Early and Romantic (3)
- ENGL 4530 - American Literature: Realism and Naturalism (3)
- ENGL 4540 - American Literature: Modern (3)
- ENGL 4550 - American Literature: Contemporary (3)

British Literature (one of the following)

- ENGL 4610 - British Literature: Medieval (3)
- ENGL 4620 - British Literature: Renaissance (3)
- ENGL 4630 - British Literature: Neoclassical and Romantic (3)
- ENGL 4640 - British Literature: Victorian (3)
- ENGL 4650 - British Literature: Modern (3)
- ENGL 4660 - British Literature: Contemporary (3)

English Departmental Honors

Please contact the English Department for advisement and permission prior to enrolling in Honors courses.

To earn departmental honors in English, a student must:

1. Complete all requirements for a major in English;
2. Earn a cumulative GPA of 3.0 and a GPA of 3.7 in the major;
3. Take one Honors 3000 level class;
4. Present work at the National Undergraduate Literature Conference, the Weber State Undergraduate Research Conference, or some similar professional conference; or, show evidence of submitting work for publication with a regional

or national journal; or, perform documented community service in the cause of literacy. The number of hours will be negotiated with the department advisor and written as a signed contract.

Students who have not completed their General Education requirements are strongly encouraged to fulfill them with Honors General Education courses.

Department of Foreign Languages

Department Chair: Craig Bergeson

Location: Elizabeth Hall, Room 434

Telephone Contact: Karlene Foster 801-626-6183

Professors: Yumi Adachi, Craig Bergeson, Alicia Giralt, Cheryl Hansen, Thomas Mathews, Eva Szalay; **Associate Professor:** Isabel Asensio, **Assistant Professors:** Diego Batista, Electra Fielding

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 FL 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 FL 1010, FL 1020, FL 2010 and FL 2020 by passing a higher numbered course with a minimum grade of "C"
2. Students may obtain credit for FL 1010, FL 1020, FL 2010 and FL 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 (FL 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 and Interdisciplinary Programs section of this catalog.)

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 30.5 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.

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 and General Education 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 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.

Assessment

During their senior year, all French 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)

- FRCH 1010 - First Year I (3)
- FRCH 1020 - First Year II (3)
- FRCH 2010 - Second Year I (3)
- FRCH 2020 HU - Second Year II (3)

Required Courses (6.5 credit hours)

- FRCH 3060 - Grammar & Composition (3)
- FRCH 3160 - Introduction to Literature (3)
- FL 4990 - Senior Assessment (.5)

Elective Courses

Select a minimum of 24 credit hours from the following (choice must include at least one literature course on this list)

- FRCH 3000 - Proficiency Development (3)
- FRCH 3190 - Foreign Language Journal (1)
- FRCH 3220 - Phonetics and Phonology (3)
- FL 3320 - Applied Language Studies (1-3)
- FL 3320 - Language & Culture of Europe (3) *

- FRCH 3360 - Advanced Grammar (3)
- FRCH 3550 DV - Cultural Heritage I (3)
- FRCH 3560 - Cultural Heritage II (3)
- FRCH 3570 - Special Topics in Culture (3)
- FRCH 3610 - Literature Survey I (3)
- FRCH 3620 - Literature Survey II (3)
- FRCH 3630 - Literature Genres (3)
- FRCH 3650 - Literature Periods (3)
- FRCH 3670 - Literature Authors (3)
- FRCH 3690 - Literature Special Topics in Literature (1-3)
- FRCH 3710 - Business Language I (3)
- FRCH 3720 - Language for Specific Purposes I (3)
- FRCH 3730 - Language for Specific Purposes II (3)
- FRCH 3740 - Translation/Interpreting I (3)
- FRCH 3850 - Study Abroad (1-6)
- FRCH 4190 - Foreign Language Journal (1)
- FRCH 4220 - Special Topics in Linguistics (3)
- FRCH 4620 - Survey of Literature I (3)
- FRCH 4630 - Survey of Literature II (3)
- FRCH 4690 - Special Topics in Literature (3)
- FRCH 4710 - Business Language II (3)
- FRCH 4740 - Translation/Interpreting II (3)
- FRCH 4830 - Directed Readings (1-3)
- FRCH 4850 - Study Abroad (1-6)
- FRCH 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- FRCH 4960 - Senior Seminar and Thesis (3)

*FL 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 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.

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 and General Education 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.

Assessment

During their senior year, all French Teaching 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)

- FRCH 1010 - First Year I (3)
- FRCH 1020 - First Year II (3)
- FRCH 2010 - Second Year I (3)
- FRCH 2020 HU - Second Year II (3)

Required Courses (15.5 credit hours)

- FRCH 3060 - Grammar & Composition (3)
- FRCH 3160 - Introduction to Literature (3)
- FRCH 3220 - Phonetics and Phonology (3)
- FL 4340 - Foreign Language Acquisition and Teaching for Proficiency (3)
- FL 4400 - Methods of Teaching a Foreign Language (3) *
- FL 4990 - Senior Assessment (.5)

Elective Courses

Select a minimum of 21 credit hours from the following (choice must include at least one literature course from this list)

- FRCH 3000 - Proficiency Development (3)
- FRCH 3190 - Foreign Language Journal (1)
- FRCH 3220 - Phonetics and Phonology (3)
- FRCH 3360 - Advanced Grammar (3)
- FRCH 3710 - Business Language I (3)
- FRCH 3550 DV - Cultural Heritage I (3)
- FRCH 3560 - Cultural Heritage II (3)
- FRCH 3570 - Special Topics in Culture (3)
- FRCH 3610 - Literature Survey I (3)
- FRCH 3620 - Literature Survey II (3)
- FRCH 3630 - Literature Genres (3)
- FRCH 3650 - Literature Periods (3)
- FRCH 3670 - Literature Authors (3)
- FRCH 3690 - Literature Special Topics in Literature (1-3)
- FRCH 3720 - Language for Specific Purposes I (3)
- FRCH 3730 - Language for Specific Purposes II (3)
- FRCH 3740 - Translation/Interpreting I (3)
- FRCH 3850 - Study Abroad (1-6)
- FRCH 4190 - Foreign Language Journal (1)
- FRCH 4220 - Special Topics in Linguistics (3)
- FRCH 4710 - Business Language II (3)
- FRCH 4620 - Survey of Literature I (3)

- FRCH 4630 - Survey of Literature II (3)
- FRCH 4690 - Special Topics in Literature (3)
- FRCH 4740 - Translation/Interpreting II (3)
- FRCH 4830 - Directed Readings (1-3)
- FRCH 4850 - Study Abroad (1-6)
- FRCH 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- FRCH 4960 - Senior Seminar and Thesis (3)

*Students must take ACTFL Oral and Written Proficiency Examinations prior to taking FL 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 taking FL 4400. (Please see the foreign language advisor.)

French, Commercial Emphasis (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 30.5 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.

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 and General Education 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.

Assessment

During their senior year, all French 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)

- FRCH 1010 - First Year I (3)
- FRCH 1020 - First Year II (3)
- FRCH 2010 - Second Year I (3)
- FRCH 2020 HU - Second Year II (3)

Required Courses (15.5 credit hours)

- FRCH 3060 - Grammar & Composition (3)
- FRCH 3160 - Introduction to Literature (3)
- FRCH 3710 - Business Language I (3)
- FRCH 4710 - Business Language II (3)
- FL 4990 - Senior Assessment (.5)

Select 3 credit hours from the following

- FRCH 3550 DV - Cultural Heritage I (3)
- FRCH 3560 - Cultural Heritage II (3)
- FRCH 3570 - Special Topics in Culture (3)

Elective Courses

Select a minimum of 15 credit hours from the following

- FRCH 3000 - Proficiency Development (3)
- FRCH 3190 - Foreign Language Journal (1)
- FRCH 3220 - Phonetics and Phonology (3)
- FL 3320 - Applied Language Studies (1-3)
- FL 3320 - Language & Culture of Europe (3) *
- FRCH 3360 - Advanced Grammar (3)
- FRCH 3550 DV - Cultural Heritage I (3)
- FRCH 3560 - Cultural Heritage II (3)
- FRCH 3570 - Special Topics in Culture (3)
- FRCH 3610 - Literature Survey I (3)
- FRCH 3620 - Literature Survey II (3)
- FRCH 3630 - Literature Genres (3)
- FRCH 3650 - Literature Periods (3)
- FRCH 3670 - Literature Authors (3)
- FRCH 3690 - Literature Special Topics in Literature (1-3)
- FRCH 3720 - Language for Specific Purposes I (3)
- FRCH 3730 - Language for Specific Purposes II (3)
- FRCH 3740 - Translation/Interpreting I (3)
- FRCH 3850 - Study Abroad (1-6)
- FRCH 4190 - Foreign Language Journal (1)
- FRCH 4220 - Special Topics in Linguistics (3)
- FRCH 4620 - Survey of Literature I (3)
- FRCH 4630 - Survey of Literature II (3)
- FRCH 4690 - Special Topics in Literature (3)
- FRCH 4740 - Translation/Interpreting II (3)
- FRCH 4830 - Directed Readings (1-3)
- FRCH 4850 - Study Abroad (1-6)
- FRCH 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- FRCH 4960 - Senior Seminar and Thesis (3)

*FL 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.

German (BA)

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 30.5 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.

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 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 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.

Assessment

During their senior year, all German 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)

- GRMN 1010 - First Year I (3)
- GRMN 1020 - First Year II (3)
- GRMN 2010 - Second Year I (3)
- GRMN 2020 HU - Second Year II (3)

Required Courses (6.5 credit hours)

- GRMN 3060 - Grammar & Composition (3)
- GRMN 3160 - Introduction to Literature (3)
- GRMN 4990 - Senior Assessment (.5)

Elective Courses

Select a minimum of 24 credit hours from the following (choice must include at least one literature course on this list)

- GRMN 3000 - Proficiency Development (3)
- GRMN 3190 - Foreign Language Journal (1)
- GRMN 3220 - Phonetics and Phonology (3)
- GRMN 3320 - Applied Language Studies (1-3)
- GRMN 3320 - Language & Culture of Europe (3) *
- GRMN 3360 - Advanced Grammar (3)
- GRMN 3550 DV - Cultural Heritage I (3)
- GRMN 3560 - Cultural Heritage II (3)
- GRMN 3570 - Special Topics in Culture (3)
- GRMN 3610 - Literature Survey I (3)
- GRMN 3620 - Literature Survey II (3)
- GRMN 3630 - Literature Genres (3)
- GRMN 3650 - Literature Periods (3)
- GRMN 3670 - Literature Authors (3)
- GRMN 3690 - Literature Special Topics in Literature (1-3)
- GRMN 3710 - Business Language I (3)
- GRMN 3720 - Language for Specific Purposes I (3)
- GRMN 3730 - Language for Specific Purposes II (3)
- GRMN 3740 - Translation/Interpreting I (3)
- GRMN 3850 - Study Abroad (1-6)
- GRMN 4190 - Foreign Language Journal (1)
- GRMN 4220 - Special Topics in Linguistics (3)
- GRMN 4620 - Survey of Literature I (3)
- GRMN 4630 - Survey of Literature II (3)
- GRMN 4690 - Special Topics in Literature (3)
- GRMN 4710 - Business Language II (3)
- GRMN 4740 - Translation/Interpreting II (3)
- GRMN 4830 - Directed Readings (1-3)
- GRMN 4850 - Study Abroad (1-6)
- GRMN 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- GRMN 4960 - Senior Seminar and Thesis (3)

*GRMN 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.

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 and General Education 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.

Assessment

During their senior year, all German Teaching majors will complete GRMN 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 GRMN 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- GRMN 1010 - First Year I (3)
- GRMN 1020 - First Year II (3)
- GRMN 2010 - Second Year I (3)
- GRMN 2020 HU - Second Year II (3)

Required Courses (15.5 credit hours)

- GRMN 3060 - Grammar & Composition (3)
- GRMN 3160 - Introduction to Literature (3)
- GRMN 3220 - Phonetics and Phonology (3)
- GRMN 4340 - Foreign Language Acquisition and Teaching for Proficiency (3)
- GRMN 4400 - Methods of Teaching a Foreign Language (3) *
- GRMN 4990 - Senior Assessment (.5)

Elective Courses

Select a minimum of 21 credit hours from the following (choice must include at least one literature course from this list)

- GRMN 3000 - Proficiency Development (3)
- GRMN 3190 - Foreign Language Journal (1)
- GRMN 3320 - Applied Language Studies (1-3)
- GRMN 3360 - Advanced Grammar (3)
- GRMN 3710 - Business Language I (3)
- GRMN 3550 DV - Cultural Heritage I (3)
- GRMN 3560 - Cultural Heritage II (3)
- GRMN 3570 - Special Topics in Culture (3)
- GRMN 3610 - Literature Survey I (3)
- GRMN 3620 - Literature Survey II (3)
- GRMN 3630 - Literature Genres (3)
- GRMN 3650 - Literature Periods (3)
- GRMN 3670 - Literature Authors (3)

- GRMN 3690 - Literature Special Topics in Literature **(1-3)**
- GRMN 3720 - Language for Specific Purposes I **(3)**
- GRMN 3730 - Language for Specific Purposes II **(3)**
- GRMN 3740 - Translation/Interpreting I **(3)**
- GRMN 3850 - Study Abroad **(1-6)**
- GRMN 4190 - Foreign Language Journal **(1)**
- GRMN 4220 - Special Topics in Linguistics **(3)**
- GRMN 4710 - Business Language II **(3)**
- GRMN 4620 - Survey of Literature I **(3)**
- GRMN 4630 - Survey of Literature II **(3)**
- GRMN 4690 - Special Topics in Literature **(3)**
- GRMN 4740 - Translation/Interpreting II **(3)**
- GRMN 4830 - Directed Readings **(1-3)**
- GRMN 4850 - Study Abroad **(1-6)**
- GRMN 4920 - Short Courses, Workshops, Institutes and Special Programs **(1-4)**
- GRMN 4960 - Senior Seminar and Thesis **(3)**

**Students must take ACTFL Oral and Written Proficiency Examinations prior to taking GRMN 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 taking GRMN 4400. (Please see the foreign language advisor.)*

German, Commercial Emphasis (BA)

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 30.5 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.

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 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 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.

Assessment

During their senior year, all German majors will complete GRMN 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 GRMN 4990.

Major Course Requirements for BA Degree

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- GRMN 1010 - First Year I **(3)**
- GRMN 1020 - First Year II **(3)**
- GRMN 2010 - Second Year I **(3)**
- GRMN 2020 HU - Second Year II **(3)**

Required Courses (15.5 credit hours)

- GRMN 3060 - Grammar & Composition **(3)**
- GRMN 3160 - Introduction to Literature **(3)**
- GRMN 3710 - Business Language I **(3)**
- GRMN 4710 - Business Language II **(3)**
- GRMN 4990 - Senior Assessment **(.5)**

Select 3 credit hours from the following

- GRMN 3550 DV - Cultural Heritage I **(3)**
- GRMN 3560 - Cultural Heritage II **(3)**
- GRMN 3570 - Special Topics in Culture **(3)**

Elective Courses

Select a minimum of 15 credit hours from the following

- GRMN 3000 - Proficiency Development **(3)**
- GRMN 3190 - Foreign Language Journal **(1)**
- GRMN 3220 - Phonetics and Phonology **(3)**
- GRMN 3320 - Applied Language Studies **(1-3)**
- GRMN 3320 - Language & Culture of Europe **(3) ***
- GRMN 3360 - Advanced Grammar **(3)**
- GRMN 3550 DV - Cultural Heritage I **(3)**
- GRMN 3560 - Cultural Heritage II **(3)**
- GRMN 3570 - Special Topics in Culture **(3)**
- GRMN 3610 - Literature Survey I **(3)**
- GRMN 3620 - Literature Survey II **(3)**
- GRMN 3630 - Literature Genres **(3)**
- GRMN 3650 - Literature Periods **(3)**
- GRMN 3670 - Literature Authors **(3)**
- GRMN 3690 - Literature Special Topics in Literature **(1-3)**
- GRMN 3720 - Language for Specific Purposes I **(3)**
- GRMN 3730 - Language for Specific Purposes II **(3)**
- GRMN 3740 - Translation/Interpreting I **(3)**
- GRMN 3850 - Study Abroad **(1-6)**
- GRMN 4190 - Foreign Language Journal **(1)**
- GRMN 4220 - Special Topics in Linguistics **(3)**
- GRMN 4620 - Survey of Literature I **(3)**
- GRMN 4630 - Survey of Literature II **(3)**
- GRMN 4690 - Special Topics in Literature **(3)**
- GRMN 4740 - Translation/Interpreting II **(3)**
- GRMN 4830 - Directed Readings **(1-3)**

- GRMN 4850 - Study Abroad (1-6)
- GRMN 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- GRMN 4960 - Senior Seminar and Thesis (3)

**GRMN 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.*

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 30.5 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.

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 and General Education 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.

Assessment

During their senior year, all Spanish 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 Year I (3)
- SPAN 1020 - First Year II (3)
- SPAN 2010 - Second Year I (3)
- SPAN 2020 HU - Second Year II (3)

Required Courses (6.5 credit hours)

- SPAN 3060 - Grammar & Composition (3)
- SPAN 3160 - Introduction to Literature (3)
- FL 4990 - Senior Assessment (.5)

Elective Courses

Select a minimum of 24 credit hours from the following (choice must include at least one literature course on this list)

- SPAN 3000 - Proficiency Development (3)
- SPAN 3190 - Foreign Language Journal (1)
- SPAN 3220 - Phonetics and Phonology (3)
- FL 3320 - Applied Language Studies (1-3)
- FL 3320 - Language & Culture of Europe (3) *
- SPAN 3360 - Advanced Grammar (3)
- SPAN 3550 DV - Cultural Heritage I (3)
- SPAN 3560 - Cultural Heritage II (3)
- SPAN 3610 - Literature Survey I (3)
- SPAN 3620 - Literature Survey II (3)
- SPAN 3630 - Literature Genres (3)
- SPAN 3650 - Literature Periods (3)
- SPAN 3670 - Literature Authors (3)
- SPAN 3690 - Literature Special Topics in Literature (1-3)
- SPAN 3710 - Business Language I (3)
- SPAN 3720 - Language for Specific Purposes I (3)
- SPAN 3730 - Language for Specific Purposes II (3)
- SPAN 3740 - Translation/Interpreting I (3)
- SPAN 3850 - Study Abroad (1-6)
- SPAN 4190 - Foreign Language Journal (1)
- SPAN 4220 - Special Topics in Linguistics (3)
- SPAN 4620 - Survey of Literature I (3)
- SPAN 4630 - Survey of Literature II (3)
- SPAN 4690 - Special Topics in Literature (3)
- SPAN 4710 - Business Language II (3)
- SPAN 4740 - Translation/Interpreting II (3)
- SPAN 4830 - Directed Readings (1-3)
- SPAN 4850 - Study Abroad (1-6)
- SPAN 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- SPAN 4960 - Senior Seminar and Thesis (3)

**FL 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.

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 and General Education 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.

Assessment

During their senior year, all Spanish Teaching 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 Year I (3)
- SPAN 1020 - First Year II (3)
- SPAN 2010 - Second Year I (3)
- SPAN 2020 HU - Second Year II (3)

Required Courses (15.5 credit hours)

- SPAN 3060 - Grammar & Composition (3)
- SPAN 3160 - Introduction to Literature (3)
- SPAN 3220 - Phonetics and Phonology (3)
- FL 4340 - Foreign Language Acquisition and Teaching for Proficiency (3)

- FL 4400 - Methods of Teaching a Foreign Language (3) *
- FL 4990 - Senior Assessment (.5)

Elective Courses

Select a minimum of 21 credit hours from the following (choice must include at least one literature course from this list)

- SPAN 3000 - Proficiency Development (3)
- SPAN 3190 - Foreign Language Journal (1)
- FL 3320 - Applied Language Studies (1-3)
- SPAN 3360 - Advanced Grammar (3)
- SPAN 3710 - Business Language I (3)
- SPAN 3550 DV - Cultural Heritage I (3)
- SPAN 3560 - Cultural Heritage II (3)
- SPAN 3570 - Special Topics in Culture (3)
- SPAN 3610 - Literature Survey I (3)
- SPAN 3620 - Literature Survey II (3)
- SPAN 3630 - Literature Genres (3)
- SPAN 3650 - Literature Periods (3)
- SPAN 3670 - Literature Authors (3)
- SPAN 3690 - Literature Special Topics in Literature (1-3)
- SPAN 3720 - Language for Specific Purposes I (3)
- SPAN 3730 - Language for Specific Purposes II (3)
- SPAN 3740 - Translation/Interpreting I (3)
- SPAN 3850 - Study Abroad (1-6)
- SPAN 4190 - Foreign Language Journal (1)
- SPAN 4220 - Special Topics in Linguistics (3)
- SPAN 4710 - Business Language II (3)
- SPAN 4620 - Survey of Literature I (3)
- SPAN 4630 - Survey of Literature II (3)
- SPAN 4690 - Special Topics in Literature (3)
- SPAN 4740 - Translation/Interpreting II (3)
- SPAN 4830 - Directed Readings (1-3)
- SPAN 4850 - Study Abroad (1-6)
- SPAN 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- SPAN 4960 - Senior Seminar and Thesis (3)

*Students must take ACTFL Oral and Written Proficiency Examinations prior to taking FL 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 taking FL 4400. (Please see the foreign language advisor.)

Spanish, Commercial Emphasis (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 30.5 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.

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 and General Education 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.

Assessment

During their senior year, all Spanish 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 Year I (3)
- SPAN 1020 - First Year II (3)
- SPAN 2010 - Second Year I (3)
- SPAN 2020 HU - Second Year II (3)

Required Courses (15.5 credit hours)

- SPAN 3060 - Grammar & Composition (3)
- SPAN 3160 - Introduction to Literature (3)
- SPAN 3710 - Business Language I (3)
- SPAN 4710 - Business Language II (3)
- FL 4990 - Senior Assessment (.5)

Select 3 credit hours from the following

- SPAN 3550 DV - Cultural Heritage I (3)
- SPAN 3560 - Cultural Heritage II (3)
- SPAN 3570 - Special Topics in Culture (3)

Elective Courses

Select a minimum of 15 credit hours from the following

- SPAN 3000 - Proficiency Development (3)
- SPAN 3190 - Foreign Language Journal (1)
- SPAN 3220 - Phonetics and Phonology (3)
- FL 3320 - Applied Language Studies (1-3)

- FL 3320 - Language & Culture of Europe (3) *
- SPAN 3360 - Advanced Grammar (3)
- SPAN 3550 DV - Cultural Heritage I (3)
- SPAN 3560 - Cultural Heritage II (3)
- SPAN 3570 - Special Topics in Culture (3)
- SPAN 3610 - Literature Survey I (3)
- SPAN 3620 - Literature Survey II (3)
- SPAN 3630 - Literature Genres (3)
- SPAN 3650 - Literature Periods (3)
- SPAN 3670 - Literature Authors (3)
- SPAN 3690 - Literature Special Topics in Literature (1-3)
- SPAN 3720 - Language for Specific Purposes I (3)
- SPAN 3730 - Language for Specific Purposes II (3)
- SPAN 3740 - Translation/Interpreting I (3)
- SPAN 3850 - Study Abroad (1-6)
- SPAN 4190 - Foreign Language Journal (1)
- SPAN 4220 - Special Topics in Linguistics (3)
- SPAN 4620 - Survey of Literature I (3)
- SPAN 4630 - Survey of Literature II (3)
- SPAN 4690 - Special Topics in Literature (3)
- SPAN 4740 - Translation/Interpreting II (3)
- SPAN 4830 - Directed Readings (1-3)
- SPAN 4850 - Study Abroad (1-6)
- SPAN 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- SPAN 4960 - Senior Seminar and Thesis (3)

*FL 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.

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.

Course Requirements for Minor**Prerequisite Courses**

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- FRCH 1010 - First Year I (3)
- FRCH 1020 - First Year II (3)
- FRCH 2010 - Second Year I (3)
- FRCH 2020 HU - Second Year II (3)

Required Courses (6 credit hours)

- FRCH 3060 - Grammar & Composition (3)
- FRCH 3160 - Introduction to Literature (3)

Elective Courses (select a minimum of 9 credit hours)

- FRCH 3000 - Proficiency Development (3)
- FRCH 3190 - Foreign Language Journal (1)
- FRCH 3220 - Phonetics and Phonology (3)
- FL 3320 - Applied Language Studies (1-3)
- FL 3320 - Language & Culture of Europe (3) *

- FRCH 3360 - Advanced Grammar (3)
- FRCH 3550 DV - Cultural Heritage I (3)
- FRCH 3560 - Cultural Heritage II (3)
- FRCH 3570 - Special Topics in Culture (3)
- FRCH 3610 - Literature Survey I (3)
- FRCH 3620 - Literature Survey II (3)
- FRCH 3630 - Literature Genres (3)
- FRCH 3650 - Literature Periods (3)
- FRCH 3670 - Literature Authors (3)
- FRCH 3690 - Literature Special Topics in Literature (1-3)
- FRCH 3710 - Business Language I (3)
- FRCH 3720 - Language for Specific Purposes I (3)
- FRCH 3730 - Language for Specific Purposes II (3)
- FRCH 3740 - Translation/Interpreting I (3)
- FRCH 3850 - Study Abroad (1-6)
- FRCH 4190 - Foreign Language Journal (1)
- FRCH 4220 - Special Topics in Linguistics (3)
- FRCH 4620 - Survey of Literature I (3)
- FRCH 4630 - Survey of Literature II (3)
- FRCH 4690 - Special Topics in Literature (3)
- FRCH 4710 - Business Language II (3)
- FRCH 4740 - Translation/Interpreting II (3)
- FRCH 4830 - Directed Readings (1-3)
- FRCH 4850 - Study Abroad (1-6)
- FRCH 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- FRCH 4960 - Senior Seminar and Thesis (3)

**FL 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.*

French, Commercial Emphasis Minor

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.

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- FRCH 1010 - First Year I (3)
- FRCH 1020 - First Year II (3)
- FRCH 2010 - Second Year I (3)
- FRCH 2020 HU - Second Year II (3)

Required Courses (12 credit hours)

- FRCH 3060 - Grammar & Composition (3)
- FRCH 3160 - Introduction to Literature (3)
- FRCH 3710 - Business Language I (3)
- FRCH 4710 - Business Language II (3)

Elective Courses

Select 3 credit hours from the following

- FRCH 3550 DV - Cultural Heritage I (3)
- FRCH 3560 - Cultural Heritage II (3)
- FRCH 3570 - Special Topics in Culture (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.

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- GRMN 1010 - First Year I (3)
- GRMN 1020 - First Year II (3)
- GRMN 2010 - Second Year I (3)
- GRMN 2020 HU - Second Year II (3)

Required Courses (6 credit hours)

- GRMN 3060 - Grammar & Composition (3)
- GRMN 3160 - Introduction to Literature (3)

Elective Courses (select a minimum of 9 credit hours)

- GRMN 3000 - Proficiency Development (3)
- GRMN 3190 - Foreign Language Journal (1)
- GRMN 3220 - Phonetics and Phonology (3)
- GRMN 3320 - Applied Language Studies (1-3)
- GRMN 3320 - Language & Culture of Europe (3) *
- GRMN 3360 - Advanced Grammar (3)
- GRMN 3550 DV - Cultural Heritage I (3)
- GRMN 3560 - Cultural Heritage II (3)
- GRMN 3570 - Special Topics in Culture (3)
- GRMN 3610 - Literature Survey I (3)
- GRMN 3620 - Literature Survey II (3)
- GRMN 3630 - Literature Genres (3)
- GRMN 3650 - Literature Periods (3)
- GRMN 3670 - Literature Authors (3)
- GRMN 3690 - Literature Special Topics in Literature (1-3)
- GRMN 3710 - Business Language I (3)
- GRMN 3720 - Language for Specific Purposes I (3)
- GRMN 3730 - Language for Specific Purposes II (3)
- GRMN 3740 - Translation/Interpreting I (3)
- GRMN 3850 - Study Abroad (1-6)
- GRMN 4190 - Foreign Language Journal (1)
- GRMN 4220 - Special Topics in Linguistics (3)
- GRMN 4620 - Survey of Literature I (3)
- GRMN 4630 - Survey of Literature II (3)
- GRMN 4690 - Special Topics in Literature (3)
- GRMN 4710 - Business Language II (3)
- GRMN 4740 - Translation/Interpreting II (3)
- GRMN 4830 - Directed Readings (1-3)
- GRMN 4850 - Study Abroad (1-6)
- GRMN 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- GRMN 4960 - Senior Seminar and Thesis (3)

Note:

*GRMN 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.

German, Commercial Emphasis Minor

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.

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- GRMN 1010 - First Year I (3)
- GRMN 1020 - First Year II (3)
- GRMN 2010 - Second Year I (3)
- GRMN 2020 HU - Second Year II (3)

Required Courses (9 credit hours)

- GRMN 3060 - Grammar & Composition (3)
- GRMN 3710 - Business Language I (3)
- GRMN 4710 - Business Language II (3)

Elective Courses

Select 6 credit hours from the following

- GRMN 3160 - Introduction to Literature (3)
- GRMN 3550 DV - Cultural Heritage I (3)
- GRMN 3560 - Cultural Heritage II (3)
- GRMN 3570 - Special Topics in Culture (3)

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.

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- JPNS 1010 - First Year I (3)
- JPNS 1020 - First Year II (3)

- JPNS 2010 - Second Year I (3)
- JPNS 2020 HU - Second Year II (3)

Required Courses (6 credit hours)

- JPNS 3060 - Grammar & Composition (3)
- JPNS 3160 - Introduction to Literature (3)

Elective Courses (select a minimum of 9 credit hours)

- JPNS 3000 - Proficiency Development (3)
- JPNS 3190 - Foreign Language Journal (1)
- JPNS 3220 - Phonetics and Phonology (3)
- JPNS 3320 - Applied Language Studies (1-3)
- JPNS 3360 - Advanced Grammar (3)
- JPNS 3550 DV - Cultural Heritage I (3)
- JPNS 3560 - Cultural Heritage II (3)
- JPNS 3570 - Special Topics in Culture (3)
- JPNS 3610 - Literature Survey I (3)
- JPNS 3620 - Literature Survey II (3)
- JPNS 3630 - Literature Genres (3)
- JPNS 3650 - Literature Periods (3)
- JPNS 3670 - Literature Authors (3)
- JPNS 3690 - Literature Special Topics in Literature (1-3)
- JPNS 3710 - Business Language I (3)
- JPNS 3720 - Language for Specific Purposes I (3)
- JPNS 3730 - Language for Specific Purposes II (3)
- JPNS 3740 - Translation/Interpreting I (3)
- JPNS 3850 - Study Abroad (1-6)
- JPNS 4190 - Foreign Language Journal (1)
- JPNS 4220 - Special Topics in Linguistics (3)
- JPNS 4620 - Survey of Literature I (3)
- JPNS 4630 - Survey of Literature II (3)
- JPNS 4690 - Special Topics in Literature (3)
- JPNS 4710 - Business Language II (3)
- JPNS 4740 - Translation/Interpreting II (3)
- JPNS 4830 - Directed Readings (1-3)
- JPNS 4850 - Study Abroad (1-6)
- JPNS 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- JPNS 4960 - Senior Seminar and Thesis (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.

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- SPAN 1010 - First Year I (3)
- SPAN 1020 - First Year II (3)
- SPAN 2010 - Second Year I (3)
- SPAN 2020 HU - Second Year II (3)

Required Courses (6 credit hours)

- SPAN 3060 - Grammar & Composition (3)
- SPAN 3160 - Introduction to Literature (3)

Elective Courses (select a minimum of 9 credit hours)

- SPAN 3000 - Proficiency Development (3)
- SPAN 3190 - Foreign Language Journal (1)
- SPAN 3220 - Phonetics and Phonology (3)
- FL 3320 - Applied Language Studies (1-3)
- FL 3320 - Language & Culture of Europe (3) *
- SPAN 3360 - Advanced Grammar (3)
- SPAN 3550 DV - Cultural Heritage I (3)
- SPAN 3560 - Cultural Heritage II (3)
- SPAN 3570 - Special Topics in Culture (3)
- SPAN 3610 - Literature Survey I (3)
- SPAN 3620 - Literature Survey II (3)
- SPAN 3630 - Literature Genres (3)
- SPAN 3650 - Literature Periods (3)
- SPAN 3670 - Literature Authors (3)
- SPAN 3690 - Literature Special Topics in Literature (1-3)
- SPAN 3710 - Business Language I (3)
- SPAN 3720 - Language for Specific Purposes I (3)
- SPAN 3730 - Language for Specific Purposes II (3)
- SPAN 3740 - Translation/Interpreting I (3)
- SPAN 3850 - Study Abroad (1-6)
- SPAN 4190 - Foreign Language Journal (1)
- SPAN 4220 - Special Topics in Linguistics (3)
- SPAN 4620 - Survey of Literature I (3)
- SPAN 4630 - Survey of Literature II (3)
- SPAN 4690 - Special Topics in Literature (3)
- SPAN 4710 - Business Language II (3)
- SPAN 4740 - Translation/Interpreting II (3)
- SPAN 4830 - Directed Readings (1-3)
- SPAN 4850 - Study Abroad (1-6)
- SPAN 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- SPAN 4960 - Senior Seminar and Thesis (3)

*FL 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.

Spanish, Commercial Emphasis Minor

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.

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- SPAN 1010 - First Year I (3)
- SPAN 1020 - First Year II (3)
- SPAN 2010 - Second Year I (3)
- SPAN 2020 HU - Second Year II (3)

Required Courses (12 credit hours)

- SPAN 3060 - Grammar & Composition (3)
- SPAN 3160 - Introduction to Literature (3)
- SPAN 3710 - Business Language I (3)
- SPAN 4710 - Business Language II (3)

Elective Courses (select a minimum of 6 credit hours)

- SPAN 3550 DV - Cultural Heritage I (3)
- SPAN 3560 - Cultural Heritage II (3)
- SPAN 3570 - Special Topics in Culture (3)

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 21 upper division hours in French. At least 3 credit hours of minor courses must be completed at WSU.

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- FRCH 1010 - First Year I (3)
- FRCH 1020 - First Year II (3)
- FRCH 2010 - Second Year I (3)
- FRCH 2020 HU - Second Year II (3)

Required Courses (15 credit hours)

- FRCH 3060 - Grammar & Composition (3)
- FRCH 3160 - Introduction to Literature (3)
- FRCH 3220 - Phonetics and Phonology (3)
- FL 4340 - Foreign Language Acquisition and Teaching for Proficiency (3)
- FL 4400 - Methods of Teaching a Foreign Language (3) *

*Students must take ACTFL Oral and Written Proficiency Examinations prior to taking FL 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 taking FL 4400. (Please see the foreign language advisor.)

Elective Courses (select a minimum of 6 credit hours)

- FRCH 3000 - Proficiency Development (3)
- FRCH 3190 - Foreign Language Journal (1)
- FL 3320 - Applied Language Studies (1-3)
- FRCH 3360 - Advanced Grammar (3)
- FRCH 3550 DV - Cultural Heritage I (3)
- FRCH 3560 - Cultural Heritage II (3)
- FRCH 3570 - Special Topics in Culture (3)
- FRCH 3610 - Literature Survey I (3)
- FRCH 3620 - Literature Survey II (3)
- FRCH 3630 - Literature Genres (3)
- FRCH 3650 - Literature Periods (3)

- FRCH 3690 - Literature Special Topics in Literature (1-3)
- FRCH 3710 - Business Language I (3)
- FRCH 3720 - Language for Specific Purposes I (3)
- FRCH 3730 - Language for Specific Purposes II (3)
- FRCH 3740 - Translation/Interpreting I (3)
- FRCH 3850 - Study Abroad (1-6)
- FRCH 4190 - Foreign Language Journal (1)
- FRCH 4620 - Survey of Literature I (3)
- FRCH 4630 - Survey of Literature II (3)
- FRCH 4690 - Special Topics in Literature (3)
- FRCH 4710 - Business Language II (3)
- FRCH 4740 - Translation/Interpreting II (3)
- FRCH 4830 - Directed Readings (1-3)
- FRCH 4850 - Study Abroad (1-6)
- FRCH 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- FRCH 4960 - Senior Seminar and Thesis (3)

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 21 upper division hours in German. At least 3 credit hours of minor courses must be completed at WSU.

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- GRMN 1010 - First Year I (3)
- GRMN 1020 - First Year II (3)
- GRMN 2010 - Second Year I (3)
- GRMN 2020 HU - Second Year II (3)

Required Courses (15 credit hours)

- GRMN 3060 - Grammar & Composition (3)
- GRMN 3160 - Introduction to Literature (3)
- GRMN 3220 - Phonetics and Phonology (3)
- GRMN 4340 - Foreign Language Acquisition and Teaching for Proficiency (3)
- GRMN 4400 - Methods of Teaching a Foreign Language (3) *

Elective Courses (select a minimum of 6 credit hours)

- GRMN 3000 - Proficiency Development (3)
- GRMN 3190 - Foreign Language Journal (1)
- GRMN 3320 - Applied Language Studies (1-3)
- GRMN 3360 - Advanced Grammar (3)
- GRMN 3550 DV - Cultural Heritage I (3)
- GRMN 3560 - Cultural Heritage II (3)
- GRMN 3570 - Special Topics in Culture (3)
- GRMN 3610 - Literature Survey I (3)
- GRMN 3620 - Literature Survey II (3)
- GRMN 3630 - Literature Genres (3)
- GRMN 3650 - Literature Periods (3)
- GRMN 3670 - Literature Authors (3)
- GRMN 3690 - Literature Special Topics in Literature (1-3)

- GRMN 3710 - Business Language I (3)
- GRMN 3720 - Language for Specific Purposes I (3)
- GRMN 3730 - Language for Specific Purposes II (3)
- GRMN 3740 - Translation/Interpreting I (3)
- GRMN 3850 - Study Abroad (1-6)
- GRMN 4190 - Foreign Language Journal (1)
- GRMN 4620 - Survey of Literature I (3)
- GRMN 4630 - Survey of Literature II (3)
- GRMN 4690 - Special Topics in Literature (3)
- GRMN 4710 - Business Language II (3)
- GRMN 4740 - Translation/Interpreting II (3)
- GRMN 4830 - Directed Readings (1-3)
- GRMN 4850 - Study Abroad (1-6)
- GRMN 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- GRMN 4960 - Senior Seminar and Thesis (3)

*Students must take ACTFL Oral and Written Proficiency Examinations prior to taking FL 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 taking FL 4400. (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 21 upper division hours in Spanish. At least 3 credit hours of minor courses must be completed at WSU.

Course Requirements for Minor

Prerequisite Courses

Complete the following 12 credit hours (or demonstrate equivalent proficiency)

- SPAN 1010 - First Year I (3)
- SPAN 1020 - First Year II (3)
- SPAN 2010 - Second Year I (3)
- SPAN 2020 HU - Second Year II (3)

Required Courses (15 credit hours)

- SPAN 3060 - Grammar & Composition (3)
- SPAN 3160 - Introduction to Literature (3)
- SPAN 3220 - Phonetics and Phonology (3)
- FL 4340 - Foreign Language Acquisition and Teaching for Proficiency (3)
- FL 4400 - Methods of Teaching a Foreign Language (3) *

Elective Courses (select a minimum of 6 credit hours)

- SPAN 3000 - Proficiency Development (3)
- SPAN 3190 - Foreign Language Journal (1)
- FL 3320 - Applied Language Studies (1-3)
- SPAN 3360 - Advanced Grammar (3)
- SPAN 3550 DV - Cultural Heritage I (3)
- SPAN 3560 - Cultural Heritage II (3)
- SPAN 3570 - Special Topics in Culture (3)
- SPAN 3610 - Literature Survey I (3)

- SPAN 3620 - Literature Survey II (3)
- SPAN 3630 - Literature Genres (3)
- SPAN 3650 - Literature Periods (3)
- SPAN 3670 - Literature Authors (3)
- SPAN 3690 - Literature Special Topics in Literature (1-3)
- SPAN 3710 - Business Language I (3)
- SPAN 3720 - Language for Specific Purposes I (3)
- SPAN 3730 - Language for Specific Purposes II (3)
- SPAN 3740 - Translation/Interpreting I (3)
- SPAN 3850 - Study Abroad (1-6)
- SPAN 4190 - Foreign Language Journal (1)
- SPAN 4620 - Survey of Literature I (3)
- SPAN 4630 - Survey of Literature II (3)
- SPAN 4690 - Special Topics in Literature (3)
- SPAN 4710 - Business Language II (3)
- SPAN 4740 - Translation/Interpreting II (3)
- SPAN 4830 - Directed Readings (1-3)
- SPAN 4850 - Study Abroad (1-6)
- SPAN 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- SPAN 4960 - Senior Seminar and Thesis (3)

**Students must take ACTFL Oral and Written Proficiency Examinations prior to taking FL 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 taking FL 4400. (Please see the foreign language advisor.)*

Foreign Language Departmental Honors

Please contact the Foreign Languages Department for advisement and permission prior to enrolling in Honors courses.

Requirements for Departmental Honors in Foreign Languages:

1. Maintain a GPA of 3.5 in all major classes and an overall GPA of 3.0.
2. Complete at least 6 credit hours of French, German or Spanish on an Honors basis; this may be done in any upper-division course and is part of the 30.5 credit hour major requirement. A written agreement should be reached with the appropriate professor regarding expectations when taking a class as Honors.
3. Complete 3 credit hours of General Honors courses.
4. Complete HNRS 4990 - Honors Senior Project (3) – the advisor for this project must be an instructor in Foreign Languages. The project should be shared with other students in a public forum such as the Undergraduate Literature Conference, as undergraduate research or at the department scholarship reception held each spring.

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

Department of Performing Arts Sid and Mary Foulger School of Music

Chair: Dr. Thomas Priest

Location: BC 331

Telephone Contact: Georgene Ady 801-626-6437

Professors: Karen Brookens, Tracy Callahan, James Christian, David Feller, Mark Henderson, Joanne Lawrence, Michael Palumbo, Thomas Priest, Thomas Root, Erik Stern, Van Tinkham, Shi-Hwa Wang, Yu-Jane Yang, Catherine Zublin; **Associate Professors:** Ralph van der Beek, Amanda Sowerby, Viktor Uzur; **Assistant Professors:** Carey Campbell, Jennifer Kokai

The Department of Performing Arts | Sid and Mary Foulger School of Music program 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.

Sid and Mary Foulger School of Music

The Sid and Mary Foulger 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, choral music education, or instrumental music education. Additional programs include the Bachelor of Arts in music and a music minor.

The primary goals of the Foulger 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 | Foulger 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 must register for the 9 hour music core as follows: MUSC 1110, MUSC 1130, MUSC 1150, MUSC 1901, major private lessons, master class, and major 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. All music majors and minors at Weber State University must study privately each semester with a WSU faculty member or an approved adjunct faculty member.
- C. All music majors pursuing the performance, keyboard pedagogy, stringed instrument pedagogy, or vocal pedagogy emphasis will study privately in their major area for a minimum of 6 semesters. All music majors pursuing one of these emphases will enroll in one of the major performing ensembles (concert choir, symphonic band, symphony orchestra, guitar ensemble, keyboard ensemble-- as appropriate to the student's major performance area) for a minimum of 8 credit hours.
- D. Music education majors (instrumental or choral emphasis) will study privately in their major area for a minimum of 7 semesters. Music education majors will enroll in one of the major performing ensembles (concert choir, symphonic band, symphony orchestra, guitar ensemble—as appropriate to the student's major area) for a minimum of 7 credit hours; music education majors are exempted from performance group participation during the semester of student teaching.
- E. All music majors must participate in their major area performing group during each semester of school enrollment, except as noted in "D" above.
- F. All music majors are expected to complete the four levels of competency in their major performance area of study prior to graduation.
- G. All music minors will study privately until advancement to the 3000 level of proficiency is achieved, with a minimum of four semesters of study.
- H. All music minors must participate in their concentration area major performing ensemble each semester until the minor is completed, with a minimum of two semesters of enrollment in the ensemble.
- I. A \$350 Applied Music Fee is charged to music majors and minors for one credit hour instrumental or vocal lessons. These lessons are 45 minutes in length and require attendance at a weekly master class. The fee for two credit hours lessons is \$700. This is for two 45 minute lessons each week plus master class attendance and a research paper or project.
- J. A \$258 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.
- K. All music education, vocal and keyboard pedagogy majors should consult the latest student handbook, and with their major advisors, for specific internship requirements.

Schedule for Performance Evaluations

- 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 recital are excused from that performance area's performance evaluation the semester in which the recital is completed.

Procedures for Performance Evaluation

- 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.
- C. A student in a Bachelor of Music or Bachelor of Music Education degree program will not be permitted to progress to the 3000 level until the piano proficiency examination is passed.
- D. 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.
- E. 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.
- F. 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.
- G. 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 music majors and minors must participate in at least one general student recital per semester. This should normally be a solo appearance, but this determination is left to the discretion of the teacher.
- B. All music majors except those in the Bachelor of Arts and keyboard pedagogy programs, must present a half-hour formal junior recital upon reaching the 3000 competency level. All music 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 music majors in Bachelor of Music and Bachelor of Arts programs 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. See "Senior Project" in the next column for music education exceptions to this requirement.
- D. Repertoire for the senior recital must not contain music performed on the junior recital.
- E. Completion of a senior recital will exempt a student from further proficiency level evaluations but not from continued private study.
- F. 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 faculty member of the student's choice.
- G. A faculty committee selected by the area director will be present at the public performance of the senior recital and will recommend pass/fail of the recital.
- H. All students must complete a recital approval form for junior or senior recitals. The recital form must be completed and signed by the music advisor and applied teacher prior to scheduling any required faculty preview performance.
- I. 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.

Senior Project

- A. 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.
- B. The Director of Music Education in consultation with the music faculty must approve the senior project option at least one semester prior to the completion of the project. Students must enroll in MUSC 4830 at least one semester prior to completing the senior project. A written proposal must be approved and signed by a faculty committee before the student may enroll in MUSC 4992.
- C. The committee must be comprised of at least three members including the following:
1. The Director of Music Education or his or her designee
 2. An appropriate Music Area Head or his or her designee
 3. A Weber State Faculty Member
- Appropriate outside members that are not members of the WSU faculty may be selected with the approval of the music faculty.
- D. Upon receiving approval of the project, the student should proceed with the project in close consultation with the committee.
- E. Upon completion of the project, the faculty committee shall meet and provide useful information to the student. Each member of the committee will assign a letter grade. These grades will be averaged for the final grade in MUSC 4992 (Senior Project).

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. Transfer students must also complete two years of recital attendance. No student will be approved for graduation until this two year recital attendance requirement is met.

Piano Proficiency

All students in the Bachelor of Music and Bachelor of Music Education programs must pass the piano proficiency examination and must be registered for Class Piano or private piano until the exam is passed. It is suggested that the requirements for piano proficiency be completed by the end of the student's sophomore year.

Music Major Foreign Language Requirement

The Bachelor of Music and Bachelor of Music Education 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.

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 pursuing a BIS degree with Music as an Emphasis Area must complete the requirements for the Music Minor. (Also refer to Bachelor of Integrated Studies (BIS) requirements.)

Foulger School of Music Advisors

Advisors for Bachelor of Music in Performance, Pedagogy, and Bachelor of Arts degrees are:

Brass Area:	Dr. Carey Campbell	801-626-6790
Keyboard Area:	Dr. Yu-Jane Yang	801-626-7489
	Dr. Ralph Van der beek	801-626-6825
String Area:	Dr. Michael A. Palumbo	801-626-6991
Vocal Area:	Dr. Karen Brookens	801-626-6439
Wind and Percussion:	Dr. Carey Campbell	801-626-6790

Advisor for the Bachelor of Integrated Studies degree is:

Dr. Michael A. Palumbo 801-626-6991

Advisors for the Bachelor of Music Education degree are:

Choral Music Education:	Dr. Mark Henderson	801-626-6448
Wind/Brass/Percussion:	Dr. Thomas Priest	801-626-7181
String Area:	Dr. Michael A. Palumbo	801-626-6991
Music Education-Keyboard	Dr. Yu-Jane Yang	6801-26-7489

Advisor for the Music Minor is:

Dr. Viktor Uzur 801-626-6441

Music Core

Core Courses Required for All Majors (30 credit hours)

- MUSC 1110 - Music Theory I (3)
- MUSC 1120 - Music Theory II (3)
- MUSC 1130 - Sight-Singing & Ear-Training I (1)
- MUSC 1140 - Sight-Singing & Ear-Training II (1)
- MUSC 1901 - Music: The First-Year Experience (1)
- MUSC 1911 - Introduction to Music Technology (1)

- MUSC 2110 - Music Theory III (3)
- MUSC 2120 - Music Theory IV (3)
- MUSC 2130 - Sight Singing & Ear-Training III (1)
- MUSC 2140 - Sight Singing & Ear-Training IV (1)
- MUSC 3205 - Music History I: Medieval and Renaissance Music (2)
- MUSC 3206 - Music History II: Baroque and Classical Music (3)
- MUSC 3207 - Music History III: Music of the 19th through the 21st Centuries (3)
- MUSC 3208 - World Music (2)
- MUSC 3840 - Form and Analysis (2)

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.

Dance (BA)

The BA degree in Dance provides an awareness of the possibilities of dance in all of its manifestations and rigorously prepares students in performance, choreography, community outreach and involvement, education, technology, social and cultural roles, and research/scholarly endeavors. The degree prepares enthusiastic and energetic graduates who will use their passion about the art form to guide their career and advanced study choices.

Foreign Language: 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) and an overall GPA of 2.50 or "C+." In addition, a grade of "B" or higher is required in at least one 3000-level major course in both ballet and 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).

Advisement

Students should meet annually, if not more often, with the faculty advisor for course and program advisement. Email jlawrence@weber.edu 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 requirements for this major.

General Education

Refer to Degree and General Education 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/DV and NUTR 1020 LS are prerequisites for required dance courses.

Course Requirements for BA Degree:

Technique Courses Required (22 credit hours)

Appropriate level technique courses in ballet and modern dance (initially to be determined by placement class) are required every semester of residence—22 credit hours required, 11 each in Ballet and Modern Dance.

- DANC 1100 - Ballet I (1)
- DANC 1200 - Modern I (1)
- DANC 2470 - Ballet II (1.5)
- DANC 2490 - Modern II (1.5)
- DANC 3470 - Ballet III (1.5)
- DANC 3490 - Modern III (1.5)

Additional Dance Form Required

Select four of the following (4 credit hours):

- DANC 1450 - Special Topic Dance Form (1) variable topic
- DANC 1500 - Jazz I (1)
- DANC 1520 - Folk & Ethnic Dance (1)
- DANC 1580 - Tap Dance (1)
- DANC 2480 - Jazz II (1)
- DANC 3440 - Dance for Musical Theatre (1)
- DANC 3450 - Special Topic Dance Form (1) variable topic
- DANC 3580 - Intermediate/Advanced Tap Dance (1)

Creative Dance Courses Required (22 credit hours)

- DANC 2410 - Improvisation (2)
- DANC 3500 - Choreography I: Space & Time/Design in Dance (2)
- DANC 3510 - Choreography II: Process (2)
- DANC 3520 - Choreography Practicum (2)
- DANC 3910 - Moving Company: Rehearsal & Development (2) (must take four times=4)
- DANC 3911 - Moving Company: Performance (2) (must take twice=4)
- DANC 4700 - Creative Synthesis in Dance (2)
- DANC 4910 - Rehearsal and Performance (1) (must take four times=4)

Dance History Course Required (6 credit hours)

- DANC 3010 - Dance History I: Primitive Period-the Early Decades of Modern Dance (3)
- DANC 3020 - Dance History II: 20th Century Art and Education (3)

Support Courses Required (6-7 credit hours, choosing only 1 THEA option)

- DANC 1310 - Music for Dance (2)
- * THEA 1033 CA - Acting I (3) or
- THEA 2022 - Stage Costume (2) or
- THEA 2032 - Stage Lighting (2)
- DANC 2300 - Dance Kinesiology (2)

Elective Courses (6-10 hours) in any other area which adds to thesis research applicable to DANC 4700 Creative Synthesis in Dance.

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.

Dance Education (BA)

Program Prerequisites: For those seeking secondary certification, 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 42 of these are within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

Advisement

Students must consult with the Dance Program advisor at least once each term. Email jlawrence@weber.edu 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).

Admission Requirements

Declare your program of study. Dance Education majors seeking secondary certification 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.

Major Course Requirements for BS or BA Degree

Dance Courses Required (53 credit hours)

6 credit hours required in Ballet, 6 credit hours required in Modern, and 2 credit hours required in Jazz

- DANC 1100 - Ballet I (1) (1 each)
- DANC 1200 - Modern I (1) (1 each)
- DANC 1310 - Music for Dance (2)
- DANC 1500 - Jazz I (1) (1 each)
- DANC 1520 - Folk & Ethnic Dance (1)
- DANC 1580 - Tap Dance (1)
- DANC 2250 - Alignment and Conditioning for Dance/Pilates (1)
- DANC 2300 - Dance Kinesiology (2)
- DANC 2410 - Improvisation (2)

- DANC 2470 - Ballet II (1.5) (1 each)
- DANC 2480 - Jazz II (1) (1 each)
- DANC 2490 - Modern II (1.5) (1 each)
- DANC 3010 - Dance History I: Primitive Period-the Early Decades of Modern Dance (3)
- DANC 3020 - Dance History II: 20th Century Art and Education (3)
- DANC 3320 - Techniques and Materials for Teaching Modern Dance (2)
- DANC 3470 - Ballet III (1.5) (1 each)
- DANC 3490 - Modern III (1.5) (1 each)
- DANC 3500 - Choreography I: Space & Time/Design in Dance (2)
- DANC 3510 - Choreography II: Process (2)
- DANC 3520 - Choreography Practicum (2)
- DANC 3640 - Teaching Creative Dance in the Elementary School (2)
- DANC 3860 - Field Experience (1)
- DANC 4700 - Creative Synthesis in Dance (2)
- DANC 4910 - Rehearsal and Performance (1)

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.

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.

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to Foulger School of Music Advisors.

Admission Requirements

Declare your program of study (see Enrollment Services and Information).

General Education

Refer to Degree and General Education Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

Refer to the Foulger School of Music policies and procedures.

Major Course Requirements for Bachelor of Arts in Music Degree

Music Core (30 credit hours)

Complete the Music Core Course Requirements listed on Department of Performing Arts | Sid and Mary Foulger School of Music.

Additional Courses Required (minimum of 19 credit hours)

- MUSC 1150 - Class Piano I (1)
- MUSC 1160 - Class Piano II (1)
- MUSC 2150 - Class Piano III (1)
- MUSC 3840 - Form and Analysis (2)
- MUSC 4991 - Senior Recital (1)
- Applied Music in appropriate area (min. 7 semesters)
- Major Ensemble in appropriate area (min. 8 semesters)

Language Courses Required to fulfill the BA

Six semester-hours of foreign language chosen from French, German, Italian, and Spanish. 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. Language arts may include coursework in music theory, form & analysis, and music history.

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; 62-63 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.

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/DV - Introduction to Dance (3), THEA 1033 CA - Acting I (3) and THEA 1043 CA - Introduction to American Musical Theatre (3).

Major Course Requirements for BA Degree

Required Pre-Major Core Courses (13 credit hours)

- DANC 1010 CA/DV - Introduction to Dance (3)
- THEA 1013 CA - Introduction to Theatre (3)
- THEA 1033 CA - Acting I (3)
- THEA 1043 CA - Introduction to American Musical Theatre (3)
- THEA 1051 - Freshman (New Student) Seminar (1)

Language Courses Required to fulfill the BA

Refer to Degree and General Education 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 3303 - History and Literature of Theatre I, and THEA 3343 - History & Literature of Musical Theatre).

Required Courses for Musical Theatre Emphasis

Dance (8 credit hours)

The following courses may be repeated for credit as approved by an advisor

- DANC 1100 - Ballet I (1)
- DANC 1200 - Modern I (1)
- DANC 1450A - Flamenco (1) or
- DANC 3450A - Flamenco (1)
- DANC 1450B - Social Dance (1) or
- DANC 3450B - Social Dance (1)
- DANC 1450D - Rhythm Tap (1) or
- DANC 3450D - Rhythm Tap (1)
- DANC 1500 - Jazz I (1)
- DANC 1520 - Folk & Ethnic Dance (1)
- DANC 1580 - Tap Dance (1)
- DANC 2470 - Ballet II (1.5)
- DANC 2480 - Jazz II (1)
- DANC 2490 - Modern II (1.5)
- DANC 3440 - Dance for Musical Theatre (1)
- DANC 3470 - Ballet III (1.5)
- DANC 3490 - Modern III (1.5)
- DANC 4910 - Rehearsal and Performance (1)

Music (6 credit hours)

- MUSC 1100 - Fundamentals of Music (2)
- MUSC 1143 - Music Theory for Musical Theatre (4)

Theatre (42 credit hours)

- THEA 1030 - Voice and Movement for the Actor (3)
- THEA 1223 - Stage Makeup (2)
- THEA 1713 - Script Analysis (3)
- THEA 2012 - Stage Scenery (2)
- THEA 2022 - Stage Costume (2)
- THEA 2032 - Stage Lighting (2)
- THEA 2033 - Acting II (3)
- THEA 2443 - Acting for Musical Theatre (3)
- THEA 3103 - Directing I (3)
- THEA 3303 - History and Literature of Theatre I (3)
- THEA 3343 - History & Literature of Musical Theatre (3)
- THEA 3443 - Scene Study for Musical Theatre (3)
- THEA 3991 - Junior Seminar (1)
- THEA 4143 - Directing and Choreographing for Musical Theatre (3)
- THEA 4651 - Individual Training in Stage Voice (1) (repeated 4 times)

Theatre Design (2-3 credit hours)

Select one of the following theatre design classes

- THEA 3212 - Scenic Design (2)
- THEA 3222 - Stage Lighting Design (2)
- THEA 4203 - Costume Design (3)

Theatre Practicum (3 credit hours)

Select from the following options

- THEA 4851 - Design/Tech Practicum (1) *may be repeated for credit*
- THEA 4861 - Performance Practicum (1)

Theatre Arts (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 2.00 or higher.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; a minimum of 45-49 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.

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.)

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 and General Education Requirements of this catalog for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements. The following general education courses are required for the Theatre Major: THEA 1033 Acting I (3), ARTH 1090 Art and Architecture of the World: Paleolithic-AD 1000 (4) or ARTH 1100 Art and Architecture of the World: AD 1000-Present (4), and ENGL 3500 - Introduction to Shakespeare (3).

Major Course Requirements for BA Degree

45-49 Credit Hours (exclusive of required general education courses)

Theatre Courses Required (28-31 credit hours)

- THEA 1013 CA - Introduction to Theatre (3)
- THEA 1030 - Voice and Movement for the Actor (3) or
- COMM 1020 HU - Principles of Public Speaking (3)
- THEA 1051 - Freshman (New Student) Seminar (1)
- THEA 1713 - Script Analysis (3)
- THEA 1223 - Stage Makeup (2)
- THEA 2012 - Stage Scenery (2)
- THEA 2022 - Stage Costume (2)
- THEA 2032 - Stage Lighting (2)
- THEA 2403 - Production and Stage Management (3)
- THEA 3103 - Directing I (3)
- THEA 3303 - History and Literature of Theatre I (3)
- THEA 3313 - History and Literature of Theatre II (3)
- THEA 3991 - Junior Seminar (1)

Theatre Design (2-3 credit hours)

Select one of the following theatre design classes

- THEA 3212 - Scenic Design (2)
- THEA 3222 - Stage Lighting Design (2)
- THEA 4203 - Costume Design (3)

Theatre Practicum (3 credit hours)

Select 3 credit hours from the following options

- THEA 4851 - Design/Tech Practicum (1) *may be repeated for credit*
- THEA 4861 - Performance Practicum (1) *may be repeated for credit*

General Education Courses Required (10 credit hours)

The following general education courses are required for the Theatre Major:

- THEA 1033 CA - Acting I (3)
- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 (4) or
- ARTH 1100 CA - Art and Architecture of the World: AD 1000-Present (4)
- ENGL 3500 HU - Introduction to Shakespeare (3)

Language Courses Required to fulfill the BA

Refer to Degree and General Education 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).

Focus Areas and Sample Programs (12 credit hours)

Select at least 12 credit hours in one of the following emphasis areas, approved by an advisor

Acting/Directing

- THEA 2033 - Acting II (3)
- THEA 3033 - Advanced Acting (3)
- THEA 3340 - Theatre Management (3)
- THEA 4002D - Special Studies in Theatre: Auditioning (2)
- THEA 4103 - Directing II (3)
- THEA 4143 - Directing and Choreographing for Musical Theatre (3)
- THEA 4230 - Performance Seminar (1-3)
- THEA 4890 - Cooperative Work Experience or Internship (1-3)
- COMM 3070 - Performance Studies (3)

Design/Technical

- THEA 2203 - Costume Technology (3)
- THEA 3212 - Scenic Design (2)
- THEA 3222 - Stage Lighting Design (2)
- THEA 3232 - Scene Painting (2)
- THEA 3243 - Costume History (3)
- THEA 4203 - Costume Design (3)
- THEA 4220 - Design Seminar (1-3)
- THEA 4890 - Cooperative Work Experience or Internship (1-3)

Additional classes from across campus for Design/Technical Emphasis

see individual course descriptions for prerequisites

- ART 1130 - Design: 3D (3)
- ART 2250 - Foundations of Photography: Black & White/Analog (3)
- ART 2350 - Small Metals/Jewelry I (3)
- ART 3120 - Figure Drawing (3)
- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 (4)
- ARTH 1100 CA - Art and Architecture of the World: AD 1000-Present (4)
- COMM 3070 - Performance Studies (3)
- DET 1250 - Fundamentals of Architectural Drafting Using 2D CAD (3)
- DET 1340 - Architectural Board Drafting for Interior Design (3)
- DET 1350 - Residential Architectural Design (3)
- IDT 1020 - Presentation Techniques (3)
- IDT 2010 - Sustainability I: Textiles and Soft Materials (3)
- IDT 3040 - Perspective/Rendering (2)
- IDT 3010 - Historical Interiors (3)

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 2.00 or higher.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; a minimum of 45-49 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.

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.)

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 and General Education Requirements of this catalog for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements. The following general education courses are required for the Theatre Major: THEA 1033 Acting I (3), ARTH 1090 Art and Architecture of the World: Paleolithic-AD 1000 (4) or ARTH 1100 Art and Architecture of the World: AD 1000-Present (4), and ENGL 3500 - Introduction to Shakespeare (3).

Major Course Requirements for BA Degree

45-49 Credit Hours (exclusive of required general education courses)

Theatre Courses Required (28-31 credit hours)

- THEA 1013 CA - Introduction to Theatre (3)
- THEA 1030 - Voice and Movement for the Actor (3) or
- COMM 1020 HU - Principles of Public Speaking (3)
- THEA 1051 - Freshman (New Student) Seminar (1)
- THEA 1713 - Script Analysis (3)
- THEA 1223 - Stage Makeup (2)
- THEA 2012 - Stage Scenery (2)
- THEA 2022 - Stage Costume (2)
- THEA 2032 - Stage Lighting (2)
- THEA 2403 - Production and Stage Management (3)
- THEA 3103 - Directing I (3)
- THEA 3303 - History and Literature of Theatre I (3)
- THEA 3313 - History and Literature of Theatre II (3)
- THEA 3991 - Junior Seminar (1)

Theatre Design (2-3 credit hours)

Select one of the following theatre design classes

- THEA 3212 - Scenic Design (2)
- THEA 3222 - Stage Lighting Design (2)
- THEA 4203 - Costume Design (3)

Theatre Practicum (3 credit hours)

Select 3 credit hours from the following options

- THEA 4851 - Design/Tech Practicum (1) may be repeated for credit
- THEA 4861 - Performance Practicum (1) may be repeated for credit

General Education Courses Required (10 credit hours)

The following general education courses are required for the Theatre Major:

- THEA 1033 CA - Acting I (3)
- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 (4) or
- ARTH 1100 CA - Art and Architecture of the World: AD 1000-Present (4)
- ENGL 3500 HU - Introduction to Shakespeare (3)

Language Courses Required to fulfill the BA

Refer to Degree and General Education 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).

Focus Areas and Sample Programs (12 credit hours)

Select at least 12 credit hours in one of the following emphasis areas, approved by an advisor

Acting/Directing

- THEA 2033 - Acting II (3)
- THEA 3033 - Advanced Acting (3)
- THEA 3340 - Theatre Management (3)
- THEA 4002D - Special Studies in Theatre: Auditioning (2)
- THEA 4103 - Directing II (3)
- THEA 4143 - Directing and Choreographing for Musical Theatre (3)
- THEA 4230 - Performance Seminar (1-3)
- THEA 4890 - Cooperative Work Experience or Internship (1-3)
- COMM 3070 - Performance Studies (3)

Design/Technical

- THEA 2203 - Costume Technology (3)
- THEA 3212 - Scenic Design (2)
- THEA 3222 - Stage Lighting Design (2)
- THEA 3232 - Scene Painting (2)
- THEA 3243 - Costume History (3)
- THEA 4203 - Costume Design (3)
- THEA 4220 - Design Seminar (1-3)

- THEA 4890 - Cooperative Work Experience or Internship (1-3)

Additional classes from across campus for Design/Technical Emphasis

see individual course descriptions for prerequisites

- ART 1130 - Design: 3D (3)
- ART 2250 - Foundations of Photography: Black & White/Analog (3)
- ART 2350 - Small Metals/Jewelry I (3)
- ART 3120 - Figure Drawing (3)
- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 (4)
- ARTH 1100 CA - Art and Architecture of the World: AD 1000-Present (4)
- COMM 3070 - Performance Studies (3)
- DET 1250 - Fundamentals of Architectural Drafting Using 2D CAD (3)
- DET 1340 - Architectural Board Drafting for Interior Design (3)
- DET 1350 - Residential Architectural Design (3)
- IDT 1020 - Presentation Techniques (3)
- IDT 2010 - Sustainability I: Textiles and Soft Materials (3)
- IDT 3040 - Perspective/Rendering (2)
- IDT 3010 - Historical Interiors (3)

Theatre Teaching Requirements

Additional requirements for students completing the BA in Theatre Teaching

Required Theatre Classes

- THEA 3340 - Theatre Management (3)
- THEA 4713 - Teaching Theatre in the Secondary School (3)

And select two of the following

- THEA 2033 - Acting II (3)
- THEA 3033 - Advanced Acting (3)
- THEA 4103 - Directing II (3)
- THEA 4143 - Directing and Choreographing for Musical Theatre (3)
- THEA 4603 - Creative Drama (3)

Theatre teaching majors must also satisfy the Teacher Education admission and licensure requirements.

Music Major Performance and Pedagogy (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.

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to Foulger School of Music Advisors.

Admission Requirements

Declare your program of study (see Enrollment 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 and General Education Requirements for Bachelor of Music requirements. NTM 1700 and LIBS 1704 TD will fulfill the Computer Literacy general education requirement. PSY 1010 is recommended.

Refer to the Foulger School of Music policies and procedures.

Students in the BM and BME programs must be enrolled in Class Piano or private piano lessons until piano proficiency is passed. Students may not register for private instruction at the 3000 or 4000 level until piano proficiency is passed.

Major Course Requirements for Bachelor of Music Degree

Keyboard Performance Emphasis

Music Core (30 credit hours)

Complete the Music Core Course Requirements listed in the Department of Performing Arts | Sid and Mary Foulger School of Music.

Additional Courses Required (minimum of 30 credit hours)

- MUSC 2321 - Principles of Piano Accompanying I (1)
- MUSC 2331 - Principles of Piano Accompanying II (1)
- MUSC 3102 - Counterpoint (2)
- MUSC 3302 - Keyboard Literature I-II (2)
- MUSC 3312 - Keyboard Literature I-II (2)
- MUSC 3872 - Choral Conducting I-II (2) or
- MUSC 3822 - Instrumental Conducting I-II (2)
- MUSC 3991 - Junior Recital (1)
- MUSC 4302 - Keyboard Pedagogy I-II (2)
- MUSC 4312 - Keyboard Pedagogy I-II (2)
- MUSC 4991 - Senior Recital (1)
- Applied Music in appropriate area (min. 6 semesters)
- Major Ensemble in appropriate area (min. 8 semesters)
- Piano Proficiency

Foreign Language

See Foreign Language Requirements in the Music Area procedures and policies.

Vocal Performance emphasis

Music Core (30 credit hours)

Complete the Music Core Course Requirements listed in the Department of Performing Arts | Sid and Mary Foulger School of Music.

Additional Courses Required (minimum of 28 credit hours)

- MUSC 2321 - Principles of Piano Accompanying I (1)
- MUSC 2331 - Principles of Piano Accompanying II (1)
- MUSC 3102 - Counterpoint (2)
- MUSC 3402 - Vocal Literature I (2)
- MUSC 3412 - Vocal Literature II (2)
- MUSC 3872 - Choral Conducting I-II (2)
- MUSC 3991 - Junior Recital (1)
- MUSC 4402 - Vocal Pedagogy I-II (2)
- MUSC 4412 - Vocal Pedagogy I-II (2)
- MUSC 4991 - Senior Recital (1)
- Applied Music in appropriate area (min. 6 semesters)
- Major Ensemble in appropriate area (min. 8 semesters)
- Piano Proficiency

Foreign Language

See Foreign Language Requirements in the Music Area procedures and policies.

Instrumental Performance Emphasis

Music Core (30 credit hours)

Complete the Music Core Course Requirements listed in the Department of Performing Arts | Sid and Mary Foulger School of Music.

Additional Courses Required (minimum of 22 credit hours)

Choose 2 courses from the following first group that are most closely related to the student's major performance area:

- MUSC 2821 - Percussion Methods I (1) and
- MUSC 2822 - Percussion Methods II (1) or
- MUSC 2841 - Brass Methods I (1) and
- MUSC 2842 - Brass Methods II (1) or
- MUSC 2851 - Woodwind Methods I (1) and
- MUSC 2852 - Woodwind Methods II (1) or
- MUSC 2871 - String Methods I (1) and
- MUSC 2872 - String Methods II (1)
- MUSC 3102 - Counterpoint (2)
- MUSC 3822 - Instrumental Conducting I-II (2) and
- MUSC 3823 - Instrumental Conducting I-II (2)
- MUSC 3991 - Junior Recital (1)
- MUSC 4991 - Senior Recital (1)
- Applied Music in appropriate area (min. 6 semesters)
- Major Ensemble in appropriate area (min. 8 semesters)
- Piano Proficiency

Foreign Language

See Foreign Language Requirements in the Music Area procedures and policies.

Keyboard Pedagogy Emphasis

Music Core (30 credit hours)

Complete the Music Core Course Requirements listed in the Department of Performing Arts | Sid and Mary Foulger School of Music.

Additional Courses Required (minimum of 32 credit hours)

- MUSC 2321 - Principles of Piano Accompanying I **(1)**
- MUSC 2331 - Principles of Piano Accompanying II **(1)**
- MUSC 3102 - Counterpoint **(2)**
- MUSC 3302 - Keyboard Literature I-II **(2)**
- MUSC 3312 - Keyboard Literature I-II **(2)**
- MUSC 3872 - Choral Conducting I-II **(2)** or
- MUSC 3822 - Instrumental Conducting I-II **(2)**
- MUSC 4302 - Keyboard Pedagogy I-II **(2)**
- MUSC 4312 - Keyboard Pedagogy I-II **(2)**
- MUSC 4860 - Internship in Music **(1-3)** (min. 2 credit hours required)
- MUSC 4991 - Senior Recital **(1)**
- Applied Piano or Organ **(min. 7 semesters)**
- Keyboard Ensemble **(min. 8 semesters)**
- Piano Proficiency

Refer to the student handbook and course requirement handouts for specific Internship and Directed Reading requirements.

Foreign Language

See Foreign Language Requirements in the Music Area procedures and policies.

Stringed Instrument Pedagogy Emphasis

Music Core (30 credit hours)

Complete the Music Core Course Requirements listed in the Department of Performing Arts | Sid and Mary Foulger School of Music.

Additional Courses Required (minimum of 32 credit hours)

- MUSC 2871 - String Methods I **(1)**
- MUSC 2872 - String Methods II **(1)**
- MUSC 3102 - Counterpoint **(2)**
- MUSC 3822 - Instrumental Conducting I-II **(2)**
- MUSC 3823 - Instrumental Conducting I-II **(2)**
- MUSC 3851 - Stringed Instrument Pedagogy I **(2)**
- MUSC 3852 - Stringed Instrument Pedagogy II **(2)**
- MUSC 3991 - Junior Recital **(1)**
- MUSC 4771 - Stringed Instrument Literature I **(2)**
- MUSC 4772 - Stringed Instrument Literature II **(2)**
- MUSC 4991 - Senior Recital **(1)**
- Applied Music on appropriate stringed instrument **(min. 7 semesters)**
- Weber State Symphony Orchestra **(min. 8 semesters)**
- Piano Proficiency

Refer to the student handbook and course requirement handouts for specific Internship and Directed Reading requirements.

Foreign Language

See Foreign Language Requirements in the Music Area procedures and policies.

Vocal Pedagogy Emphasis

Music Core (30 credit hours)

Complete the Music Core Course Requirements listed in the Department of Performing Arts | Sid and Mary Foulger School of Music.

Additional Courses Required (minimum of 32 credit hours)

- MUSC 2321 - Principles of Piano Accompanying I **(1)**
- MUSC 2331 - Principles of Piano Accompanying II **(1)**
- MUSC 3102 - Counterpoint **(2)**
- MUSC 3402 - Vocal Literature I **(2)**
- MUSC 3412 - Vocal Literature II **(2)**
- MUSC 3872 - Choral Conducting I-II **(2)**
- MUSC 3991 - Junior Recital **(1)**
- MUSC 4402 - Vocal Pedagogy I-II **(2)**
- MUSC 4412 - Vocal Pedagogy I-II **(2)**
- MUSC 4860 - Internship in Music **(1-3)** (min. 2 credit hours required)
- MUSC 4991 - Senior Recital **(1)**
- Applied Music in appropriate area **(min. 6 semesters)**
- Major Ensemble in appropriate area **(min. 8 semesters)**
- Piano Proficiency

Refer to the student handbook and course requirement handouts for specific Internship and Directed Reading requirements.

Foreign Language

See Foreign Language Requirements in the Music Area procedures and policies.

Music Education Teaching (BME)

Program Prerequisites: Audition required for admission to program. 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: A total of 120 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.

Advisement

Music majors should meet with an advisor prior to registration. For current advisor listing please refer to Foulger School of Music Advisors.

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 and General Education Requirements for Bachelor of Music requirements. NTM 1700 and LIBS 1704 will fulfill the Computer Literacy general education requirement. PSY 1010 is recommended.

Refer to the Foulger School of Music policies and procedures.

Students in the BM and BME programs must be enrolled in Class Piano or private piano lessons until piano proficiency is passed. Students may not register for private instruction at the 3000 or 4000 level until piano proficiency is passed.

Major Course Requirements for Bachelor of Music Education Degree

Choral Music Education Emphasis (Secondary Only Option)

For students seeking licensure to teach music in secondary schools

Music Core (30 credit hours)

Complete the Music Core Course Requirements listed on Department of Performing Arts | Sid and Mary Foulger School of Music.

Additional Courses Required (minimum of 34-37 credit hours)

Students whose main performing instrument is piano or organ must also take two semesters of MUSC 1620 and one semester of MUSC 2620 (voice lessons)

- MUSC 2321 - Principles of Piano Accompanying I (1)
- MUSC 2331 - Principles of Piano Accompanying II (1)
- MUSC 2540 - Instrumental Techniques for Choral Majors (2)
- MUSC 3122 - Choral Arranging (2)
- MUSC 3842 - Producing the School Musical (2)
- MUSC 3872 - Choral Conducting I-II (2)
- MUSC 3882 - Choral Conducting I-II (2)
- MUSC 3991 - Junior Recital (1)
- MUSC 4402 - Vocal Pedagogy I-II (2)
- MUSC 4822 - Junior High/ Middle School Music Methods (2)
- MUSC 4842 - High School Music Methods (2)
- MUSC 4860 - Internship in Music (1-3) (min. 1 credit hour required)
- MUSC 4991 - Senior Recital (1) or
- MUSC 4992 - Senior Project (1) *

**Students must enroll in MUSC 4830 - Directed Readings (1) as a prerequisite.*

Applied Voice or Piano – min. 6 semesters
Major Choral Ensemble – min. 7 semesters
Piano proficiency

Foreign Language

See Foreign Language Requirements in the Music Area procedures and policies.

Instrumental Music Education Emphasis (Secondary Only Option)

For students seeking licensure to teach music in secondary schools

Music Core (30 credit hours)

Complete the Music Core Course Requirements listed on Department of Performing Arts | Sid and Mary Foulger School of Music.

Additional Courses Required (minimum of 35 credit hours)

- MUSC 2821 - Percussion Methods I (1)
- MUSC 2822 - Percussion Methods II (1)
- MUSC 2841 - Brass Methods I (1)
- MUSC 2842 - Brass Methods II (1)
- MUSC 2851 - Woodwind Methods I (1)
- MUSC 2852 - Woodwind Methods II (1)
- MUSC 2871 - String Methods I (1)
- MUSC 2872 - String Methods II (1)
- MUSC 2881 - Vocal Workshop (1)
- MUSC 3112 - Orchestration (2)
- MUSC 3822 - Instrumental Conducting I-II (2)
- MUSC 3823 - Instrumental Conducting I-II (2)
- MUSC 3991 - Junior Recital (1)
- MUSC 4822 - Junior High/ Middle School Music Methods (2)
- MUSC 4842 - High School Music Methods (2)
- MUSC 4860 - Internship in Music (1-3) (min. 1 credit hour required)
- MUSC 4991 - Senior Recital (1) or
- MUSC 4992 - Senior Project (1) *

**Students must enroll in MUSC 4830 - Directed Readings (1) as a prerequisite.*

Applied Music in appropriate area – min. 6 semesters
Major Ensemble in appropriate area – min. 7 semesters
Piano proficiency

Additional Coursework for K-12 Option

For students seeking licensure to teach music in Kindergarten through 12th grade

CHF 1500 SS - Human Development (3) is a required course outside of the major

Courses Required

- MUSC 3924 - Music Teaching and Learning in the Elementary School (4)
- MUSC 4860 - Internship in Music (1-3) (min. 2 credit hours required) (1 additional credit hour)

Dance Education (BS)

Program Prerequisites: For those seeking secondary certification, 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 42 of these are within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

Advisement

Students must consult with the Dance Program advisor at least once each term. Email jlawrence@weber.edu 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).

Admission Requirements

Declare your program of study. Dance Education majors seeking secondary certification 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.

Major Course Requirements for BS or BA Degree

Dance Courses Required (53 credit hours)

6 credit hours required in Ballet, 6 credit hours required in Modern, and 2 credit hours required in Jazz

- DANC 1100 - Ballet I (1) (1 each)
- DANC 1200 - Modern I (1) (1 each)
- DANC 1310 - Music for Dance (2)
- DANC 1500 - Jazz I (1) (1 each)
- DANC 1520 - Folk & Ethnic Dance (1)
- DANC 1580 - Tap Dance (1)
- DANC 2250 - Alignment and Conditioning for Dance/Pilates (1)
- DANC 2300 - Dance Kinesiology (2)
- DANC 2410 - Improvisation (2)
- DANC 2470 - Ballet II (1.5) (1 each)
- DANC 2480 - Jazz II (1) (1 each)
- DANC 2490 - Modern II (1.5) (1 each)
- DANC 3010 - Dance History I: Primitive Period-the Early Decades of Modern Dance (3)
- DANC 3020 - Dance History II: 20th Century Art and Education (3)
- DANC 3320 - Techniques and Materials for Teaching Modern Dance (2)
- DANC 3470 - Ballet III (1.5) (1 each)
- DANC 3490 - Modern III (1.5) (1 each)
- DANC 3500 - Choreography I: Space & Time/Design in Dance (2)
- DANC 3510 - Choreography II: Process (2)
- DANC 3520 - Choreography Practicum (2)

- DANC 3640 - Teaching Creative Dance in the Elementary School (2)
- DANC 3860 - Field Experience (1)
- DANC 4700 - Creative Synthesis in Dance (2)
- DANC 4910 - Rehearsal and Performance (1)

Health and Science Courses Required to fulfill the BS

- ZOOL 1020 LS - Human Biology (3)
- AT 2430 - Prevention and Care of Musculoskeletal Injuries (3)
- EDUC 4480 - Differentiated Curriculum for the Gifted and Talented (3)
- EDUC 4510 - Foundations in Special Education Practice and Law (3)

Music/Fine Arts Concentration for Elementary Education

Program Prerequisite: Fulfill the Elementary Education Major requirements (see Elementary Education in the Department of Teacher Education).

Minor: Required.

Grade Requirements: Refer to the Elementary Education Major in the Department of Teacher Education

Credit Hour Requirements: A total of 9 or 18 credit hours for these concentrations. Also refer to the Elementary Education Major in the Department of Teacher Education.

Courses for 9 or 18 Hour Fine Arts Concentration

Students electing the 9 or 18 hour Fine Arts Concentration may choose from the following music courses as part of this concentration.

- MUSC 1010 CA - Introduction to Music (3)
- MUSC 1100 - Fundamentals of Music (2)
- MUSC 3824 - Music for Elementary Teachers (4) *

Courses for 9 Hour Music Concentration

Students electing the 9 hour Music Concentration may choose from the following music courses to satisfy the concentration requirements.

- MUSC 1010 CA - Introduction to Music (3)
- MUSC 1040 CA/DV - Music of World Cultures (3)
- MUSC 1063 CA - Music in Religion (3)
- MUSC 1100 - Fundamentals of Music (2)
- MUSC 2881 - Vocal Workshop (1)
- MUSC 3824 - Music for Elementary Teachers (4) *

Note:

* Required course

Dance Minor

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. Students wishing the minor

program must register with the Dance Program Director. 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.

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.

Course Requirements for Minor

Courses Required (18 credit hours)

Select 18 credit hours from the following, with not 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

- DANC 1100 - Ballet I (1)
- DANC 1200 - Modern I (1)
- DANC 1500 - Jazz I (1)
- DANC 1520 - Folk & Ethnic Dance (1) *
- DANC 2470 - Ballet II (1.5)
- DANC 3470 - Ballet III (1.5)
- DANC 2490 - Modern II (1.5)
- DANC 3490 - Modern III (1.5)
- DANC 2480 - Jazz II (1)
- DANC 3440 - Dance for Musical Theatre (1) *

**DANC 1520 and DANC 3440 may not be repeated for credit.*

Area 2, Creative Work

- DANC 2410 - Improvisation (2)
- DANC 3500 - Choreography I: Space & Time/Design in Dance (2)
- DANC 3510 - Choreography II: Process (2)
- DANC 3520 - Choreography Practicum (2)
- DANC 3910 - Moving Company: Rehearsal & Development (2)
- DANC 3911 - Moving Company: Performance (2)
- DANC 4910 - Rehearsal and Performance (1)

Area 3, Theoretical Aspects

- DANC 1010 CA/DV - Introduction to Dance (3)
- DANC 3010 - Dance History I: Primitive Period-the Early Decades of Modern Dance (3)
- DANC 3020 - Dance History II: 20th Century Art and Education (3)
- PEP 2300 - Health/Fitness Evaluation and Exercise Prescription (3)

Music Minor

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 24 credit hours.

Advisement

Music minors should meet with an advisor prior to registration. For current advisor listing please refer to Foulger School of Music Advisors.

Course Requirements for Music Minor

Music Courses Required (24 credit hours)

- MUSC 1010 CA - Introduction to Music (3)
- MUSC 1110 - Music Theory I (3)
- MUSC 1120 - Music Theory II (3)
- MUSC 1130 - Sight-Singing & Ear-Training I (1)
- MUSC 1140 - Sight-Singing & Ear-Training II (1)
- MUSC 1150 - Class Piano I (1)
- MUSC 1160 - Class Piano II (1)
- MUSC 1901 - Music: The First-Year Experience (1)
- MUSC 3991 - Junior Recital (1)

One of the following General Education courses:

- 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/DV - Music of World Cultures (3)
- MUSC 1043 HU - Music, the Arts & Civilizations (3)
- MUSC 1063 CA - Music in Religion (3)

Applied Music Requirement

4 credit hours minimum or until completion of the Junior Recital

Major Ensemble Requirement

2 credit hours minimum or until completion of the music minor requirements

Theatre Arts Minor

Grade Requirements: A grade of "C" or better in courses used toward the minor.

Credit Hour Requirements: A minimum of 19 credit hours in Theatre Arts classes.

Course Requirements for Minor

Theatre Courses Required (19 credit hours)

- THEA 1013 CA - Introduction to Theatre (3)
- THEA 1033 CA - Acting I (3)
- THEA 1713 - Script Analysis (3)

Select two of the following technical theatre classes

- THEA 1223 - Stage Makeup (2)
- THEA 2012 - Stage Scenery (2)
- THEA 2022 - Stage Costume (2)
- THEA 2032 - Stage Lighting (2)

Select one of the following theatre history classes

- THEA 3303 - History and Literature of Theatre I (3)
- THEA 3313 - History and Literature of Theatre II (3)
- THEA 3323 HU - History and Literature of Contemporary Theatre (3)

Select one of the following options

- Any upper division 3 credit hour Theatre Arts course
- Any upper division 2 credit hour Theatre Arts course plus any 1 credit hour Theatre Practicum

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 Director.

Grade Requirements: A GPA of 2.25 or better in courses used toward the minor.

Credit Hour Requirements: Minimum of 18 credit hours.

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

Specific Dance Teaching Courses Required (13 credit hours)

- DANC 3320 - Techniques and Materials for Teaching Modern Dance (2)
- DANC 3640 - Teaching Creative Dance in the Elementary School (2)
- DANC 3860 - Field Experience (1)
- DANC 3010 - Dance History I: Primitive Period-the Early Decades of Modern Dance (3) or
- DANC 3020 - Dance History II: 20th Century Art and Education (3)
- DANC 3470 - Ballet III (1.5)
- DANC 3490 - Modern III (1.5)
- PEP 2300 - Health/Fitness Evaluation and Exercise Prescription (3)

Additional Dance Forms Required (2 credit hours)

Select two credit hours from the following

- DANC 1520 - Folk & Ethnic Dance (1) *
- DANC 2480 - Jazz II (1)
- DANC 3440 - Dance for Musical Theatre (1) *

**DANC 1520 and DANC 3440 may not be repeated for credit.*

Creative Courses Required (minimum 3 credit hours)

Select a minimum of three credit hours from the following

- DANC 2410 - Improvisation (2)
- DANC 3500 - Choreography I: Space & Time/Design in Dance (2)
- DANC 3510 - Choreography II: Process (2)
- DANC 3520 - Choreography Practicum (2)

- DANC 3910 - Moving Company: Rehearsal & Development (2)
- DANC 3911 - Moving Company: Performance (2)
- DANC 4910 - Rehearsal and Performance (1) *

**may be repeated once for credit*

Theatre Arts Teaching Minor

Grade Requirements: A grade of "C" or better in courses used toward the minor.

Credit Hour Requirements: A minimum of 22 credit hours in Theatre Arts classes.

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).

Course Requirements for Teaching Minor

Required Courses (22 credit hours)

- THEA 1013 CA - Introduction to Theatre (3)
- THEA 1033 CA - Acting I (3)
- THEA 3103 - Directing I (3)
- THEA 4713 - Teaching Theatre in the Secondary School (3)

Select two of the following technical theatre classes

- THEA 1223 - Stage Makeup (2)
- THEA 2012 - Stage Scenery (2)
- THEA 2022 - Stage Costume (2)
- THEA 2032 - Stage Lighting (2)

Select one of the following theatre history classes

- THEA 3303 - History and Literature of Theatre I (3)
- THEA 3313 - History and Literature of Theatre II (3)
- THEA 3323 HU - History and Literature of Contemporary Theatre (3)

Select one of the following options

- Any upper division 3 credit hour Theatre Arts course
- Any upper division 2 credit hour Theatre Arts course plus any 1 credit hour Theatre Practicum

Dance Departmental Honors

In conjunction with the Honors Program, the Department of Performing Arts offers a Departmental Honors Program. This is an enriched major program that provides greater scope for intellectual initiative and independent work. Please contact the Performing Arts Department for advisement and permission prior to enrolling in Honors courses. To earn departmental honors in Performing Arts, a student must:

1. Have a cumulative GPA of 3.5 and Departmental GPA of 3.7.
2. Fulfill all the requirements of the major.
3. Successfully complete one course offered by the Honors Program.
4. Have distinguished participation in:

- a state, regional, national or international competition OR
- professional organization OR
- adjudicated festival/conference OR
- Undergraduate Research Conference (including WSU's) OR
- 30 hours of community service related to the discipline
This requirement will be determined and approved by the appropriate Department Advisor.

5. Complete the following final project:
Dance: DANC 4700 (Creative Synthesis in Dance, Grade of A)
Music: Grade of A in MUSC 4991 (Senior Recital) **or** MUSC 4992 (Senior Project)
Theatre: Grade of A in THEA 4900 (Senior Project)

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

Music Departmental Honors

In conjunction with the Honors Program, the Department of Performing Arts offers a Departmental Honors Program. This is an enriched major program that provides greater scope for intellectual initiative and independent work. Please contact the Performing Arts Department for advisement and permission prior to enrolling in Honors courses.

To earn departmental honors in Music, a student must:

1. Have a cumulative GPA of 3.5 and Departmental GPA of 3.7.
2. Fulfill all the requirements of the major.
3. Successfully complete one course offered by the Honors Program.
4. Have distinguished participation in:
 - a state, regional, national or international competition OR
 - professional organization OR
 - adjudicated festival/conference OR
 - Undergraduate Research Conference (including WSU's) OR
 - 30 hours of community service related to the discipline
This requirement will be determined and approved by the appropriate Department Advisor.
5. Complete a final project as indicated:
Dance: DANC 4700 - Creative Synthesis in Dance, (Grade of A)
Music: MUSC 4991 - Senior Recital, (Grade of A) **or** MUSC 4992 - Senior Project, (Grade of A)
Theatre: THEA 4900 - Senior Project, (Grade of A)

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

Theatre Departmental Honors

To earn departmental honors in Theatre, a student must:

1. Have a cumulative GPA of 3.5 and Departmental GPA of 3.7.
2. Fulfill all the requirements of the major.

3. Successfully complete of one course offered by the Honors Program.
4. Have distinguished participation in:
 - a state, regional, national or international competition OR
 - professional organization OR
 - adjudicated festival/conference OR
 - Undergraduate Research Conference (including WSU's) OR
 - 30 hours of community service related to the discipline
This requirement will be determined and approved by the appropriate Department Advisor.
5. Complete the following final project:
Grade of A in THEA 4900 - Senior Project

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

Department of Visual Arts

Department Chair: Matthew Choberka

Location: Ethel Wattis Kimball Visual Arts Center

Telephone Contact: Cynthia Kurien 801-626-6455

Professors: Naseem Banerji, Mark Biddle, James Jacobs,

Susan Makov, Angelika Pagel, K Stevenson; **Associate**

Professor: Matthew Choberka; **Assistant Professors:**

Larry Clarkson, Paul Crow, Joshua Winegar, Stephen

Wolochowicz, Liese Zahabi

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.

Course Requirements

Foundation Courses Required for All Art Majors (27 credit hours)

The following are required for all BS/BA/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 an "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 (3) F, Sp
- ART 1110 - Drawing I (3) F, Sp
- ART 1120 - Design: 2D (3) F, Sp
- ART 1130 - Design: 3D (3) F, Sp
- ART 1140 - Color Theory (3) F, Sp

Choose two of the following courses

- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 (4) F
- ARTH 1100 CA - Art and Architecture of the World: AD 1000-Present (4) Sp
- ARTH 2040 - Art and Architecture of Asia (4) F, Sp

Choose one of the following courses

- ARTH 3030 - Native American Art of the Southwest: From the Anasazi to the Present (4) Sp (o)
- * ARTH 3040 - Modern Art (4) F
- * ARTH 3050 - Contemporary Art (4) Sp (e)
- ARTH 3060 - The Art and Architecture of India (4) Sp (e)

- ARTH 3070 - The Art and Architecture of China (4) Sp (o)
- ARTH 3080 - The Art and Architecture of Japan (4) F (o)
- ARTH 3100 - The Art and Architecture of the Islamic World (4) F (e)
- ARTH 3950 - Photography: History, Theory and Criticism (4) Sp (e)
- * Art Education Composite majors must select either ARTH 3040 or ARTH 3050

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.)

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 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).

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.

Admission Requirements

Declare your program of study (see Enrollment Services and Information) with the department secretary. There are no special admission or application requirements.

General Education

Refer to Degree and General Education 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.

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.

Major Course Requirements for General Art BA Degree

Foundation Courses (27 credit hours)

see Department of Visual Arts

Required Studio Distribution (9 credit hours)

Select one of the following:

- ART 2200 - Introduction to Printmaking (3)
- ART 2600 - Painting I (3)

Select one of the following:

- ART 2310 - Introduction to Ceramic Art (3)
- ART 2700 - Sculpture I (3)

Select one of the following:

- ART 2250 - Foundations of Photography: Black & White/Analog (3)
- ART 2450 - Foundations of Photography: Color/Digital (3)
- ART 3430 - Typography and Publication Design (3)

Studio Electives (12 credit hours)

Select 12 credit hours of studio art coursework.

Art Education Composite (BA)

Art Education majors are encouraged to consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269) and K. Stevenson 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).

Students who select the Art Education Composite 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 and K. Stevenson at 801-626-7273 for more information or to schedule an appointment.

Admission Requirements

All Art Education majors must first declare a Major (program of study - see Enrollment 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 and General Education 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.

Art Education Composite Major Course Requirements for BS or BA Degree

Foundation Courses (27 credit hours)

see Department of Visual Arts

Note: For the Art History foundation course, Art Education Composite majors must select either ARTH 3040 or ARTH 3050 (prerequisite ARTH 1100 CA)

Studio Distribution (9 credit hours)

Select one of the following

- ART 2200 - Introduction to Printmaking (3)
- ART 2600 - Painting I (3)

Select one of the following

- ART 2310 - Introduction to Ceramic Art (3)
- ART 2700 - Sculpture I (3)

Select one of the following

- ART 2250 - Foundations of Photography: Black & White/Analog (3)
- ART 3430 - Typography and Publication Design (3)

Required Courses (6 credit hours)

- ART 3515 - Art Methods and Resources for Secondary Teachers I [Art Methods I] (3)
- ART 3520 - Art Methods and Resources for Secondary Teachers II [Art Methods II] (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.

Note:

In addition, students must fulfill 24 credit hours within the chosen science field required for the minor. Minors include: Botany, Chemistry, Earth Science, Geology, Microbiology, Physics, Zoology, Math, Psychology, Anthropology, Information Systems and Technologies, Economics, Nutrition Education.

Art (BFA)

Areas of Emphasis

- 2D Media (drawing, painting, printmaking)
- 3D Media (ceramics, sculpture, small metals)
- Photography
- Visual Communication (graphic design in print/interactive media)
- Art Education

Program Prerequisite: Completion of Foundation courses followed by portfolio review (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, 72 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).

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.

BFA Admission Requirements

All Art majors must first declare a Major (program of study - see Enrollment Services and Information) with the department secretary. Once the Foundation courses have been completed, students can apply for admission to the BFA degree program. BFA reviews are held twice each year by the visual arts faculty. Information regarding upcoming reviews is available in the visual arts office (KVAC 103). If not admitted to BFA level study, students may reapply in subsequent semesters. 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 and General Education 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.

Course Requirements for the BFA

Foundation Courses (27 credit hours)

see Department of Visual Arts.

Note: For the Art History foundation course, Art Education Composite majors must select either ARTH 3040 or ARTH 3050 (prerequisite ARTH 1100 CA)

Required Studio Distribution (9 credit hours)

Select one of the following:

- ART 2200 - Introduction to Printmaking (3)
- ART 2600 - Painting I (3)

Select one of the following:

- ART 2310 - Introduction to Ceramic Art (3)
- ART 2700 - Sculpture I (3)

Select one of the following:

- ART 2250 - Foundations of Photography: Black & White/Analog (3)
- ART 2450 - Foundations of Photography: Color/Digital (3)
- ART 3430 - Typography and Publication Design (3)

Other Required Courses (3-12 credit hours depending upon emphasis)

Required for all emphases except Visual Communication

- ART 3995 - BFA Seminar (3)
- ART 4990 - BFA Thesis (3) (includes senior exhibit)

The BFA Thesis may not be taken the semester immediately following the BFA seminar.

Required for Visual Communication emphasis

- ART 4410 - Design Seminar (3)

Required for Art Education emphasis

- ART 3515 - Art Methods and Resources for Secondary Teachers I [Art Methods I] (3)
- ART 3520 - Art Methods and Resources for Secondary Teachers II [Art Methods II] (3)

Art History Electives (4 credit hours)

Select one of the following

- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 (4)
- ARTH 1100 CA - Art and Architecture of the World: AD 1000-Present (4)
- ARTH 2040 - Art and Architecture of Asia (4)
- ARTH 3030 - Native American Art of the Southwest: From the Anasazi to the Present (4)
- ARTH 3040 - Modern Art (4)
- ARTH 3050 - Contemporary Art (4)
- ARTH 3060 - The Art and Architecture of India (4)
- ARTH 3070 - The Art and Architecture of China (4)
- ARTH 3080 - The Art and Architecture of Japan (4)
- ARTH 3100 - The Art and Architecture of the Islamic World (4)
- ARTH 3950 - Photography: History, Theory and Criticism (4)

Studio Elected Specializations (20-29 credit hours depending upon emphasis)

Complete the 72 credit hour program total by selecting courses in consultation with the faculty advisor in your emphasis area. The Art Education emphasis is the only area to require 20 credit hours of electives (Art Methods I and II replace six credit hours of studio electives).

Art Education Composite (BS)

Art Education majors are encouraged to consult with advisors in the Jerry and Vickie Moyes College of Education (call 801-626-6269) and K. Stevenson 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).

Students who select the Art Education Composite 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 and K. Stevenson at 801-626-7273 for more information or to schedule an appointment.

Admission Requirements

All Art Education majors must first declare a Major (program of study - see Enrollment 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 and General Education 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.

Art Education Composite Major Course Requirements for BS or BA Degree

Foundation Courses (27 credit hours)

see Department of Visual Arts

Note: For the Art History foundation course, Art Education Composite majors must select either ARTH 3040 or ARTH 3050 (prerequisite ARTH 1100 CA)

Studio Distribution (9 credit hours)

Select one of the following

- ART 2200 - Introduction to Printmaking (3)
- ART 2600 - Painting I (3)

Select one of the following

- ART 2310 - Introduction to Ceramic Art (3)
- ART 2700 - Sculpture I (3)

Select one of the following

- ART 2250 - Foundations of Photography: Black & White/Analog (3)
- ART 3430 - Typography and Publication Design (3)

Required Courses (6 credit hours)

- ART 3515 - Art Methods and Resources for Secondary Teachers I [Art Methods I] (3)
- ART 3520 - Art Methods and Resources for Secondary Teachers II [Art Methods II] (3)

Studio Electives (6 credit hours)

Select six credit hours of studio art coursework.

Additional Courses Required to fulfill the BS

- EDUC 4480 - Differentiated Curriculum for the Gifted and Talented (3)
- EDUC 4510 - Foundations in Special Education Practice and Law (3)
- ARTH 3040 - Modern Art (4)
- ARTH 3050 - Contemporary Art (4)

In addition, students must fulfill 24 credit hours within the chosen science field required for the minor. Minors include: Botany, Chemistry, Earth Science, Geology, Microbiology, Physics, Zoology, Math, Psychology, Anthropology, Information Systems and Technologies, Economics, Nutrition Education.

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.

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 (3)
- ART 1110 - Drawing I (3)
- ART 1120 - Design: 2D (3)
- ART 1130 - Design: 3D (3)
- ART 3515 - Art Methods and Resources for Secondary Teachers I [Art Methods I] (3)
- ART 3520 - Art Methods and Resources for Secondary Teachers II [Art Methods II] (3)

Elective Course (6 credit hours)

Select two courses from the following

- ART 2200 - Introduction to Printmaking (3)
- ART 2250 - Foundations of Photography: Black & White/Analog (3)
- ART 2310 - Introduction to Ceramic Art (3)

- ART 2350 - Small Metals/Jewelry I (3)
- ART 2600 - Painting I (3)
- ART 2700 - Sculpture I (3)
- ART 3430 - Typography and Publication Design (3)
- ART 3440 - Visual Communication (3)
- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 (4)
- ARTH 1100 CA - Art and Architecture of the World: AD 1000-Present (4)
- ARTH 2040 - Art and Architecture of Asia (4)

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.

Art History 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 23 credit hours.

Course Requirements for Minor

Required Courses (15 credit hours)

- ART 1040 - Orientation to Visual Studies (3)
- ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 (4)
- ARTH 1100 CA - Art and Architecture of the World: AD 1000-Present (4)
- ARTH 2040 - Art and Architecture of Asia (4)

Elective Course (8 credit hours)

Select two upper division art history (ARTH) courses for elective credit.

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

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.

Course Requirements for Minor

Required Courses (15 credit hours)

- ART 1040 - Orientation to Visual Studies (3)
- ART 1110 - Drawing I (3)
- ART 1120 - Design: 2D (3)
- ART 1130 - Design: 3D (3)
- ART 1140 - Color Theory (3)

Electives Courses (9 credit hours)

Choose nine credit hours of art courses in consultation with the Department of Visual Arts Chair.

General Art, Art Education Composite 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

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.

Course Requirements for Minor

Core Courses Required (12 credit hours)

- ART 1110 - Drawing I (3)
- ART 1120 - Design: 2D (3)
- ART 1140 - Color Theory (3)
- ART 3420B - Vector Drawing (1)
- ART 3420C - Digital Page Composition (1)
- ART 3420D - Design for the Internet (1)

Track Courses Required (12 credit hours)

Complete the courses for one of the following tracks

Web Design Track

- ART 3430 - Typography and Publication Design (3)
- ART 3440 - Visual Communication (3)
- ART 4420 - Advanced Digital Media (3)
- ART 4440 - Interactive Media (3)

Gaming Track

- ART 3440 - Visual Communication (3)
- ART 3460 - Illustration (3)
- ART 4420 - Advanced Digital Media (3)
- ART 4440 - Interactive Media (3)

Photography 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.

Course Requirements for Minor

Required Courses (12 credit hours)

- ART 1040 - Orientation to Visual Studies (3)
- ART 2250 - Foundations of Photography: Black & White/Analog (3)
- ART 2450 - Foundations of Photography: Color/Digital (3)
- ART 3150 - Photography Seminar (3)

Electives (12 credit hours minimum)

Select a minimum of 12 credit hours from the following

- ART 3550 - Photography: View Camera Techniques **(3)**
- ART 4150 - Photography: Alternative Processes **(3)**
- ART 4550 - Photography: Studio Lighting **(3)**
- ART 4660 - Special Topics in Photography **(3)**
- ART 4750 - Experimental Photography **(3)**
- ARTH 3950 - Photography: History, Theory and Criticism **(4)**

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.

BFA Departmental Honors

Please contact the Visual Arts Department for advisement and permission prior to enrolling in Honors courses.

Requirements for BFA Departmental Honors:

1. Be declared as a BFA major;
2. Fulfill all the departmental requirements for a BFA, including:
3. If your emphasis is 2D, 3D, or Photography you must take the BFA Seminar and then the BFA Thesis. These cannot be take consecutively. At least one semester must separate these two courses. You must earn a grade of no lower than 3.7 in both of these courses.
4. If your emphasis is Visual Communications you must take the Design Seminar course and receive a 3.7.
5. Exhibit in a BFA show approved by the faculty or, if your emphasis is Visual Communications, participate in the Portfolio Review.
6. Earn a cumulative GPA of 3.5 and a departmental GPA of 3.7.
7. You are required to join and participate in the AIGA or the Student Art Guild.
8. You must take one honors course. This may be an Honors General Education course.

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes

John B. Goddard School of Business & Economics

Dr. Jeff Steagall, 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, business administration [with emphases in finance, management (with human resource management track), marketing, and supply chain management], economics, and information systems & technologies; 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 John B. Goddard School of Business & Economics 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, quality management, ethics, and entrepreneurship are discussed 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.

Associate Dean: Dr. Cliff Nowell

Location: Wattis Building, Room 201

Telephone Contact: Mary Ann Boles 801-626-7307

Coordinator of Academic Advisement:

Mara Sikkink 801-626-6534

Location: Wattis Building, Room 211

Coordinator of Recruitment & Career Development:

Patricia Wheeler 801-626-7914

Location: Wattis Building, Room 213

Department Chairs/Directors

Accounting and Taxation: Dr. David Malone 801-626-8802

Business Administration:
Dr. Michael Stevens 801-626-8099

Economics: Dr. Doris Geide-Stevenson 801-626-7634

Graduate Program Directors

MACC/MTAX Programs: Mr. Ryan Pace 801-626-7562

MBA Program: Dr. Matt Mouritsen 801-626-8151

John B. Goddard School of Business & Economics Vision, Mission and Values

Vision

To become an acknowledged leader in business education that develops professionals with the facility to analyze problems, the resolve to implement change, the capacity to lead, and the courage to act justly in all chosen endeavors.

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.

Values

We embrace a diverse student body admitted upon criteria which measure the promise for success. The students of Utah are our prime constituency, but we attract and welcome students from across the nation and abroad.

The Goddard School is founded on an environment where people are free to openly question any concept, voiced by any person, at any time. Similarly, we value and seek the informed opinions of those outside the School.

Our mission is chiefly supported through a community of teaching scholars who focus their efforts toward instructional improvement and the advancement of theory and practice through research. Faculty and staff also direct their expertise to enhance the broader community thereby advancing management practice and economic development at the national and international levels.

Accessibility to Business & Economics Courses

Courses

All 1000 and 2000 level courses are open to all WSU students. Students of any major may find several upper division courses of interest, although prerequisites must be met for all GSBE courses:

- BSAD 3000 - Small Business Management (3)
 - BSAD 3200 - Legal Environment of Business (3)
 - FIN 3400 - Real Estate Principles and Practices (3)
 - MGMT 3010 - Organizational Behavior and Management (3)
 - MGMT 3200 - Managerial Communications (3)
 - MGMT 4300 - Influence and Group Effectiveness (3)
 - MGMT 4400 - Advanced Organizational Behavior (3)
 - MKTG 3010 - Marketing Concepts and Practices (3)
 - MKTG 3100 - Consumer Behavior (3)
 - MKTG 3200 - Selling and Sales Management (3)
 - IST 3110 - Information Technology for Business (3)
- are open to all students*

Baccalaureate Degree Requirements

Candidates for a bachelor of science degree in the John B. Goddard School of Business & Economics (GSBE) must satisfy the following requirements:

General Requirements

- WSU Degree Requirements
- General Education Requirements

John B. Goddard School of Business & Economics Requirements

The 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 six required elements: Liberal Support Curriculum, Business Foundations, Admission and Major Declaration, Cross-Functional Core, Functional Core, and Major Discipline.

Liberal Support Curriculum

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. The specific courses in the Liberal Support Curriculum are:

Liberal Support Curriculum (10 to 14 credit hours)

- ENGL 2010 EN - Intermediate College Writing (3)
- *prerequisite is ENGL 1010 Introductory College Writing (3) or equivalent*
- BTNY 1403 LS - Environment Appreciation (3-4)
- MATH 1050 QL - College Algebra (4)

Note:

ENGL 2010 and MATH 1050 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 GSBE majors may be used to satisfy specific university and general education requirements.

MATH 1050 is, in addition to being a specific requirement in the John B. Goddard School of Business & Economics, 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.

Business Foundations

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. However, admittance to the Goddard School requires a cumulative GPA of 2.5 or higher for the five Business Foundation courses.

Business Foundations Curriculum (13 credit hours)

- ACTG 2010 - Survey of Accounting I (3)
- ECON 2010 SS - Principles of Microeconomics (3)
- ECON 2020 SS - Principles of Macroeconomics (3)
- QUAN 2600 - Business Statistics I (3)
- IST 2010 TE - Business Computer Skills (1) *

** IST TE2010 and an Information Literacy course will satisfy the WSU computer and information literacy (CIL) requirement. Information Literacy courses include: BSAD 2704 (strongly suggested for GSBE majors) or NTM 1504 or LIBS 1704.*

Admission and Major Declaration

See the Admissions and Advisement sections in the John B. Goddard School of Business & Economics for additional information. The following assessment course is required for all students intending to pursue a major, minor, certificate or emphasis in Business and Economics in the John B. Goddard School of Business & Economics:

- BSAD 2899 - Business Foundations and Admission Assessment (0) or
- ECON 2899 - Economics Foundations and Admission Assessment (0) *(for non-business Economics majors only)*

Additional Information:

Students should register for this course concurrent with (same semester as) or after their last required Business Foundations Course.

Each major discipline within the John B. Goddard School of Business & Economics (GSBE) designates different course work. Consult the Degrees/Programs listing for the Major course work required in Accounting, Business Administration [emphases in Finance, Management (with Human Resource Management track), Marketing, and Supply Chain Management], Information Systems & Technologies, and Economics. Generally, students should begin taking courses

within their major area *before* completing all of the courses in the Cross-Functional and Functional Cores. Department planning guides will assist students in course sequencing.

Cross-Functional Core

The Cross-Functional Core provides the competencies needed to analyze problems and interact with individuals from different units of an organization. The focus of the Cross-Functional Core is based upon analysis, problem solving, communication and planning. Specific classes within the Cross-Functional Core are:

Cross-Functional Core Curriculum (19 credit hours)

- QUAN 2400 - Business Calculus (3)
- QUAN 3610 - Business Statistics II (3)
- BSAD 3200 - Legal Environment of Business (3)
- BSAD 3330 - Business Ethics & Environmental Responsibility (3)
- BSAD 4620 - Executive Lectures (1)
- BSAD 4780 - Strategic Management (3) *

*BSAD 4780 should be taken near the conclusion of the program of study.

And one of the following International courses:

- ACTG 5140 - Accounting for Global and Complex Entities (3)
- ECON 3110 - International Trade (3)
- ECON 3120 - International Finance and Monetary Systems (3)
- ECON 4170 - Economic Development (3)
- IST 3710 - Global Issues in Information Technology (3)
- MGMT 3400 - International Business (3)
- MKTG 3600 - International Marketing (3)
- SCM 3720 - Transportation and Global Supply Chain Management (3)

Additional Information:

Students will continue taking courses in this area throughout their undergraduate program. Many of the courses in the Cross-Functional Core are prerequisites for other classes. Keeping this in mind and using department planning guides will assist students in selecting courses.

Functional Core

The Functional Core exposes students to the traditional functional areas of business. Courses within the Functional Core include:

Functional Core Curriculum (15 credit hours)

- ACTG 2020 - Survey of Accounting II (3)
- FIN 3200 - Financial Management (3)
- MGMT 3010 - Organizational Behavior and Management (3)
- SCM 3050 - Operations and Logistics Management (3)
- MKTG 3010 - Marketing Concepts and Practices (3)

Additional Information:

Everyone working in business needs a knowledge of these areas. Students should take course work within the Functional Core as they are completing the courses within the Major Discipline. Many of the courses in the Functional

Core are prerequisites for other classes. Keeping this in mind and using department planning guides will assist students in course sequencing.

Graduation Requirements

1. **GPA Requirement:** Candidates for GSBE 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 Business Foundation GPA, the overall business and economics GPA, and the overall university GPA must be 2.5 or higher.
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.

Admissions

All students seeking majors, minors, emphases and certificates within the John B. Goddard School of Business & Economics must be formally admitted. Only completed Admission Forms are reviewed for selection consideration.

Criteria for admittance to the John B. Goddard School of Business & Economics:

- Formal admission to Weber State University (WSU)
- Successful completion of ENGL 2010 and MATH 1050 (or their equivalent) with a "C" grade or higher
- Successful completion ("C-" grade or higher) of Business Foundations with a 2.5 or higher cumulative GPA for the five foundation courses
- Successful completion of assessment course: BSAD 2899 or ECON 2899 (*for non-business Economics majors only*)
- Overall cumulative GPA of 2.5 or higher
- Declaration of business major, minor, emphasis or certificate

Process for admittance to the John B. Goddard School of Business & Economics:

1. Register for BSAD 2899 or ECON 2899 (for non-business Economics majors only) concurrent with (same semester as) or after final required Business Foundations Course. Course objectives are:
 - a. Complete assessment of Business Foundations
 - b. Complete online application which includes:
 - GSBE application student information

- Essay as described on the GSBE application
- Accepting to abide by the GSBE Honor Code

A grade of CR (credit) for 2899 equates to being admitted to the Goddard School.

Transcripts need not be submitted unless the student is notified by the Goddard School.

2. Await Notification Letter from GSBE Admissions Committee

Advisement

GSBE 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, and admission into the John B. Goddard School of Business & Economics is provided by the GSBE Coordinator of Academic Advisement, Mara Sikkink, WB 211, (801) 626-6534;
- major selection, major declaration, major requirements, minors, second degrees, and certificates is provided by the GSBE major department;
- employment preparation, including internships and resumes, and business etiquette is provided by the GBSE Coordinator of Recruitment & Career Development, Patricia Wheeler, WB 213, (801) 626-7914.

Credit Policy

1. **Obsolete Credit:** John B. Goddard School of Business & Economics credit 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 appropriate academic department chair.
2. **Waiver Requests:** Any exceptions to the printed John B. Goddard School of Business & Economics 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. However, some courses, such as the General Education MATH and ENGL Core requirements, may require a higher grade.
2. Students should establish transfer of general education work prior to meeting with the John B. Goddard School of Business & Economics' Coordinator of Academic Advisement. The Coordinator 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 Coordinator 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 related 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 John B. Goddard School of Business & Economics.
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 GSBE Coordinator of Academic Advisement or major department chair.

Center for Business & Economic Development

Director: Ms. Beverly King

Location: Wattis Business Building, Room 218

Telephone: 801-626-7232

The Center for Business and Economic Development fosters a broad and continuing partnership between businesses, government agencies, and the John B. Goddard School of Business & Economics. The Center encourages and facilitates professional development opportunities for faculty and students, promotes business and economic development in the community, and serves as a community resource for entrepreneurship and small business management. As a service organization, the Center provides business and technical assistance, training and education, and information to businesses and government agencies. Specific programs and services of the Center are listed below.

Small Business Development Center

The Small Business Development Center (SBDC) is a partnership between Weber State University, the U.S. Small Business Administration, and the Utah Governor's Office of Economic Development. The SBDC provides a wide variety of seminars, workshops and courses in small business and

entrepreneurship, as well as management assistance to small and emerging businesses in Northern Utah. Areas of consultation include business assessment and planning, marketing research and strategy, financial analysis and planning, debt and equity funding development, information technology, and human resource management.

Small Business Institute

The Small Business Institute (SBI) uses teams of senior-level or graduate students to provide management consulting and technical assistance to small business concerns. Students participating in the program receive university credit and the opportunity to apply their knowledge and skills in a real-world setting. Participating businesses receive management assistance at no charge.

Child Center for Entrepreneurship

The William H. Child Center for Entrepreneurship supports the education of students in the creation of new business organizations, whether start-up firms, joint ventures or new subsidiaries of existing companies. Specific programs sponsored by the Center include the Utah Collegiate Entrepreneur Award program, an annual student business plan competition, outreach entrepreneurship education programs in area high schools, and student organizations, such as the Weber Entrepreneurs Association (WEA) and Students in Free Enterprise (SIFE).

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.

- Study abroad programs to China, Hong Kong, South-east Asia, Latin America, Africa, and Europe are regularly offered through the WSU Foreign Language Department, WSU Asian Studies Alliance and other academic departments on campus.
- The John B. Goddard School of Business & Economics has signed cooperative agreements with Fachhochschule Hof of the Federal Republic of Germany, the European Business School in Paris, France and Blaise Pascal University in Vichy, France. Under the terms of these agreements, our students can enroll at these partner institutions without any additional tuition charge. The same privilege is extended to students from partner institutions who enroll at WSU.
- The School offers an International Certificate which may be awarded with a baccalaureate degree offered by the School. This program is described below.

Entrepreneurship Institutional Certificate

A student may apply for a certificate in Entrepreneurship provided he or she has met all of the following requirements:

1. Concurrent or previous completion of a Bachelor of Arts (BA) or a Bachelor of Science (BS) degree from the John B. Goddard School of Business & Economics or any other AACSB accredited business school.
2. Completion of a specified program of at least 12 semester hours of upper division business course work, as approved by the entrepreneurship area

faculty. Course work shall include BSAD 4500 - Entrepreneurship and at least 9 additional credit hours selected to satisfy the experiential requirement listed below and to support the specific field in which the student plans to pursue an entrepreneurial career. The GPA for this course work must be at least 2.50.

3. Completion of an experiential learning component relating to an entrepreneurial venture. This requirement can be satisfied through any of the following:
 - a. completion of BSAD 4680 - Small Business Diagnostics;
 - b. completion of an approved business internship;
 - c. completion of a class project on behalf of an entrepreneurial client.
4. Presentation and defense of a comprehensive business plan for an entrepreneurial venture. This presentation will be made before a panel of faculty from the John B. Goddard School of Business & Economics and representatives from the business community.

International Business & Economics Institutional Certificate

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:

Course Requirements for Institutional Certificate

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 (1, 2, 3)
- ACTG 4802 - Individual Study (1, 2, 3)
- ACTG 4803 - Individual Study (1, 2, 3)
- ACTG 4810 - Experimental Courses (1-3)
- ACTG 5140 - Accounting for Global and Complex Entities (3)
- BSAD 3600 - [World Region] Business and Society (3)
- ECON 3110 - International Trade (3)
- ECON 3120 - International Finance and Monetary Systems (3)
- ECON 4170 - Economic Development (3)
- ECON 4800 - Independent Research (1-3)
- ECON 4810 - Experimental Courses (1-3)
- IST 3710 - Global Issues in Information Technology (3)
- IST 4801 - Individual Projects (1-3)
- IST 4802 - Individual Projects (1-3)
- IST 4803 - Individual Projects (1-3)
- IST 4810 - Experimental Courses (1-3)
- MGMT 3400 - International Business (3)
- MGMT 3550 - The Cultural Environment of International Business (3)
- MGMT 4800 - Independent Research (1-3)
- MGMT 4810 - Experimental Courses (1-3)
- MKTG 3600 - International Marketing (3)

International Business & Economics Institutional Certificate Language Emphasis

A student graduating with a Bachelor's Degree in Business or Economics may apply for a certificate of competency 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 Institutional Certificate).
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 FL 3550 DV - Cultural Heritage I for the chosen language.

Master of Business Administration Program

MBA Program Director: Matt Mouritsen, 801-626-8151
MBA Enrollment Director: Mark Stevenson, 801-395-3528

MBA Department Secretary: Sally Taylor 801-395-3519

Location: Davis Campus - 2750 N. 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
- Contract Management in Business
- Environmental Sustainability for Business
- Information Systems Technologies: Information Assurance
- Health Services Administration

Master of Business Administration (MBA)

Program Prerequisite: Applicants must have earned a bachelor's degree from a regionally accredited institution or be in the final stage of completing the undergraduate degree. If proof of completion of the bachelor's degree has not been received by the end of an admitted student's first semester in the MBA Program, they will not be allowed to continue in the program until an official transcript with the posted bachelor's degree has been sent to 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 program GPA must be 3.0 or higher. 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, or 2 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: 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.

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.

Non-MBA Electives

Qualified students may take up to three MACC (Master of Accounting) or MTAX (Master of Taxation) courses as MBA electives, counting nine credit hours toward their MBA elective requirements. MBA students may also use up to three courses in the WSU Master of Health Administration program, counting nine credit hours toward their MBA elective requirements.

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, performance on the Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE), and other factors such as work experience and career progression. The ideal applicant will present a strong overall previous academic record, strong letters of recommendation, and an above average total GMAT/GRE score, including high achievement on the verbal, quantitative, and analytical writing assessments.

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. 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) which is not more than two years old and on which a minimum score of 550 (paper-based) or 213 (computer-based) has been earned. Equivalent IELTS score also accepted in place of TOEFL.

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 (3)
- MBA 6020 - Financial and Managerial Accounting (3)
- MBA 6040 - Managerial Economics (3)
- MBA 6050 - Quantitative Methods I (3)
- MBA 6051 - Quantitative Methods II (3)

Other Required Courses (24 credit hours)

- MBA 6110 - Tools for the Ethical Manager (3)
- MBA 6120 - Organizational Behavior (3)
- MBA 6130 - Financial Management (3)
- MBA 6140 - Marketing Management (3)
- MBA 6150 - Operations/Supply Chain Management (3)
- MBA 6210 - Management Accounting and Control (3)
- MBA 6310 - Information Technology in the Enterprise (3)
- MBA 6410 - Global Macroeconomic Conditions (3)

Electives (select 12 credit hours)

- MBA 6160 - Applications of Decision Models (3)
- MBA 6170 - Corporate Communications (3)
- MBA 6340 - Strategic Aerospace Management (3)
- MBA 6350 - Continuous Process Improvement in Aerospace Management (3)
- MBA 6360 - Aerospace Program Management (3)
- MBA 6420 - The Economics of Industry (3)
- MBA 6430 - International Marketing (3)
- MBA 6440 - Strategic Leadership (3)
- MBA 6450 - Leadership Through People Skills (3)
- MBA 6510 - Investment Analysis and Portfolio Management (3)
- MBA 6520 - International Business Field Studies (3)
- MBA 6530 - E-Business (3)
- MBA 6540 - Negotiations (3)
- MBA 6550 - Managing and Improving Quality (3)
- MBA 6560 - Business/Market Planning Using Online Resources (3)
- MBA 6580 - Project Management (3)
- MBA 6590 - Strategic Business Tax Planning (3)
- MBA 6630 - Networking & Information Systems (3)
- MBA 6640 - Information Assurance in the Enterprise (3)
- MBA 6680 - Graduate Consulting Project (3)
- MBA 6700 - Managing for Environmental Sustainability (3)
- MBA 6710 - Accounting and Finance for Environmental Sustainability (3)
- MBA 6720 - Environmental Economics for Sustainable Business (3)
- MBA 6730 - Consulting Project in Environmental Sustainability (3) *
- MBA 6740 - Principles of Contract Management (3)
- MBA 6760 - Legal Aspects of Contract Management (3)
- MBA 6800 - Directed Study (1-3)

* Students may complete either MBA 6680 or MBA 6730, but not both courses.

Capstone (3 credit hours)

- MBA 6180 - Strategic Management (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 - Tools for the Ethical Manager (3)
- MBA 6210 - Management Accounting and Control (3)
- MBA 6120 - Organizational Behavior (3)
- MBA 6130 - Financial Management (3)
- MBA 6140 - Marketing Management (3)
- MBA 6150 - Operations/Supply Chain Management (3)
- MBA 6310 - Information Technology in the Enterprise (3)
- MBA 6410 - Global Macroeconomic Conditions (3)

Electives (select 9 credit hours)

- MBA 6160 - Applications of Decision Models (3)
- MBA 6170 - Corporate Communications (3)
- MBA 6340 - Strategic Aerospace Management (3)
- MBA 6350 - Continuous Process Improvement in Aerospace Management (3)
- MBA 6360 - Aerospace Program Management (3)
- MBA 6420 - The Economics of Industry (3)
- MBA 6430 - International Marketing (3)
- MBA 6440 - Strategic Leadership (3)
- MBA 6450 - Leadership Through People Skills (3)
- MBA 6510 - Investment Analysis and Portfolio Management (3)
- MBA 6520 - International Business Field Studies (3)
- MBA 6530 - E-Business (3)
- MBA 6540 - Negotiations (3)
- MBA 6550 - Managing and Improving Quality (3)
- MBA 6560 - Business/Market Planning Using Online Resources (3)
- MBA 6580 - Project Management (3)
- MBA 6590 - Strategic Business Tax Planning (3)
- MBA 6630 - Networking & Information Systems (3)
- MBA 6640 - Information Assurance in the Enterprise (3)
- MBA 6680 - Graduate Consulting Project (3) *
- MBA 6700 - Managing for Environmental Sustainability (3)
- MBA 6710 - Accounting and Finance for Environmental Sustainability (3)
- MBA 6720 - Environmental Economics for Sustainable Business (3)
- MBA 6730 - Consulting Project in Environmental Sustainability (3) *
- MBA 6740 - Principles of Contract Management (3)
- MBA 6750 - Financial Aspects of Contract Management (3)
- MBA 6760 - Legal Aspects of Contract Management (3)
- MBA 6800 - Directed Study (1-3)

* Students may complete either MBA 6680 or MBA 6730, but not both courses.

Capstone (3 credit hours)

- MBA 6180 - Strategic Management (3)

Aerospace Management Graduate Certificate

MBA Program Director: Matt Mouritsen, 801-626-8151

MBA Enrollment Director:

Mark Stevenson, 801-395-3528

MBA Department Secretary: Sally Taylor 801-395-3519

Location: Davis Campus - 2750 N. University Park Blvd., Layton

Students earning a Graduate Certificate in Aerospace Management will become knowledgeable about strategic management, continuous process improvement, program 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 elective courses.

Courses Required for Graduate Certificate**Required Courses**

- MBA 6340 - Strategic Aerospace Management (3)
- MBA 6350 - Continuous Process Improvement in Aerospace Management (3)
- MBA 6360 - Aerospace Program Management (3)
- MBA 6740 - Principles of Contract Management (3)

Contract Management in Business Graduate Certificate

MBA Program Director: Matt Mouritsen, 801-626-8151

MBA Enrollment Director: Mark Stevenson, 801-395-3528

MBA Department Secretary: Sally Taylor 801-395-3519

Location: Davis Campus - 2750 N. University Park Blvd., Layton

Students earning a 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.

Courses Required for Graduate Certificate

Required Courses

- MBA 6740 - Principles of Contract Management (3)
- MBA 6750 - Financial Aspects of Contract Management (3)
- MBA 6760 - Legal Aspects of Contract Management (3)

Elective Courses

Select one of the following:

- MBA 6540 - Negotiations (3)
- or*
- MBA 6580 - Project Management (3)

Environmental Sustainability for Business Graduate Certificate

MBA Program Director: Matt Mouritsen, 801-626-8151

MBA Enrollment Director: Mark Stevenson, 801-395-3528

MBA Department Secretary: Sally Taylor 801-395-3519

Location: Davis Campus - 2750 N. University Park Blvd., Layton

The Certificate in Environmental Sustainability for Business is designed for graduate students to explore and evaluate how business organizations can address environmental issues to meet societal needs and create competitive advantages. Students must complete four courses (12 credit hours) of existing MBA elective courses in environmental sustainability in order to be awarded the Certificate in Environmental 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.

Courses Required for Graduate Certificate

- MBA 6700 - Managing for Environmental Sustainability (3)
- MBA 6710 - Accounting and Finance for Environmental Sustainability (3)
- MBA 6720 - Environmental Economics for Sustainable Business (3)
- MBA 6730 - Consulting Project in Environmental Sustainability (3)

Information Systems & Technologies: Information Assurance Graduate Certificate

MBA Program Director: Matt Mouritsen, 801-626-8151

MBA Enrollment Director: Mark Stevenson, 801-395-3528

MBA Department Secretary: Sally Taylor 801-395-3519

Location: Davis Campus - 2750 N. University Park Blvd., Layton

A student may apply for a certificate in Information Systems & Technologies provided he or she has fulfilled the following criteria:

1. Course Work Required (13 credit hours)

- MBA 6310 - Information Technology in the Enterprise (3)
- MBA 6640 - Information Assurance in the Enterprise (3)
- IST 6800 - Directed Studies (1)
and two of the following
- MBA 6530 - E-Business (3)
- MBA 6630 - Networking & Information Systems (3)
- MACC 6570 - Information Systems Auditing (3)

2. Prerequisite degree:

Bachelor of Arts (BA), Bachelor of Science (BS), Master of Accounting (MACC), Master of Taxation (MTAX) or Master of Business Administration (MBA) degree from Weber State University, John B. Goddard School of Business & Economics or any AACSB accredited business school. Any student who has been admitted to the MACC, MTAX or the MBA program is also eligible for this certificate.

Master of Accounting Program

Program Director: Ryan Pace, 801-626-7562

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 (MACC)

Grade Requirements: A MACC student must complete all MACC program courses, including electives, 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.

Admissions Requirements

- A four year Bachelor's degree. If the degree is not in Accounting, leveling courses will be required after acceptance into the program.
- An acceptable GMAT score.
- Acceptable grade point average 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, GMAT, current resume, and 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.

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) which is not more than two years old and on which a minimum score of 550 (paper-based) or 213 (computer-based) has been earned.

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 GMAT scores, official undergraduate transcripts, resume, and two letters of recommendation.

It is expected that the Master of Accounting Program will entail approximately 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 Accountancy & Taxation for a separate and detailed bulletin on the Master of Accounting Program.

Course Requirements for Master of Accounting

All MACC students are required to complete the following courses (21 credit hours):

- MACC 6120 - Financial Accounting & Reporting (3)
- MACC 6130 - Governmental and Nonprofit Accounting (3)
- MACC 6160 - Financial Statement Analysis (3)
- MACC 6330 - Strategic Management Accounting (3)
- MACC 6560 - Advanced Auditing & Assurance Services (3)
- MACC 6570 - Information Systems Auditing (3)
- MACC 6610 - Advanced Accounting Information Systems (3)

And one of the following tax courses:

- MTAX 6400 - Tax Research & Communication (3)
- MTAX 6425 - Tax Practice, Procedure & Ethics (3)
- MTAX 6430 - Advanced Individual Taxation (3)
- MTAX 6460 - Advanced Corporate Taxation (3)
- MTAX 6470 - Advanced Partnership Taxation (3)

In addition to the previously listed courses

MACC students are required to complete 6 hours of electives. They may select any other MACC or MTAX courses. Electives may include a maximum of 3 hours of non-MACC and non-MTAX courses selected from approved 5000 or higher-numbered courses which were not taken in the student's undergraduate program. Select MBA courses approved by the MACC program director may also be used.

Master of Taxation Program

Program Director: Ryan Pace, 801-626-7562

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.

Master of Taxation (MTAX)

Grade Requirements: A Master of Taxation student must complete all MTAX program courses, including electives, 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.

Admissions Requirements

- A four year Bachelor's degree. If the degree is not in Accounting, leveling courses will be required after acceptance into the program.
- An acceptable GMAT score.
- Acceptable grade point average 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, GMAT, current resume, and 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.

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) which is not more than two years old and on which a minimum score of 550 (paper-based) or 213 (computer-based) has been earned.

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 GMAT scores, official undergraduate transcripts, resume, and two letters of recommendation.

It is expected that the Master of Taxation Program will entail approximately 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 Accountancy & 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 program director. For issues regarding registration and scheduling, students will contact the School of Accounting & Taxation department secretary. Career services will be offered through the Goddard School of Business and Economics.

Course Requirements for Master of Taxation

All MTAX students are required to complete the following courses (15 credit hours):

- MTAX 6400 - Tax Research & Communication (3)
- MTAX 6425 - Tax Practice, Procedure & Ethics (3)

- MTAX 6430 - Advanced Individual Taxation (3)
- MTAX 6460 - Advanced Corporate Taxation (3)
- MTAX 6470 - Advanced Partnership Taxation (3)

And at least one of the following (3 credit hours):

- MTAX 6410 - International Taxation (3)
- MTAX 6440 - Exempt Entities & State & Local Taxation (3)
- MTAX 6450 - Real Estate Taxation (3)
- MTAX 6480 - Retirement Planning & Employee Benefits (3)
- MTAX 6490 - Mergers, Acquisitions and Consolidations (3)

In addition to meeting the requirements set forth above

MTAX students are required to complete 12 credit hours of electives. At least two of the elective courses must be selected from MACC courses (totaling at least 6 credit hours). Electives may include a maximum of 3 hours of non-MTAX and non-MACC courses selected from approved 5000 or higher-numbered courses which were not taken in the student's undergraduate program. Certain MBA courses approved by the MTAX program director may also be used.

School of Accounting & Taxation

Department Chair: David Malone

Location: Wattis Business Building, Room 221

Telephone Contact: Patricia Glover, 801-626-6072

Professors: Jefferson Davis, David Malone, Richard McDermott; **Associate Professors:** Larry Deppe, Matthew Mouritsen, Ryan Pace; **Assistant Professor:** Eric Smith;

Instructor: Loisanne Kattelman

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.

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 (controllershship), cost accounting, and internal auditing; careers in various governmental agencies and other accounting and business-related fields. (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.)

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.

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, ECON 2010, ECON 2020, IST 2010, and QUAN 2600. These five 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. (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 major GPA, the bachelor GPA, and the overall university GPA must be 2.5 or higher.

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.

Advisement

Advisement is strongly encouraged for all GSBE majors and minors. See more information on available advising resources John B. Goddard School of Business & Economics.

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 GSBE Advising Center, WB 211, (801) 626-6534 and/or the School of Accountancy & Taxation, WB 221, (801) 626-6072.

General Education

Refer to Degree and General Education Requirements for the University Bachelor of Science requirements. The following courses required for the Accounting major will also satisfy general education requirements: ENGL 2010 (Composition); MATH 1050 (Quantitative Literacy); BTNY 1403 (Life Science); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

Major Course Requirements for BS Degree

John B. Goddard School of Business & Economics Requirements

- Liberal Support Curriculum (13 or 14)
- Business Foundations (13)

- BSAD 2899 - Business Foundations and Admission Assessment (0)
- Business Cross-Functional Core (19)
- Business Functional Core (15)

Required Major Courses (33 credit hours)

All course prerequisites must be met. Refer to the course descriptions for required prerequisites.

- ACTG 3110 - Intermediate Financial Accounting I (3)
- ACTG 3120 - Intermediate Financial Accounting II (3)
- ACTG 3300 - Cost Accounting (3)
- ACTG 3400 - Taxation of Individuals (3)
- ACTG 3750 - Accounting & Information Systems (3)
- ACTG 4510 - Auditing (3)
- ACTG 5140 - Accounting for Global and Complex Entities (3)*
- ACTG 5440 - Taxation of Business Entities (3)
- BSAD 4210 - Survey of Business Law (3)
- IST 3110 - Information Technology for Business (3)
- NTM 3250 - Business Communication (3)

**ACTG 5140 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 (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- COMM 2270 - Argumentation & Debate (3)
- COMM 3070 - Performance Studies (3)
- COMM 3100 - Small Group Facilitation & Leadership (3)
- COMM 3120 - Advanced Public Speaking (3)

Accounting Minor

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 major GPA, the bachelor GPA, and the overall university GPA must be 2.5 or higher.

Credit Hour Requirements: A total of 37 credit hours is required. Of the 37 hours, 24 hours are accounting classes and the remaining classes are support courses.

For the John B. Goddard School of Business & Economics majors, this represents an additional 18 credit hours of course work beyond requirements in major field.

This minor is available to all students. Business students must complete the minor requirements in addition to all major requirements. Approval of a minor program by the School of Accountancy & Taxation is required. All prerequisites for required courses must be satisfied.

Course Requirements for Accounting Minor

Courses Required (24 credit hours)

- ACTG 2010 - Survey of Accounting I (3) *
- ACTG 2020 - Survey of Accounting II (3) *
- ACTG 3110 - Intermediate Financial Accounting I (3)
- ACTG 3120 - Intermediate Financial Accounting II (3)
- ACTG 3300 - Cost Accounting (3)
- ACTG 3400 - Taxation of Individuals (3)
- ACTG 3750 - Accounting & Information Systems (3)
- ACTG 4510 - Auditing (3)

Support Courses Required (13 credit hours)

- QUAN 2600 - Business Statistics I (3) *
- ECON 2010 SS - Principles of Microeconomics (3) *
- ECON 2020 SS - Principles of Macroeconomics (3) *
- IST 2010 TE - Business Computer Skills (1) *
- SCM 3050 - Operations and Logistics Management (3)

*Required for all John B. Goddard School of Business & Economics major programs.

Department of Business Administration

Department Chair: Michael Stevens

Location: Wattis Business Building, Room 216

Telephone: Kathy May 801-626-6075

Professors: Anthony Allred, Brian Davis, Taowen Le, Stephen Russell, Shane Schvaneveldt, Seokwoo Song, Michael J. Stevens, E. K. Valentin; **Associate Professors:** Edward Harris, Yuhong Fan; **Assistant Professors:** Stephen E. Hill, Jeremy Suiter, James Turner; **Instructor:** Terrilyn Morgan; **Visiting Professor:** Zhuolin Yu

The student who majors in business administration is seeking the most general business degree that is offered at the bachelor's level. 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 might be especially appropriate for students who intend to become entrepreneurs.

The Information Systems & Technologies is also under the Department of Business Administration.

Business Administration Finance Emphasis

After studying in the School's core courses about the various functions in organizations, the student who concentrates in finance learns how to acquire, allocate, and control a firm's financial resources efficiently.

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. For those students desiring to pursue careers as analysts or consultants, a graduate degree is recommended.

Business Administration Management Emphasis

The student who concentrates in management prepares to apply the knowledge and skills needed to design and maintain a positive motivational work environment. Such an environment aligns the goals of the organization with those of individuals within the organization for the purpose of increasing organizational efficiency and effectiveness.

In addition to the John B. Goddard School of Business & Economics core requirements, the management student studies human resource management, organizational behavior, continuous improvement, effective communication, and information technology. Management students will choose specialty tracks with the approval of their advisor and the management area faculty advisory council.

Management students who choose the human resource management track usually are intending a career in human resource management. These students will have some courses dealing with general management as described for the Management Emphasis but will also take courses in such specialized areas as employment and labor law and compensation and benefits.

Business Administration Marketing Emphasis

This is the only business marketing program on WSU's campus. Students concentrating in marketing specialize in course work that deals with business activities involved in getting the right goods and services to the right customers at the right time, the right place, and in the right way.

Courses provide students with vital 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.

Business Administration Supply Chain Management Emphasis

Supply chain management, as an area of emphasis, allows students to focus their education on the "supply chain" of purchasing, producing, moving, and marketing goods and services on a global basis.

The supply chain management major learns how to plan and manage a firm's operations as well as the logistics of selecting suppliers, moving materials into a firm, and distributing finished product to customers. The discipline involves industrial purchasing, inventory management, production planning and control, quality management, transportation, and distribution management.

The growing recognition by industry of the value of more effective and efficient management of the supply chain has intensified demand for persons with formal education in this area. Weber State has enjoyed considerable success in placing supply chain management graduates in a wide variety of employment opportunities with above-average salaries with such firms as Kimberly Clark, Ford Motor Company, Toyota, Hospital Corporation of America, Northrop Grumman, Wal-Mart, J.C. Penney Company, UPS, Autoliv, and the U.S. Air Force. We are also noting that career paths to senior executive positions in large corporations are increasingly mandating education or experience in operations and supply chain management.

Professional associations and area companies make several scholarships available each year exclusively to supply chain management majors at Weber State University.

Information Systems & Technologies

A bachelor's degree in Information Systems & Technologies provides students with a broad background in basic business knowledge, problem solving, and computer systems analysis and design skills. Graduates from this major are prepared to help organizations use computer technology to support their business processes. Technologies that all IST majors study include software development, computer architecture, database design, web development and management, and networks. Then, depending on the electives the student chooses, the student will also study advanced software development, and systems analysis and design, or advanced networks, information security and computer forensics.

Information Systems & Technologies graduates may work for a large organization, specializing in one aspect of information technology. Or, they may work for a small firm as one of a few people who helps support all areas of the firm's technologies. The job will involve working with people to understand how they do their jobs and where computers can be most effective, as well as implementing computer-based solutions; training people to use the systems; installing and troubleshooting hardware, software and networks; and helping management understand and plan for the best new technologies to integrate in the organization's business processes.

Information Systems & Technologies (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 ACTG 2010, ECON 2010, ECON 2020, IST 2010, and QUAN 2600. These five courses are referred to collectively as "Business Foundations." All IST courses numbered above 3000 require Business Foundations except IST 3110. (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, an overall GPA of 2.5 or higher is required.

Credit Hour Requirements: A total of 60 credit hours is required; a minimum of 30 of these is required within the AS program.

Advisement

Advisement is strongly encouraged for all GSBE 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 GSBE Advising Center, WB 211, (801) 626-6534 and/or the Department of Information Systems & Technologies, D2 137, (801) 395-3520.

General Education

Refer to Degree and General Education Requirements for Associate of Science requirements. The following courses required for the Information Systems & Technologies major will also satisfy general education requirements: ENGL 2010 (Composition); MATH 1050 (Quantitative Literacy); BTNY 1403 (Life Science); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions. IST 1100 SS - The Wired Society, is recommended to fulfill a general education requirement in Social Science.

Major Course Requirements for AS Degree

Courses Required (30 credit hours)

- IST 2010 TE - Business Computer Skills (1)
- IST 2015 - Introduction to Information Systems & Technologies (1)
- IST 2110 - Software Development I (3)
- IST 2410 - Information Systems Architecture (3)
- IST 2720 - Data Structures and Algorithms (3)
- IST 3210 - Database Design and Implementation (4)
- BTNY 1403 LS - Environment Appreciation (3-4)
- ACTG 2010 - Survey of Accounting I (3)
- ECON 2010 SS - Principles of Microeconomics (3)
- ECON 2020 SS - Principles of Macroeconomics (3)
- QUAN 2600 - Business Statistics I (3)

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, ECON 2010, ECON 2020, IST 2010, and QUAN 2600. These five 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 major GPA, the bachelor GPA, and the overall university GPA must be 2.5 or higher.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; 60-61 of these are School requirements, 30 are required within the major, and the balance should be taken outside of the major. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.

Advisement

Advisement is strongly encouraged for all GSBE majors and minors. See more information on available advising resources in the John B. Goddard School of Business & Economics.

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 GSBE Advising Center, WB 211, (801) 626-6534 and/or the Department of Business Administration, WB 216, (801) 626-6075.

General Education

Refer to Degree and General Education Requirements for the University Bachelor of Science requirements. The following courses required for the Business Administration major also will satisfy general education requirements: ENGL 2010 (English Composition); MATH 1050 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); and BTNY 1403 (Life Science).

Major Course Requirements for BS Degree

John B. Goddard School of Business & Economics Requirements

- Liberal Support Curriculum (13 or 14)
- Business Foundations (13)
- BSAD 2899 - Business Foundations and Admission Assessment (0)
- Business Cross-Functional Core (19)
- Business Functional Core (15)

Major Courses Required (6 credit hours)

- IST 3110 - Information Technology for Business (3)
- MGMT 3200 - Managerial Communications (3)

Major Electives (24 credit hours)

Two Marketing courses selected from

- MKTG 3100 - Consumer Behavior (3)
- MKTG 3200 - Selling and Sales Management (3)
- MKTG 3450 - Promotion Management (3)
- MKTG 3500 - Retail Management (3)
- MKTG 4400 - Marketing Strategy (3)

Two Finance courses selected from

- FIN 3300 - Investments (3)
- FIN 3350 - Financial Institutions (3)
- FIN 3400 - Real Estate Principles and Practices (3)
- FIN 3500 - Capital Budgeting (3)
- FIN 4400 - Financial Problems - Corporate Finance (3)

Two Management or Supply Chain Management courses (One each from Groups A and B)

Group A

- MGMT 3300 - Human Resource Management (3)
- MGMT 4300 - Influence and Group Effectiveness (3)

Group B

- SCM 3500 - Computer Models/Applications (3)
- SCM 4100 - Quality Management and Productivity (3)
- SCM 4600 - Simulation (3)

Two courses selected from the following

- ACTG (3) *
- ECON (3) *
- IST (3) *
- SCM (3) *
- BSAD 3500 - Introduction to Business Research (3)

- BSAD 3600 - [World Region] Business and Society (3)
- BSAD 4210 - Survey of Business Law (3)
- BSAD 4500 - Entrepreneurship (3)
- BSAD 4680 - Small Business Diagnostics (3)
- One additional CBE international course (3)
- MGMT 4650 - Negotiations (3)
- One additional course from Group A or B in the previous section (3)

*Upper division course to be approved by your faculty advisor.

Finance Emphasis, 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, ECON 2010, ECON 2020, IST 2010, and QUAN 2600. These five 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 Business Foundations GPA, the overall business and economics GPA, and the overall university GPA must be 2.5 or higher.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; 60-61 of these are School requirements, 33 are required within the major, and the balance should be taken outside of the major. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.

Advisement

Advisement is strongly encouraged for all GSBE 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 GSBE Advising Center, WB 211, (801) 626-6534 and/or the Department of Business Administration, WB 216, (801) 626-6075.

General Education

Refer to Degree and General Education Requirements for the University Bachelor of Science requirements. The following courses required for the Finance Emphasis also will satisfy general education requirements: ENGL 2010 (English Composition); MATH 1050 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); and BTNY 1403 (Life Science).

Major Course Requirements for BS Degree

John B. Goddard School of Business & Economics Requirements

- Liberal Support Curriculum (13 or 14)
- Business Foundations (13)
- BSAD 2899 - Business Foundations and Admission Assessment (0)
- Business Cross-Functional Core (19)
- Business Functional Core (15)

Business Courses Required (24 credit hours)

- IST 3110 - Information Technology for Business (3)
- MGMT 3200 - Managerial Communications (3)
- ECON 3120 - International Finance and Monetary Systems (3) *
- FIN 3300 - Investments (3)
- FIN 3350 - Financial Institutions (3)
- FIN 3500 - Capital Budgeting (3)
- FIN 4400 - Financial Problems - Corporate Finance (3)
- FIN 4410 - Financial Problems - Investments (3)

*ECON 3120 satisfies the International Course requirement under the Business Cross-Functional Core as well as the Business Courses requirement.

Elective Courses (9 credit hours)

Select three courses with approval of your Finance faculty advisor.

- BSAD 3500 - Introduction to Business Research (3)
- BSAD 4210 - Survey of Business Law (3)
- BSAD 4500 - Entrepreneurship (3)
- ECON 3200 - Money and Banking (3)
- FIN 3400 - Real Estate Principles and Practices (3)
- FIN 4860 - Finance Internship (3) or
- BSAD 4680 - Small Business Diagnostics (3)
- FIN 4900 - Special Topics in Finance (4)
- SCM 3500 - Computer Models/Applications (3)
- SCM 4100 - Quality Management and Productivity (3)
- MKTG 3200 - Selling and Sales Management (3)
- One additional International Course from GSBE list

Human Resource Management Track, Business Administration (BS)

The student who concentrates in management prepares to apply the knowledge and skills needed to design and maintain a positive motivational work environment. Such an environment aligns the goals of the organization with those of individuals within the organization for the purpose of increasing organizational efficiency and effectiveness.

In addition to the John B. Goddard School of Business & Economics core requirements, the management student studies human resource management, organizational behavior, continuous improvement, effective communication,

and information technology. Management students will choose specialty tracks with the approval of their advisor and the management area faculty advisory council.

Management students who choose the human resource management track usually are intending a career in human resource management. These students will have some courses dealing with general management as described for the *Management Emphasis* but will also take courses in such specialized areas as employment and labor law and compensation and benefits.

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, ECON SS2010, ECON SS2020, IST TE2010, and QUAN 2600. These five 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 major GPA, the bachelor GPA, and the overall university GPA must be 2.5 or higher.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; 62-63 of these are School requirements, 30 are required within the major, and the balance should be taken outside of the major. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.

Advisement

Advisement is strongly encouraged for all GSBE majors and minors. See more information on available advising resources.

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 GSBE Advising Center, WB 211, (801) 626-6534 and/or the Department of Business Administration, WB 216, (801) 626-6075.

General Education

Refer to the University General Requirements for Bachelor of Science requirements. The following courses required for the Management Emphasis also will satisfy general education requirements: ENGL 2010 EN (English Composition); MATH 1050 QL (Quantitative Literacy); ECON 2010 SS and ECON 2020 SS (Social Science); and BTNY 1403 LS (Life Science).

Major Course Requirements for BS Degree Human Resource Management Track

John B. Goddard School of Business & Economics Requirements

- Liberal Support Curriculum (13 or 14)
- Business Foundations (13)

- BSAD 2899 - Business Foundations and Admission Assessment **(0)**
- Business Cross-Functional Core **(19)**
- Business Functional Core **(15)**

Major Courses Required (21 credit hours)

- IST 3110 - Information Technology for Business **(3)**
- MGMT 3200 - Managerial Communications **(3)**
- MGMT 3300 - Human Resource Management **(3)**
- MGMT 3350 - Employment and Labor Law **(3)**
- MGMT 4300 - Influence and Group Effectiveness **(3)**
- MGMT 4310 - Compensation and Benefits **(3)**
- MGMT 4320 - Staffing Organizations **(3)**

Major Electives (9 credit hours)

- BSAD 3500 - Introduction to Business Research **(3)**
- BSAD 3600 - [World Region] Business and Society **(3)**
- BSAD 4210 - Survey of Business Law **(3)**
- BSAD 4500 - Entrepreneurship **(3)**
- ECON 3400 - Labor Economics **(3)**
- SCM 3500 - Computer Models/Applications **(3)**
- SCM 4100 - Quality Management and Productivity **(3)**
- MGMT 4350 - Training **(3)**
- MGMT 4650 - Negotiations **(3)**
- MGMT 4865 - Human Resource Internship **(3)** or
- BSAD 4680 - Small Business Diagnostics **(3)**

Information Systems & Technologies (BS)

Program Prerequisite: IST Associate of Science Degree, or equivalent degree or course work (which may be articulated for the IST 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, ECON 2010, ECON 2020, IST 2010, and QUAN 2600. These five 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 Business Foundation GPA, the overall business and economics GPA, and the overall university GPA must be 2.5 or higher.

Credit Hours Requirements: A total of 120 credit hours is required for graduation; 60-61 of these are School requirements, 33 are required within the major, and the balance should be taken outside of the major. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.

Advisement

Advisement is strongly encouraged for all GSBE 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 GSBE Advising Center, WB 211, (801) 626-6534 and/or the Department of Information Systems & Technologies, D2 137, (801) 395-3520.

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements. The following courses required for the Information Systems & Technologies major will also satisfy general education requirements: ENGL 2010 (Composition); MATH 1050 (Quantitative Literacy); BTNY 1403 (Life Science); ECON 2010 or ECON 2020 (Social Science); ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions. IST 1100, The Wired Society, is recommended to fulfill a general education requirement in Social Science.

MATH 1050 is, in addition to being a specific requirement in the John B. Goddard School of Business & Economics, a prerequisite for ECON 2010, QUAN 2400, and QUAN 2600. Students seeking a major within the John B. Goddard School of Business & Economics should plan to take the necessary mathematics courses as early as possible in their program of study. MATH 1050 must be completed with a grade of "C" or higher and may not be taken on a credit/no credit basis.

Major Course Requirements for BS Degree

John B. Goddard School of Business & Economics Requirements

- Liberal Support Curriculum **(13 or 14)**
- Business Foundations **(13)**
- BSAD 2899 - Business Foundations and Admission Assessment **(0)**
- Business Cross-Functional Core **(19)**
- Business Functional Core **(15)**

Major Courses Required (27 credit hours)

- IST 2015 - Introduction to Information Systems & Technologies **(1)**
- IST 2110 - Software Development I **(3)**
- IST 2410 - Information Systems Architecture **(3)**
- IST 2720 - Data Structures and Algorithms **(3)**
- IST 3210 - Database Design and Implementation **(4)**
- IST 3610 - Networks & Data Communications I **(4)**
- IST 3700 - E-business Technologies & Web Development **(3)**
- IST 4730 - Senior Practicum: Project Management and Systems Development **(3)**
- NTM 3250 - Business Communication **(3)**

Concentration Elective Courses (12 credit hours)

Select 4 courses from the following with at least one 4xxx level course

- IST 3620 - Networks and Data Communications II **(3)**
- IST 3720 - Software Development II **(3)**
- IST 3730 - Systems Analysis and Design **(3)**
- IST 4600 - Information Security I **(3)**

- IST 4700 - Information Security II (3)
- IST 4710 - Enterprise Software Development (3)

Management Emphasis, 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, ECON 2010, ECON 2020, IST 2010, and QUAN 2600. These five 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 Business Foundations GPA, the overall business and economics GPA, and the overall university GPA must be 2.5 or higher.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; 60-61 of these are School requirements, 30 are required within the major, and the balance should be taken outside of the major. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.

Advisement

Advisement is strongly encouraged for all GSBE 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 GSBE Advising Center, WB 211, (801) 626-6534 and/or the Department of Business Administration, WB 216, (801) 626-6075.

General Education

Refer to Degree and General Education Requirements for the University Bachelor of Science requirements. The following courses required for the Management Emphasis also will satisfy general education requirements: ENGL 2010 (English Composition); MATH 1050 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); and BTNY 1403 (Life Science).

Major Course Requirements for BS Degree Management Emphasis

John B. Goddard School of Business & Economics Requirements

- Liberal Support Curriculum (13 or 14)
- Business Foundations (13)
- BSAD 2899 - Business Foundations and Admission Assessment (0)

- Business Cross-Functional Core (19)
- Business Functional Core (15)

Major Courses Required (18 credit hours)

- IST 3110 - Information Technology for Business (3)
- SCM 3500 - Computer Models/Applications (3)
- SCM 4100 - Quality Management and Productivity (3)
- MGMT 3200 - Managerial Communications (3)
- MGMT 3300 - Human Resource Management (3)
- MGMT 4300 - Influence and Group Effectiveness (3)

Major Electives (12 credit hours)

- BSAD 3500 - Introduction to Business Research (3)
- BSAD 3600 - [World Region] Business and Society (3)
- BSAD 4210 - Survey of Business Law (3)
- BSAD 4500 - Entrepreneurship (3)
- FIN 3400 - Real Estate Principles and Practices (3)
- FIN 3500 - Capital Budgeting (3)
- SCM 4600 - Simulation (3)
- MGMT 3350 - Employment and Labor Law (3)
- MGMT 4310 - Compensation and Benefits (3)
- MGMT 4350 - Training (3)
- MGMT 4650 - Negotiations (3)
- MGMT 4860 - Management Internship (3) or
- BSAD 4680 - Small Business Diagnostics (3)
- MKTG 3200 - Selling and Sales Management (3)
- MKTG 3450 - Promotion Management (3)
- MKTG 3500 - Retail Management (3)
- MKTG 4400 - Marketing Strategy (3)

In unusual circumstances that must be approved formally by the Management Faculty Advisement Council, substitutions for elective courses will be allowed to customize the degree requirements. These substitutions will only be made when the resulting program is still clearly a management program and does not diminish the quality of the management program.

Marketing Emphasis, 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, ECON 2010, ECON 2020, IST 2010, and QUAN 2600. These five 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 Business Foundations GPA, the overall business and economics GPA, and the overall university GPA must be 2.5 or higher.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; 60-61 of these are School requirements, 30 are required within the major, and the balance should be taken outside of the major. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.

Advisement

Advisement is strongly encouraged for all GSBE 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 GSBE Advising Center, WB 211, (801) 626-6534 and/or the Department of Business Administration, WB 216, (801) 626-6075.

General Education

Refer to Degree and General Education Requirements for the University Bachelor of Science requirements. The following courses required for the Marketing Emphasis also will satisfy general education requirements: ENGL 2010 (English Composition); MATH 1050 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); and BTNY 1403 (Life Science).

Major Course Requirements for BS Degree

John B. Goddard School of Business & Economics Requirements

- Liberal Support Curriculum (13 or 14)
- Business Foundations (13)
- BSAD 2899 - Business Foundations and Admission Assessment (0)
- Business Cross-Functional Core (19)
- Business Functional Core (15)

Major Courses Required (21 credit hours)

- IST 3110 - Information Technology for Business (3)
- MGMT 3200 - Managerial Communications (3)
- MKTG 3100 - Consumer Behavior (3)
- MKTG 3200 - Selling and Sales Management (3)
- BSAD 3500 - Introduction to Business Research (3)
- MKTG 3450 - Promotion Management (3)
- MKTG 4400 - Marketing Strategy (3)

Elective Courses (9 credit hours)

- BSAD 3600 - [World Region] Business and Society (3)
- BSAD 4210 - Survey of Business Law (3)
- BSAD 4500 - Entrepreneurship (3)
- FIN 3400 - Real Estate Principles and Practices (3)
- SCM 3720 - Transportation and Global Supply Chain Management (3)
- SCM 4100 - Quality Management and Productivity (3)
- SCM 4410 - Materials and Inventory Management (3)
- SCM 4730 - Purchasing and Supply Management (3)
- MKTG 3500 - Retail Management (3)
- MKTG 3600 - International Marketing (3)
- MKTG 4200 - Internet Marketing (3)
- MKTG 4860 - Marketing Internship (3) or
- BSAD 4680 - Small Business Diagnostics (3)
- COMM 3850 - Advertising (3)

Supply Chain Management Emphasis, 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, ECON 2010, ECON 2020, IST 2010, and QUAN 2600. These five 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 Business Foundations GPA, the overall business and economics GPA, and the overall university GPA must be 2.5 or higher.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; 60-61 of these are School requirements, 30 are required within the major, and the balance should be taken outside of the major. The required 40 upper-division credit hours (courses numbered 3000 and above) are included in the School and major requirements.

Academic Advisement

Advisement is strongly encouraged for all GSBE 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 GSBE Advising Center, WB 211, (801) 626-6534 and/or the Department of Business Administration, WB 216, (801) 626-6075.

General Education

Refer to Degree and General Education Requirements for the University Bachelor of Science requirements. The following courses required for the Supply Chain Management Emphasis also will satisfy general education requirements: ENGL 2010 (English Composition); MATH 1050 (Quantitative Literacy); ECON 2010 or ECON 2020 (Social Science); and BTNY 1403 (Life Science).

Major Course Requirements for BS Degree

John B. Goddard School of Business & Economics Requirements

- Liberal Support Curriculum (13 or 14)
- Business Foundations (13)
- BSAD 2899 - Business Foundations and Admission Assessment (0)
- Business Cross-Functional Core (19)
- Business Functional Core (15)

Business Courses Required (27 credit hours)

- IST 3110 - Information Technology for Business (3)
- MGMT 3200 - Managerial Communications (3)
- SCM 3500 - Computer Models/Applications (3)
- SCM 3720 - Transportation and Global Supply Chain Management (3) *
- SCM 4050 - Contemporary Supply Chain Management Practices (3)
- SCM 4100 - Quality Management and Productivity (3)
- SCM 4410 - Materials and Inventory Management (3)
- SCM 4600 - Simulation (3)
- SCM 4730 - Purchasing and Supply Management (3)

* SCM 3720 satisfies the International Course requirement under the Business Cross-Functional Core as well as the Business Courses requirement.

Elective Courses (6 credit hours)

Select two courses from the following (see an advisor for guidance in course selection)

- ACTG 3300 - Cost Accounting (3)
- FIN 3500 - Capital Budgeting (3)
- MGMT 4300 - Influence and Group Effectiveness (3)
- MGMT 4650 - Negotiations (3)
- SCM 4860 - Supply Chain Management Internship (3) or
- BSAD 4680 - Small Business Diagnostics (3)
- BSAD 3500 - Introduction to Business Research (3)
- BSAD 3600 - [World Region] Business and Society (3)
- BSAD 4210 - Survey of Business Law (3)
- BSAD 4500 - Entrepreneurship (3)
- MGMT 3300 - Human Resource Management (3)
- MKTG 4400 - Marketing Strategy (3)
- One additional international business course from GSBE list

Information Systems & Technologies (BIS)

Program Prerequisite: IST 2010. Also refer to Bachelor of Integrated Studies (BIS) requirements.

Grade Requirements: Each IST class must be completed with a grade of C- or better, and the overall GPA for IST classes must be at least 2.5.

Credit Hour Requirements: 24 hours of IST courses selected in consultation with an IST advisor.

Course Prerequisites, Advisement and Admission Requirements

Refer to the IST Minor requirements.

Suggested Courses

- IST 2110 - Software Development I (3)
- IST 2410 - Information Systems Architecture (3)
- IST 3110 - Information Technology for Business (3)
- IST 3210 - Database Design and Implementation (4)
- IST 3610 - Networks & Data Communications I (4)

- IST 3700 - E-business Technologies & Web Development (3)

plus one of:

- IST 3620 - Networks and Data Communications II (3)
- IST 3720 - Software Development II (3)

Business Administration for Non-Business Majors Minor

Grade Requirements: A minimum GPA of 2.5 in all courses used toward the minor.

Credit Hour Requirements: Minimum of 31 credit hours in approved courses. See the John B. Goddard School of Business & Economics advisor for requirements.

Students pursuing this business administration minor must major in a nonbusiness field, complete the the Goddard School of Business & Economics Admission Requirements (see John B. Goddard School of Business & Economics), and receive approval of the program by the Business Administration Department chair.

See the Department of Business Administration, WB 216, (801) 626-6075 for advisement.

Courses Requirements for Minor

Required Courses (16 credit hours)

- ACTG 2010 - Survey of Accounting I (3)
- BSAD 2899 - Business Foundations and Admission Assessment (0)
- ECON 2010 SS - Principles of Microeconomics (3)
- ECON 2020 SS - Principles of Macroeconomics (3)
- QUAN 2600 - Business Statistics I (3)
- QUAN 3610 - Business Statistics II (3)
- IST 2010 TE - Business Computer Skills (1)

All course prerequisites must also be completed.

Elective Courses (15 credit hours)

A minimum of 15 hours in Business Administration, Finance, Management, Marketing, and Supply Chain Management courses as approved by the Business Administration Department.

Information Systems & Technologies Minor

Grade Requirements: A 2.5 GPA in the minor. A course grade of "C-" or higher is required for all business and economics prerequisite courses.

Credit Hour Requirements: 20 semester credit hours are required. Approval of a minor program by the Information Systems & Technologies department is required.

Course Prerequisites

Generally, all business and economics courses with numbers above 3000 require prior completion of ACTG 2010, ECON 2010, ECON 2020, IST 2010 and QUAN 2600 (unless noted).

These prerequisites are referred to collectively as "Business Foundations." All IST courses numbered above 3000 require Business Foundations except IST 3110.

However, for purposes of the non-business minor and the BIS Emphasis, courses numbered 3000 or higher require prior completion of IST Prerequisite Courses and IST department approval.

Advisement

Advisement is strongly encouraged for all GSBE majors and minors. See more information on available advising resources in John B. Goddard School of Business & Economics.

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 GSBE Advising Center, WB 211, (801) 626-6534 and/or the Department of Information Systems & Technologies, D2 137, (801) 395-3520.

Course Requirements for Minor

Non-Business Majors (20 credit hours)

Courses Required (16 credit hours)

- ACTG 2010 - Survey of Accounting I (3)
- IST 2010 TE - Business Computer Skills (1)
- IST 2110 - Software Development I (3)
- IST 2410 - Information Systems Architecture (3)
- IST 2720 - Data Structures and Algorithms (3)
- IST 3110 - Information Technology for Business (3)

Elective Course (4 credit hours)

Select one of the following

- IST 3210 - Database Design and Implementation (4)
- IST 3610 - Networks & Data Communications I (4)

Business Majors (20 credit hours)

Courses Required (17 credit hours)

- IST 2110 - Software Development I (3)
- IST 2410 - Information Systems Architecture (3)
- IST 2720 - Data Structures and Algorithms (3)
- IST 3210 - Database Design and Implementation (4)
- IST 3610 - Networks & Data Communications I (4)

Elective Course (3 credit hours)

Select one of the following

- IST 3620 - Networks and Data Communications II (3)
- IST 3700 - E-business Technologies & Web Development (3)
- IST 3720 - Software Development II (3)

Information Systems & Technologies Departmental Honors

Please contact the Department of Business Administration for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Enroll in the General Honors Program and complete 9 hours of General Honors courses. One of these courses must be HNRS 3900 - Honors Colloquium. The Honors Colloquium courses are 3 credit hours and topics vary from semester to semester.

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Fulfill requirements for an Information Systems & Technologies Department major. In fulfilling these requirements, students must take at least 12 hours of Information Systems & Technologies courses on an Honors basis, 3 hours of which must be completed as a IST 4730 - Senior Practicum: Project Management and Systems Development. The student may receive Information Systems & Technologies Honors credit in any upper-division or graduate level IST course.

Department of Economics

Department Chair: Doris Geide-Stevenson

Location: Wattis Business Building, Room 226

Telephone: Department Secretary, Elaine Thomas 801-626-6066

Professors: Dan Fuller, Therese Cavlovic Grijalva, Doris Geide-Stevenson, John Mbaku, Clifford Nowell; **Associate Professor:** Mary Wrenn (on leave); **Assistant Professors:** Nazneen Ahmad, Brandon Koford; **Visiting Professors:** Gregory Parkhurst, Nurgul Ukueva

The Department of Economics offers two 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 take entry level jobs 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 General 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.

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, ECON 2010, ECON 2020, IST 2010, and QUAN 2600. These five 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 Business Foundations GPA, the overall business and economics GPA, and the overall university GPA must be 2.5 or higher.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; 60-61 of these are John B. Goddard School of Business & Economics required courses and 24 are required within the major.

Advisement

Advisement is strongly encouraged for all GSBE majors and minors. See more information on available advising resources here.

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 or ECON 2899 (for non-business Economics majors only). Students may obtain information regarding admissions from the GSBE Advising Center, WB 211, (801) 626-6534 and/or the Department of Economics, WB 226, (801) 626-6066.

General Education

Refer to Degree and General Education Requirements for the University Bachelor of Science requirements. ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

MATH 1050 is a prerequisite for ECON 2010, 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.

Major Course Requirements for BS Degree

John B. Goddard School of Business & Economics Requirements

- Liberal Support Curriculum (13 or 14)
- Business Foundations (13)
- BSAD 2899 Business Foundations and Admission Assessment (0)
- Business Cross-Functional Core (19)
- Business Functional Core (15)

Business Courses Required (12 credit hours)

- ECON 2899 - Economics Foundations and Admission Assessment (0)
- ECON 4010 - Intermediate Microeconomic Theory (3)
- ECON 4020 - Intermediate Macroeconomic Theory (3)
- ECON 4980 - Research Methods (3)
- IST 3110 - Information Technology for Business (3)

Elective Courses (12 credit hours)

Select from the following

- ECON 3090 - History of Economic Thought (3)
- ECON 3110 - International Trade (3)
- ECON 3120 - International Finance and Monetary Systems (3)
- ECON 3200 - Money and Banking (3)
- ECON 3400 - Labor Economics (3)
- ECON 3410 - Women in the World Economy (3)
- ECON 4170 - Economic Development (3)
- ECON 4320 - Industrial Organization (3)
- ECON 4520 - Public Finance (3)
- ECON 4550 - Introduction to Econometrics (3)
- ECON 4560 - Mathematical Economics (3)
- ECON 4800 - Independent Research (1-3)
- ECON 4810 - Experimental Courses (1-3)
- ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

Economics, General (BS)

Program Prerequisite: Not required.

Minor: See specific programs.

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 overall business and economics GPA must be 2.5 or higher.

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).

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, General Economics majors must register for ECON 2899 (for non-business Economics majors only). Students may obtain

information regarding admissions from the GSBE Advising Center, WB 211, (801) 626-6534 and/or the Department of Economics, WB 226, (801) 626-6066.

Advisement

Advisement is strongly encouraged for all GSBE majors and minors. See more information on available advising resources.

General Education

Refer to Degree and General Education Requirements for the University Bachelor of Science requirements. The following courses required for the General Economics major will also satisfy general education requirements: ECON 2010, ECON 2020 (Social Science). ECON 1740 is recommended to fulfill the Senate Bill Requirement in American Institutions.

MATH 1050 is a prerequisite for ECON 2010, 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 General Economics BS Degree

(see also Alternative Emphases)

School of Business & Economics Courses Required (24 credit hours)

- ECON 2010 SS - Principles of Microeconomics (3)
- ECON 2020 SS - Principles of Macroeconomics (3)
- ECON 2899 - Economics Foundations and Admission Assessment (0)
- ECON 4010 - Intermediate Microeconomic Theory (3)
- ECON 4020 - Intermediate Macroeconomic Theory (3)
- ECON 4980 - Research Methods (3)
- QUAN 2400 - Business Calculus (3) or
- ECON 3030 - Managerial Economics (3)
- QUAN 2600 - Business Statistics I (3)
- QUAN 3610 - Business Statistics II (3)

Upper Division Elective Courses (15 credit hours)

Select from the following

- ECON 3090 - History of Economic Thought (3)
- ECON 3110 - International Trade (3)
- ECON 3120 - International Finance and Monetary Systems (3)
- ECON 3200 - Money and Banking (3)
- ECON 3400 - Labor Economics (3)
- ECON 3410 - Women in the World Economy (3)
- ECON 4170 - Economic Development (3)
- ECON 4320 - Industrial Organization (3)
- ECON 4520 - Public Finance (3)
- ECON 4550 - Introduction to Econometrics (3)
- ECON 4560 - Mathematical Economics (3)
- ECON 4800 - Independent Research (1-3)
- ECON 4810 - Experimental Courses (1-3)
- ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

Note:

A minor taken from the College of Behavioral and Social Sciences, or other minor program approved in advance by the department chairperson is required.

Alternative Emphases

A summary of the three alternative emphasis areas that may be pursued for the General Economics Bachelor's Degree follow. A student's program of study must be approved by the Economics Department Chair.

Quantitative Economics Emphasis

School of Business & Economics Courses Required (27 credit hours)

- ECON 2010 SS - Principles of Microeconomics (3)
- ECON 2020 SS - Principles of Macroeconomics (3)
- ECON 2899 - Economics Foundations and Admission Assessment (0)
- ECON 4010 - Intermediate Microeconomic Theory (3)
- ECON 4020 - Intermediate Macroeconomic Theory (3)
- ECON 4550 - Introduction to Econometrics (3)
- ECON 4560 - Mathematical Economics (3)
- ECON 4980 - Research Methods (3)
- QUAN 2600 - Business Statistics I (3) *
- QUAN 3610 - Business Statistics II (3) *

** Substitutes for QUAN 2600 & QUAN 3610: MATH 3410 & MATH 3420, Probability and Statistics (3 each)*

Required Math Courses (16 credit hours)

- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)
- MATH 2210 - Calculus III (4)
- MATH 2250 - Linear Algebra and Differential Equations (4) or
- MATH 2270 - Elementary Linear Algebra (3)

Electives (12 credit hours)

Select from the following

- ACTG 2010 - Survey of Accounting I (3)
- ECON 3090 - History of Economic Thought (3)
- ECON 3110 - International Trade (3)
- ECON 3120 - International Finance and Monetary Systems (3)
- ECON 3200 - Money and Banking (3)
- ECON 3400 - Labor Economics (3)
- ECON 3410 - Women in the World Economy (3)
- ECON 4170 - Economic Development (3)
- ECON 4320 - Industrial Organization (3)
- ECON 4520 - Public Finance (3)
- ECON 4800 - Independent Research (1-3)
- ECON 4810 - Experimental Courses (1-3)
- ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- MATH 3120 - Foundations of Euclidean and Non-Euclidean Geometry (3)
- MATH 3270 - Linear Algebra (3)
- MATH 4110 - Modern Algebra I (3)

Due to the cross-disciplinary nature of this program, no minor is required.

Economics with Legal Studies Emphasis

Required Courses (36 credit hours)

- ECON 2010 SS - Principles of Microeconomics (3)
- ECON 2020 SS - Principles of Macroeconomics (3)
- ECON 2899 - Economics Foundations and Admission Assessment (0)
- ECON 4010 - Intermediate Microeconomic Theory (3)
- ECON 4020 - Intermediate Macroeconomic Theory (3)
- ECON 4980 - Research Methods (3)
- QUAN 2400 - Business Calculus (3) or
- ECON 3030 - Managerial Economics (3)
- QUAN 2600 - Business Statistics I (3)
- QUAN 3610 - Business Statistics II (3)
- ENGL 3210 - Advanced College Writing (3)
- PHIL 1250 HU - Critical Thinking (3) or
- PHIL 2200 QL - Deductive Logic (3)
- MGMT 3200 - Managerial Communications (3)
- POLS 4060 - Elements of Law (3)

Upper Division Economics Elective Courses (6 credit hours)

Select from the following

- ECON 3090 - History of Economic Thought (3)
- ECON 3110 - International Trade (3)
- ECON 3120 - International Finance and Monetary Systems (3)
- ECON 3200 - Money and Banking (3)
- ECON 3400 - Labor Economics (3)
- ECON 3410 - Women in the World Economy (3)
- ECON 4170 - Economic Development (3)
- ECON 4320 - Industrial Organization (3)
- ECON 4520 - Public Finance (3)
- ECON 4550 - Introduction to Econometrics (3)
- ECON 4560 - Mathematical Economics (3)
- ECON 4800 - Independent Research (1-3)
- ECON 4810 - Experimental Courses (1-3)
- ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

Legal Studies Elective Courses (minimum of 12 credit hours)

Choose one class from each group

Skills Important to Law

- ACTG 2010 - Survey of Accounting I (3)
- ACTG 2020 - Survey of Accounting II (3)
- ENGL 3030 - Structure of English (3)
- COMM 3120 - Advanced Public Speaking (3)
- COMM 3810 - Persuasive Communication (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- COMM 4160 - Contemporary Rhetorical and Communication Theories (3)

Law Courses

- BSAD 3200 - Legal Environment of Business (3)
- CHF 3150 - Consumer Rights and Responsibilities (3)
- COMM 3650 - Communication Law (3)
- CJ 1330 - Criminal Law (3)
- CJ 2350 - Laws of Evidence (3)
- POLS 4020 - American Constitutional Law I: Governmental Powers (3)

- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)

Background of the Law

- HIST 4340 - History of England since 1714 (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- POLS 4600 - American Congress (3)
- POLS 4750 - Public Policy Analysis (3)
- SOC 4270 - Sociology of Law (3)

Correlative Courses

- PSY 3460 - Social Psychology (3)
- PSY 3560 - Group Dynamics and Counseling (3)
- PSY 3270 - Motivation and Emotion (3)

Due to the cross-disciplinary nature of this program, no minor is required.

International Economics Emphasis

School of Business & Economics Courses Required (30 credit hours)

- ECON 2010 SS - Principles of Microeconomics (3)
- ECON 2020 SS - Principles of Macroeconomics (3)
- ECON 2899 - Economics Foundations and Admission Assessment (0)
- ECON 4010 - Intermediate Microeconomic Theory (3)
- ECON 4020 - Intermediate Macroeconomic Theory (3)
- ECON 4980 - Research Methods (3)
- QUAN 2400 - Business Calculus (3)
- QUAN 2600 - Business Statistics I (3)
- QUAN 3610 - Business Statistics II (3)

and a minimum of two of the following:

- ECON 3110 - International Trade (3)
- ECON 3120 - International Finance and Monetary Systems (3)
- ECON 4170 - Economic Development (3)

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 (3)
- ECON 3200 - Money and Banking (3)
- ECON 3400 - Labor Economics (3)
- ECON 3410 - Women in the World Economy (3)
- ECON 4320 - Industrial Organization (3)
- ECON 4520 - Public Finance (3)
- ECON 4550 - Introduction to Econometrics (3)
- ECON 4560 - Mathematical Economics (3)
- ECON 4800 - Independent Research (1-3)
- ECON 4810 - Experimental Courses (1-3)
- ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

Political Science/Philosophy (minimum of 3 credit hours)

- POLS 2100 SS - Introduction to International Politics (3)

- POLS 2200 SS - Introduction to Comparative Politics (3)
- POLS 2300 SS - Introduction to Political Theory (3)
- POLS 3140 - Foreign Policy of the United States (3)
- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4160 - Topics in World Politics (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)
- POLS 4280 - Foreign Policies of Major Powers (3)
- PHIL 3550 DV - Philosophy of Eastern Religion (3)

Geography (minimum of 3 credit hours)

- GEOG 3060 - World Environmental Issues (3)
- GEOG 3540 DV - Geography of Latin America (3)
- GEOG 3590 DV - Geography of Europe (3)
- GEOG 3620 DV - Geography of Russia and the Former USSR (3)
- GEOG 3640 DV - Geography of Asia (3)
- GEOG 3660 DV - Geography of China and Japan (3)
- GEOG 3740 DV - Geography of Africa (3)

History (minimum of 3 credit hours)

- HIST 4260 - Twentieth-Century Europe (3)
- HIST 4320 - Russia since 1917 (3)
- HIST 4340 - History of England since 1714 (3)
- HIST 4350 DV - History of Modern Germany (3)
- HIST 4370 - History of Modern France 1789-present (3)
- HIST 4410 - History of Spain and Portugal (3)
- HIST 4430 - History of Scandinavia (3)
- HIST 4450 - History of Modern Eastern Europe since 1815 (3)
- HIST 4510 DV - Twentieth Century World (3)
- HIST 4530 DV - Far Eastern History (3)
- HIST 4550 DV - Southeast Asian History (3)
- HIST 4590 DV - Middle Eastern History (3)
- HIST 4610 - History of Africa (3)
- HIST 4650 DV - Modern Latin America (3)
- HIST 4670 DV - History of Mexico (3)

Given the broad international electives required, no minor is required.

Economics for Non-Business Majors Minor

Grade Requirements: A grade of "C-" or higher in courses used toward the minor.

Credit Hour Requirements: Minimum of 21 credit hours.

This minor is for students who major outside of the John B. Goddard School of Business & Economics. Approval of a minor program by the Economics department chair is required.

Course Requirements for Minor

Required Courses (21 credit hours)

- ECON 2899 - Economics Foundations and Admission Assessment (0)
- ECON 2010 SS - Principles of Microeconomics (3)
- ECON 2020 SS - Principles of Macroeconomics (3)
- ECON 4010 - Intermediate Microeconomic Theory (3)

- ECON 4020 - Intermediate Macroeconomic Theory (3) or
- ECON 3200 - Money and Banking (3)
- QUAN 2600 - Business Statistics I (3) or
- CJ 3600 - Criminal Justice Statistics (3) or
- GEOG 3600 - Quantitative Methods in Geography (3) or
- PSY 3600 - Statistics in Psychology (3) or
- GERT 3600 - Social Statistics (3) or
- SW 3600 - Social Statistics (3) or
- SOC 3600 - Social Statistics (3)
- Two upper-level ECON or QUAN electives (6)

MATH 1050 with a grade of "C" or higher (or CR if taken on a CR/NC basis) is a prerequisite for ECON 2010, QUAN 2600; ECON 2010 is a prerequisite for ECON 2020.

Economics Teaching Minor

Grade Requirements: A grade of 2.5 or higher in courses used toward the minor.

Credit Hour Requirements: Minimum of 15 credit hours.

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 (15 credit hours)

- ECON 1010 SS - Economics as a Social Science (3)
- ECON 2010 SS - Principles of Microeconomics (3)
- ECON 2020 SS - Principles of Macroeconomics (3)
- ECON 1740 AI - Economic History of the United States (3)
- ECON 3200 - Money and Banking (3)

Economics Departmental Honors

Please contact the Economics Department for advisement and permission prior to enrolling in Honors courses.

Prerequisite: Enroll in the General Honors Program and complete at least 9 hours of General Honors courses.

Grade Requirements: Maintain an overall GPA of 3.3

Credit Hour Requirements: Fulfill requirements for an Economics Department major, given above for Business Economics and, for General Economics, in the Social & Behavioral Sciences section of the catalog. In fulfilling these requirements, students must take at least 12 hours of economics courses on an Honors basis, 2 hours of which must be completed as a senior project (HNRS 4990). The student may receive economics Honors credit in any upperdivision or graduate-level economics course. In addition, either ECON 4010 or ECON 4020 must be taken on an Honors basis.

Jerry and Vickie Moyes College of Education

Dr. Jack L. Rasmussen, Dean

The College of Education is committed to developing and maintaining healthy and responsible individuals, families, and schools in a global and diverse society through roles related to the preparation and support of practitioners and educators, service to campus and community, and the discovery and advancement of knowledge.

Students completing baccalaureate programs in the College of Education will be granted the Bachelor of Science degree. The College also grants Master of Education degrees in Curriculum and Instruction and Master of Science degrees in Athletic Training.

Associate Deans: Dr. Chloe D. Merrill and Dr. S. Jack Loughton

Location: David O. McKay Education Building, Room 228
Telephone Contact: Ruby Thatcher 801-626-6272

Department Chairs/Directors

Child and Family Studies:

Dr. Paul Schvaneveldt 801-626-7151

Health Promotion and Human Performance:

Dr. Jennifer Turley 801-626-6933

Master of Science in Athletic Training:

Dr. Valerie Herzog 801-626-7656

Master of Education:

Dr. Peggy Saunders 801-626-6278

Teacher Education:

Dr. Jack Mayhew 801-626-7171

Grade Appeal Procedures

The evaluation of student performance is recorded on the student's University transcript as part of the student's permanent record. The grade is determined by the faculty member responsible for the course and is based upon factors related to achievement of the course objectives. The grade is considered final unless an appropriate appeal is filed by the student. For the student who is dissatisfied with a grade and has reason to believe the grade issued is incorrect, the following appeal procedure is provided by the College and the University. Steps 1 and 2 of the process are considered informal appeals and are designed to provide an avenue for resolution without a formal hearing.

Step 1 Within fourteen (14) days of the beginning of the following term, the student shall confer with the instructor who issued the grade and outline the reason/s why he or she believes the grade to be incorrect. (If the faculty member is unavailable, the student must contact the faculty member's chairperson within this same time period to request an extension of the time allowed for this step. Such permission must be obtained in writing.) Within seven (7) days of the student-faculty conference, the faculty member shall advise the student, in writing, of the outcome of the course grade review.

Step 2 If the student still considers the grade to be incorrect, the student may appeal the grade at the department level. This appeal must be in writing, must follow the procedures outlined in the College's Grade Appeal Process document, and must be filed not later than seven (7) days from the date of the completion of step one. The College Grade Appeal Process document may be picked up from the department office or the office of the dean.

Step 3 If, after completion of step 2, the student is still dissatisfied, the student should consult with the University's due process officer and may request that the case be reviewed by a Weber State University hearing committee.

Master of Education in Curriculum and Instruction Program

Director: Peggy Saunders

Location: McKay Education Building, Room 235

Telephone Contact: Lynda Goucher 801-626-6278

Web site: weber.edu/meduc

The mission of the Master of Education in Curriculum and Instruction (MEd) program is to extend the professional knowledge, skills and attitudes of educators in schools, business, industry, and higher education through advancing the theoretical and practical applications of curriculum and instruction. The program is approved the National Council for Accreditation of Teacher Education (NCATE).

The MEd program with the organizing theme of Teacher as Reflective Practitioner is practice-oriented, and the purposes, processes, outcomes, and evaluation are explicated by a model represented by the acronym TREC: Teachers Reflecting, Engaging, and Collaborating. The components, reflecting, engaging, and collaborating, serve as a framework for organizing course work and program development. The goals of the curriculum reflect an emphasis on preparing master educators who:

- are reflective of their own practices and their impact on students;
- engage students through a variety of strategies to ensure growth in knowledge and learning processes that they might become independent life-time learners;
- collaborate with peers and students in learning communities;
- engage in research to improve educational practices and those of peers.

In cooperation with the university, the program provides avenues for continuing professional development and continual learning for university faculty as well as students and encourages the university values of teaching, scholarship, and service.

Master of Education in Curriculum and Instruction (MEd)

Admission Requirements

The MEd program is selective with a limited number of openings available for qualified students. Admission deadlines are January 15 for Summer and Fall Semesters, and September 15 for Spring Semester. For additional information contact the Master of Education office, (801) 626-6278.

The following 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.
5. Completed MEd recommendation forms (3).
6. Minimum GPA of 3.25 on the last 60 semester hours (90 quarter hours) of approved undergraduate/graduate course work.
or
Minimum GPA of 3.00 to 3.24 on the last 60 semester hours (90 quarter hours) and a minimum score of either 396 on the Miller's Analogies Test (MAT) or 480 each on the Verbal, Quantitative, and Analytical portions of the Graduate Record Examination (GRE).
7. Interview with Teacher Education faculty members.
8. Writing proficiency assessment.
9. Technology proficiency assessment.
10. Attendance at a new-student orientation session prior to beginning the MEd program.
11. Provisional admittance (first 21 hours).

Note: It is recommended applicants have an equivalent of one year's full-time professional teaching experience.

Additional Requirements for Licensure Candidates

1. Bachelor's degree from an accredited university. (For Secondary Licensure Candidates the degree must be in a recognized content major—a discipline taught in Utah secondary schools and for which WSU can recommend you for licensure).
2. Praxis II [subject-area test(s)].
3. Fingerprinting and background check.

Additional Requirements for International Students

- TOEFL score of 213 (computer-based) or 80 (internet-based) or IELTS 6.0.
- Oral language proficiency assessment.
- Weber State University-accepted Bachelor's degree.
- Courses evaluated into the equivalent of American credits and letter grades.
- If the overall GPA is lower than 3.25, and the evaluated transcript cannot be calculated for the last 60 semester hours (90 quarter hours) of course work, the Graduate Record Examination must be taken with a minimum score of 480 each on the Quantitative and Analytical portions.

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 core and licensure classes.

Course Requirements for MEd

The 36 hour program of study consists of a 21-hour professional core requirement and 15 hours of graduate committee-approved professional education electives and/or courses in the student's discipline. A portion of the core requirement is the completion of a Master's project, an application of knowledge and skills.

Professional Education Core Requirements (21 credit hours)

Foundations

- MED 6000 - Fundamentals of Graduate Study (2)
- MED 6010 - Advanced Historical Foundations (2)
- MED 6020 - Diversity in Education (2)
- MED 6030 - Advanced Educational Psychology (2)

Methodology

- MED 6050 - Curriculum Design, Evaluation & Assessment (3)
- MED 6060 - Instructional Strategies (2)

Scholarship

- MED 6080 - Conducting Educational Research (3)
- MED 6085 - Developing a Project Proposal (1)
- MED 6090 - Master's Project (3)
- MED 6091 - Graduate Synthesis (1)

Electives (15 credit hours)

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 in reading, special education, gifted and talented, ESL, or ESL/bilingual. At the present time Weber State offers graduate level content courses in English, HPHP, math, history, science, NTM, and foreign language. The graduate office has listings of approved elective courses and endorsement requirements.

Secondary Licensure Track

MEd Course Requirements for Secondary Licensure

Foundations and Methods

- MED 6110 - Introduction to Classroom Management (3) or
- MED 6120 - Advanced Classroom Management (3)
- MED 6050 - Curriculum Design, Evaluation & Assessment (3)

The following courses can be taken in any order:

- MED 6320 - Content Area Literacy Instruction (3)
- MED 6510 - Advanced Foundations in Special Education Practice and Law (Elementary and Secondary Teachers) (3)
- MED 6020 - Diversity in Education (2)
- MED 6060 - Instructional Strategies (2)

If a methods course is available in your content major, you are required to take it.

Field Experience with Supervision

(These credits do not count towards a master's degree, but are part of the requirements for licensure.)

If currently teaching on a provisional license

- EDUC 5860 - Practicum in Education **(1-4)** (2 + 2)
Mentoring and supervision will be given for two semesters (2 credits each semester - minimum of 4 credit hours)

OR

If not currently teaching

- EDUC 5860 - Practicum in Education **(1-4)** (2 credit hours required)
- At least 60 clock hours in a secondary school setting early in your coursework.
- EDUC 5880 - Student Teaching in Secondary Education for MED Students **(6)**
- All day for 50 days with an assigned cooperating teaching, or you can be hired by a district and complete an internship.

Successful completion of the above coursework and field work will result in a recommendation for the Utah Level 1 Secondary License.

Course Requirements for MEd (Secondary Licensure Track)

The 36 hour program of study consists of 16 hours of licensure courses, 14 hours of additional professional MEd core requirements and 6 hours of graduate committee-approved professional education electives and/or courses in the student's discipline. A portion of the core requirement is the completion of a Master's project, an application of knowledge and skills.

Professional Education Core Requirements (14 credit hours)

Foundations

- MED 6000 - Fundamentals of Graduate Study **(2)**
- MED 6010 - Advanced Historical Foundations **(2)**
- MED 6030 - Advanced Educational Psychology **(2)**

Scholarship

- MED 6080 - Conducting Educational Research **(3)**
- MED 6085 - Developing a Project Proposal **(1)**
- MED 6090 - Master's Project **(3)**
- MED 6091 - Graduate Synthesis **(1)**

Electives (6 credit hours)

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 in reading, special education, gifted and talented, ESL, or ESL/bilingual. The graduate office has listings of approved elective courses and endorsement requirements.

If a methods course is available in your content major, you are required to take it.

It is recommended that students take a graduate level content methods course in their content major. WSU offers methods courses in English, HPHP, math, history, science, and foreign language.

Elementary Education Licensure Track

MEd Course Requirements for Elementary Licensure

Foundations and Methods

- MED 6110 - Introduction to Classroom Management **(3)** or
- MED 6120 - Advanced Classroom Management **(3)**
- MED 6050 - Curriculum Design, Evaluation & Assessment **(3)**

The following courses can be taken in any order:

- MED 6020 - Diversity in Education **(2)**
- MED 6311 - Content Instruction in the Elementary School: Science **(2)**
- MED 6312 - Content Instruction in the Elementary School: Mathematics **(2)**
- MED 6313 - Content Instruction in the Elementary School: Social Studies **(2)**
- MED 6510 - Advanced Foundations in Special Education Practice and Law (Elementary and Secondary Teachers) **(3)**

Literacy Courses

- MED 6314 - Reading Instruction in Elementary Schools **(2)**
- MED 6316 - Language Arts Instruction in Elementary Schools **(2)**

Mentoring and Supervision

*These credits do **not** count towards a master's degree, but are part of the requirements for licensure.*

Option 1 (If currently teaching on a provision license)

- EDUC 5860 - Practicum in Education **(1-4)** (2+2)
(Mentoring, supervision, and coaching support will be given for two semesters: 2 credits each semester with a minimum of 4 credit hours)

Option 2 (If not currently teaching)

- EDUC 5860 - Practicum in Education **(1-4)** (2 credit hours required)
(Complete a practicum of at least 60 clock hours in a school setting after completing MED 6050.)
- EDUC 5840 - Student Teaching in Elementary Education for MED Students **(6)**
(Complete student teaching, all day for 50 days, with an assigned cooperating teacher.)

Successful completion of the above course work and field work will result in recommendation for the Utah Level 1 Elementary License.

Course Requirements for MEd (Elementary Licensure Track)

The 37 hour program of study consists of 21 hours of licensure courses and 16 hours of additional professional core requirements. A portion of the core requirement is the completion of a Master's project, an application of knowledge and skills.

Professional Education Core Requirements (16 credit hours)

Foundations

- MED 6000 - Fundamentals of Graduate Study **(2)**
- MED 6010 - Advanced Historical Foundations **(2)**
- MED 6030 - Advanced Educational Psychology **(2)**
- MED 6060 - Instructional Strategies **(2)**

Scholarship

- MED 6080 - Conducting Educational Research **(3)**
- MED 6085 - Developing a Project Proposal **(1)**
- MED 6090 - Master's Project **(3)**
- MED 6091 - Graduate Synthesis **(1)**

Special Education (Mild/Moderate) Licensure Track

MEd Course Requirements for Special Education Licensure

Foundations and Methods

- MED 6510 - Advanced Foundations in Special Education Practice and Law (Elementary and Secondary Teachers) **(3)**
- MED 6520 - Collaboration, Consultation, and IEP Development **(3)**
- MED 6530 - Principles and Applications of Special Education Assessment **(3)**
- MED 6540 - Advanced Managing Student Behavior **(3)**
- MED 6550 - Advanced Instructional Planning and Learning Environments for Special Education Students **(3)** OR
- MED 6580 - Advanced Learning Strategies and Transition for Special Education Students **(3)**
- MED 6555 - Advanced Instructional Methods and Practicum: Reading **(4)**
- MED 6560 - Advanced Instructional Methods and Practicum: Mathematics **(4)**
- MED 6570 - Advanced Instructional Methods and Practicum: Written Expression **(4)**

Field Experience with Supervision

(These credits do not count towards a master's degree, but are part of the requirements for licensure.)

If currently teaching on a provisional license

- EDUC 4670 - Special Education Student Teaching **(4)**
- EDUC 4685 - Special Education Student Teaching Seminar and Synthesis **(1)**

OR

If not currently teaching

- EDUC 4581 - Pre-Student Teaching in Special Education: Assessment, Behavior Management, Instruction **(4)** which includes at least 60 clock hours in a K-12 school resource room setting.
- EDUC 4680 - Special Education Student Teaching **(8)** all day for 60 days, with an assigned cooperating teaching
- EDUC 4686 - Special Education Student Teaching Seminar & Synthesis for Special Education Majors **(4)**

Note:

Successful completion of the above coursework and field work will result in a recommendation for the Utah Level 1 Special Education (mild-mod) License.

Course Requirements for MEd (Special Education Licensure Track)

The 44 hour program of study consists of 30 hours of licensure courses and 14 hours of additional professional MEd core requirements. A portion of the core requirement is the completion of a Master's project, an application of knowledge and skills.

Professional Education Core Requirements (14 credit hours)

Foundations

- MED 6000 - Fundamentals of Graduate Study **(2)**
- MED 6010 - Advanced Historical Foundations **(2)**
- MED 6030 - Advanced Educational Psychology **(2)**

Scholarship

- MED 6080 - Conducting Educational Research **(3)**
- MED 6085 - Developing a Project Proposal **(1)**
- MED 6090 - Master's Project **(3)**
- MED 6091 - Graduate Synthesis **(1)**

Master of Science in Athletic Training Program

Director: Valerie W. Herzog, EdD, LAT, ATC

Location: 102F Swenson Building

Telephone: 801-626-7656

Faculty: Valerie W. Herzog, EdD, LAT, ATC; Jordan Hamson-Utley, PhD, LAT, ATC; Jennifer Ostrowski, PhD

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 allied health care as a certified athletic trainer. Athletic trainers are currently employed in colleges and universities, public and private high schools, corporations, physical therapy clinics, professional organizations, the military, factories, and hospitals (www.nata.org - National Athletic Trainers' Association).

Master of Science in Athletic Training (MS)

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 for WSU general admissions)
- GRE scores (only required if GPA is below a 3.0)
- Minimum 3.0 GPA*
- Submit Graduate Athletic Training Student Application (found online at: weber.edu/athletictraining/graduateadmissions.html)
- Submit Application Essay (see online application 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)**
- Program Interview - in person or over the phone
- Completed Technical Standards Form
- Official Transcripts from other colleges/universities attended
- Physical examination and proof of immunizations
- Hepatitis-B vaccination (can be completed in first semester if deficient)
- Current Emergency Medical Response and CPR for Professional Rescuers and Healthcare Providers certification cards (can be completed in first semester if deficient)
- Pay Application fee

* Grade point averages between 2.75 and 2.99 will be considered if GRE scores are above average.

** Students who are deficient in one or more 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 application deadline is February 1 for the following summer 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 February 1st deadline, as the program will likely reach capacity at that point. The online application may be accessed on-line at weber.edu/athletictraining/graduateadmissions.html.

Post-Admission Requirements

After formal admission to the Athletic Training Masters 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 Health Promotion and Human Performance and the MSAT faculty.

Both the background check and the drug test will be completed during the student's first semester. The expenses (approximately \$75) 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 a 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 550 (paper-based) or 213 (computer-based), or 79-80 (internet-based) has been earned. The MSAT also accept 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 has been earned.

Selection Process

- A. All applicants will be ranked using a numerical scale on the following criteria:
 1. Cumulative GPA/GRE Scores [0-4 weight in selection formula = 40%]
 2. Application Essay [0-4 weight in selection formula = 25%]
 3. References [0-4 weight in selection formula = 15%]
 4. Previous athletic training experience and strength of applicant's commitment as reflected in interview responses [0-4 weight in selection formula = 20%]
- 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 concerning clinical instructor-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 re-apply must meet all requirements in effect at the time of re-application. 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.**

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 courses (*includes Graduate Practicum courses*).
 2. Maintain an overall Weber State University Graduate GPA of 3.0.
 3. Adhere to WSU Athletic Training Policies and Procedures.

4. 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 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. Athletic Training Policies and Procedures are available in the MS Athletic Training Student Handbook. Students who receive a grade lower than a "B-" in two or more MSAT courses will be dismissed from the program.

Advisement

Students enrolled in the MSAT program will be assigned a faculty advisor. Students will be required to meet with their faculty advisor at least once a semester but will be encouraged 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 entry-level masters program 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.

Prerequisite Course Requirements for MS

Required Prerequisite Courses (31 credit hours)

(or equivalent courses - syllabi or catalog course description required)

- AT 2300 - Emergency Response (3)
- HTHS 2240 - Introduction to Pharmacology (3)
- HLTH 1030 SS - Healthy Lifestyles (3)
- NUTR 1020 LS - Science and Application of Human Nutrition (3)
- PEP 3280 - Teaching Neuromuscular Conditioning (2)
- PEP 3500 - Kinesiology (3)
- PEP 3510 - Exercise Physiology (3)
- PSY 1010 SS - Introductory Psychology (3)
- ZOOL 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)

Course Requirements for MS

Required Courses (52 credit hours)

Didactic Courses

- MSAT 6080 - Research Methods I (3)
- MSAT 6085 - Research Methods II (3)

- MSAT 6090 - Research Methods III (3)
- MSAT 6200 - Psychology of Sport, Injury & Rehabilitation (3)
- MSAT 6300 - Orthopedic Assessment of Musculoskeletal Injuries: Lower Extremities (3)
- MSAT 6301 - Orthopedic Assessment of Musculoskeletal Injuries: Upper Extremities (3)
- MSAT 6350 - General Medical Conditions and Advances in Athletic Training (3)
- MSAT 6400 - Basic Therapeutic Modalities for Musculoskeletal Injuries (3)
- MSAT 6401 - Advanced Therapeutic Modalities for Musculoskeletal Injuries (3)
- MSAT 6431 - Orthopedic Taping, Wrapping, & Bracing (1)
- MSAT 6450 - Basic Rehabilitation of Musculoskeletal Injuries (3)
- MSAT 6451 - Advanced Rehabilitation of Musculoskeletal Injuries (3)
- MSAT 6600 - Administration and Management in Athletic Training (3)
- MSAT 6700 - Advanced Diagnostic Imaging for the Athletic Training Profession (1)
- MSAT 6999 - Critical Thinking for Musculoskeletal Injury Management (1)

Clinical Courses

- MSAT 6500 - Introduction to Graduate Athletic Training (First Semester) (2)
- MSAT 6501 - Graduate Practicum I (2)
- MSAT 6502 - Graduate Practicum II (3)
- MSAT 6503 - Graduate Practicum III (3)
- MSAT 6504 - Graduate Practicum IV (3)

Department of Child and Family Studies

Department Chair: Paul Schvaneveldt

Location: McKay Education Building, Room 204

Telephone Contact: Carol VandenAkker 801-626-7151

Advisor: Darcy Gregg 801-626-6411

Professors: Chloe Merrill, Paul Schvaneveldt; **Associate**

Professor: Randy Chatelain; **Assistant Professors:**

Daniel Hubler, Jared Lisonbee, Carrie L. Ota, Pamela Payne, Wei Qiu; **Instructors:** Joyce Buck, Carole Haun.

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. Minors in Child Development and Family Studies are also offered. Family studies is also an area available for a Bachelor of Integrated 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.

All students with a major/minor in Child & Family Studies are strongly encouraged to contact the department academic advisor in McKay Education Building room 248 (801-626-6411) early in their academic career for advisement and declaration of a major and/or minor.

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.

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 C level or better and apply to the Director of the Melba S. Lehner Children's School two semesters prior to student teaching. Other practical experience can be arranged with a faculty advisor.

Double Major

Early Childhood and Elementary Education

Students wanting licensure in both Early Childhood Education and Elementary Education are encouraged to complete a double major. All course requirements must be completed for both majors, which include only one semester of student teaching EDUC 4840 Student Teaching in Elementary Education (K and 1-3) and EDUC 4850 Integrated Elementary Student Teaching Seminar. Students will complete the Early Childhood Education requirements and add EDUC 2000 Social Studies Concepts, EDUC 3140 Educational Psychology, Interpersonal Skills and Classroom Management in Level 1, and be sure to take EDUC 3260E The Exceptional Student in Level 2. Please see the CHF department academic advisor for additional coursework and information.

Early Childhood (AAS)

Program Prerequisite: Before beginning this program, a student must see the department advisor in McKay Education Building Room 248 (801-626-6411).

Grade Requirements: An overall GPA of 2.00 or C and a grade of C or better in required courses. 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.

Credit Hour Requirements: A total of 63 credit hours is required for graduation; 29-31 of these are required within the major.

Advisement

Students must follow the Department of Child and Family Studies Advisement procedures. Contact the department advisor located in the McKay Education Building, Room 248 (801-626-6411).

Admission Requirements

Declare your program of study (see Program of Study (Major/Minor) Declaration).

Students enrolling in CHF 2600, CHF 2610 and CHF 2620 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. A handout available from the department secretary explains the procedure and nominal expenses. If the background check reveals misconduct, you will not be allowed to enroll in these courses or any others which include field experience, practica or student teaching. Background checks require up to eight weeks and should be completed, or in progress, prior to enrolling in CHF 2600, CHF 2610 and CHF 2620. See the department secretary for further details.

General Education

Refer to Degree and General Education 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.

Major Course Requirements for AAS Degree

General Education Requirements (15-18 credits)

Composition (3 credit hours)

- ENGL 2010 EN - Intermediate College Writing **(3)**
(prerequisite is ENGL 1010 (3) or equivalent)

Humanities/Creative Arts (3 credit hours)

- COMM 1020 HU - Principles of Public Speaking **(3)**
recommended

Quantitative Literacy (3 credit hours)

- MATH 1030 QL - Contemporary Mathematics **(3)**
recommended

Social Science (3 credit hours)

- CHF 1500 SS - Human Development **(3)**
recommended

Physical & Life Sciences (3 credit hours)

Child & Family Courses Required (minimum of 29-31 credit hours)

- CHF 1500 SS - Human Development **(3)**
- CHF 2400 - Family Relations **(3)**
- CHF 2500 - Development of the Child: Birth Through Eight **(3)**
- CHF 2600 - Introduction to Early Childhood Education **(3)** *(lab required)*
- CHF 2610 - Guidance Based on Developmental Theory **(3)** *(lab required)*

- CHF 2620 - Planning Creative Experiences for Young Children **(3)** (*lab required*)
- CHF 2860 - Practicum **(2-6)** (4-6 credit hours required) *
- CHF 2990A - Seminar in Child Development **(1)** *
- CHF 3500 - Young Children at Risk **(3)**
- CHF 3640 - Working with Parents **(3)**

* *Should be taken concurrently and after all other CHF classes are completed. CHF 4710 and CHF 4720 will also fulfill this requirement. Must make application and deadline for Practicum Experience.*

Electives (minimum 18 credit hours)

Select 18 additional credit hours with the approval of an advisor. Seek additional depth in Child and Family Studies and also select courses from across campus to enhance teaching competency in the areas of Art, Science, Literature, Music, Health & First Aid, etc.

Advisors will suggest specific appropriate courses. Students should work closely with an advisor if they are planning to go on for a future Early Childhood baccalaureate or a teaching certificate.

Early Childhood (BS)

Students preparing to work in childhood programs or agencies serving young children that do not require a teaching certificate graduate with a major in Early Childhood.

Students who wish to obtain certification to teach in kindergarten through 3rd grade graduate with a major in Early Childhood Education. (See Early Childhood Education description.)

Program Prerequisite: Not required.

Minor: Required. In lieu of a minor, a specialization of 15 credit hours may be substituted as approved by the department. Six of these hours must be upper division (courses numbered 3000 or above).

Grade Requirements: A grade of C or better in each course is required for this major in addition to a cumulative GPA of 2.50 for all courses. 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.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; 43 of these are required within the major. A minimum of 40 credit hours must be upper division (courses numbered 3000 and above); 22 of these are required within the major.

Advisement

Students must follow the Department of Child and Family Studies Advisement procedures. Contact the department advisor located in the McKay Education Building, Room 248 (801-626-6411).

Admission Requirements

Declare your program of study (see Program of Study (Major/Minor) Declaration). Sign a Program of Study Contract with the Department of Child and Family Studies. Contact the department advisor, 801-626-6411.

Students enrolling in CHF 2600, CHF 2610 and CHF 2620 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. A handout available from the department secretary explains the procedure and nominal expenses. If the background check reveals misconduct, you will not be allowed to enroll in these courses or any others which include field experience, practica or student teaching. Background checks required up to eight weeks and should be completed, or in progress, prior to enrolling in CHF 2600, CHF 2610 and CHF 2620. See the department secretary for further details.

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements. CHF 1500 (3) will satisfy a general education requirement and is prerequisite to most major courses.

Major Course Requirements for BS Degree

Pre Core Course Required (3 credit hours)

- CHF 1500 SS - Human Development **(3)**

(This course will satisfy a general education requirement.)

Core Courses Required (40 credit hours)

- CHF 2400 - Family Relations **(3)**
- CHF 2500 - Development of the Child: Birth Through Eight **(3)**
- CHF 2570 - Middle Childhood Development **(3)**
- CHF 2600 - Introduction to Early Childhood Education **(3)** (*lab required*)
- CHF 2610 - Guidance Based on Developmental Theory **(3)** (*lab required*)
- CHF 2620 - Planning Creative Experiences for Young Children **(3)** (*lab required*)
- CHF 3500 - Young Children at Risk **(3)**
- CHF 3640 - Working with Parents **(3)**
- CHF 4500 - Comparative Study of Childhood and Adolescent Development **(3)**
- CHF 4710 - Advanced Guidance and Planning for Early Childhood Education **(3)** *
- CHF 4720 - Student Teaching in the Children's School **(3-6)** (6 credit hours required) *
- CHF 4890 - Cooperative Work Experience **(1-6)** (3 credit hours required)
- CHF 4990A - Seminar in Child Development **(1)** *

* *Taken concurrently. Students are encouraged to apply two semesters prior to teaching in the Melba S. Lehner Children's School.*

In addition

Students must complete an advisor-approved specialization of 15 hours or advisor-approved minor.

Early Childhood Education (BS)

The Departments of Child and Family Studies and Teacher Education offer a major in Early Childhood Education with certification for teaching in programs which serve children from birth through eight years of age (Pre-K through 3rd grade). Students preparing to teach a Pre-K early care and education program, Head Start, or a Kindergarten to 3rd grade classroom of a public school graduate with a major in Early Childhood Education.

Program Prerequisite: Students must have completed at least 40 credit hours of general education and relevant prerequisite courses. Students must also meet the Teacher Education admission and licensure requirements. (See Department of Teacher Education in this catalog.)

Minor: Not required. Early Childhood is the specialization.

Grade Requirements: Early Childhood 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 the program. A grade of "C" or better in each course (except professional education courses) is required. 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.

Credit Hour Requirements: A minimum of 126 credit hours is required for a bachelor's degree; 94 of these are required within the major. A minimum of 65 upper division credit hours is required (courses numbered 3000 and above).

Advisement

Students must follow the Department of Child and Family Studies Advisement procedures. Contact the department advisor located in the McKay Education Building, Room 248 (801-626-6411).

Admission Requirements

Declare your program of study (see Program of Study (Major/Minor) Declaration). Early Childhood Education majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Students enrolling in CHF 2600, CHF 2610 and CHF 2620 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. A handout available from the department secretary explains the procedure and nominal expenses. If the background check reveals misconduct, you will not be allowed to enroll in these courses or any others which include field experience, practica or student teaching. Background checks require up to eight weeks and should be completed, or in progress, prior to enrolling in CHF 2600, CHF 2610 and CHF 2620. See the department secretary for further details.

General Education

See Degree and General Education Requirements for Bachelor of Science requirements. CHF 1500 will satisfy a general education requirement and is prerequisite to most Child and Family courses. COMM 1020 may be taken to fulfill both a support course and a general education requirement. A science class with a lab is a requirement for Teacher Education.

Major Course Requirements for BS Degree

Pre Core Course Required (3 credit hours)

- CHF 1500 SS - Human Development (3)

(This course will satisfy a general education requirement.)

Core Courses Required (25 credit hours)

- CHF 2500 - Development of the Child: Birth Through Eight (3)
- CHF 2600 - Introduction to Early Childhood Education (3) *(lab required)*
- CHF 2610 - Guidance Based on Developmental Theory (3) *(lab required)*
- CHF 2620 - Planning Creative Experiences for Young Children (3) *(lab required)*
- CHF 3640 - Working with Parents (3)
- CHF 4710 - Advanced Guidance and Planning for Early Childhood Education (3) *
- CHF 4720 - Student Teaching in the Children's School (3-6) (6 credit hours required) *
- CHF 4990A - Seminar in Child Development (1)

* Taken concurrently. Students are encouraged to apply two semesters prior to teaching in the Melba S. Lehner Children's School.

Support Courses Required (22 credit hours)

- EDUC 1010 - Exploring Teaching (3)
- COMM 1020 HU - Principles of Public Speaking (3) * or
- COMM 2110 HU - Interpersonal & Small Group Communication (3) * or equivalent
- MATH 2010 - Mathematics for Elementary Teachers I (3)
- MATH 2020 - Mathematics for Elementary Teachers II (3)
- ENGL 3300 - Children's Literature (3)
- PEP 3630 - Physical Education K-6 (3) **
- HLTH 4300 - Health Education in the Elementary School (2)
- EDUC 3110 - Instructional Technology (2) *** or
- EDUC 3370 - Advanced Instructional Technology (2) ***

Note:

* Will satisfy a general education requirement

** Students must take PEP 3630 after Level 1

*** Based on a technology proficiency assessment, students will complete one of two courses prior to or concurrent with Level 1

Support Course Elective (2-4 credit hours)

Select one course from the following

- MUSC 3824 - Music for Elementary Teachers (4)
- EDUC 3430 - Creative Processes in the Elementary School (3)
- THEA 4603 - Creative Drama (3)
- DANC 3640 - Teaching Creative Dance in the Elementary School (2)
- ART 1030 CA - Studio Art for the Non-Art Major (3) *

* May not be used as both a support elective and general education

Professional Education Courses Required (42 credit hours)

Admission to teacher education is required prior to enrollment in Professional Education courses.

Level 1 (6 credit hours)

- EDUC 3100 - Instructional Planning & Assessment (3)
- EDUC 3120 - Reading Instruction in the Primary Grades (3)

Level 2 (12 credit hours, includes practicum)

- EDUC 3200E DV - Foundations of Diversity: Culturally, Linguistically Responsive Teaching (Elementary) (3)
- EDUC 3240 - Reading Instruction in the Intermediate Grades (3)
- EDUC 3260E DV - The Exceptional Student (Elementary) (3) or
- CHF 3500 - Young Children at Risk (3)
- EDUC 3280 - Elementary Social Studies Methods (3)

Level 3 (12 credit hours, includes practicum)

- EDUC 4300 - Elementary Mathematics Methods (3)
- EDUC 4320 - Elementary Language Arts Methods (3)
- EDUC 4330 - Elementary Science Methods (3)
- EDUC 4340 - Elementary Art/Music Methods (3)

Students are encouraged to take their Praxis exam prior to Level 4.

Level 4 (12 credit hours)

- EDUC 4840 - Student Teaching in Elementary Education (8)
- EDUC 4850 - Integrated Elementary Education Student Teaching Seminar and Synthesis (4)

Family Studies (BS)

Program Prerequisite: (1) Complete the Pre-professional Core courses listed in the next column under Major Course Requirements; (2) Declare your Family Studies major with the department academic advisor; (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 department 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.

Advisement

Students must follow the Department of Child and Family Studies Advisement procedures. Contact the department advisor located in McKay Education Building, Room 248 (801-626-6411).

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 with the department academic advisor.
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. A handout available from the department secretary explains the procedure and nominal expenses. Background checks require up to eight weeks and should be completed, or in progress, at the time Family Studies Program courses are begun. See the department secretary for further details.

General Education

Refer to Degree and General Education 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.

Major Course Requirements for BS Degree

Pre-professional Core Course Requirements (12 credit hours)

- CHF 1400 - Marriage as an Interpersonal Process (3)
- CHF 1500 SS - Human Development (3)
- CHF 2100 - Family Resource Management (3)
- CHF 2400 - Family Relations (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

- CHF 2990B - Seminar in Family Studies (3)
- CHF 3850 - Current Research Methods in Child and Family Studies (3)
- CHF 4500 - Comparative Study of Childhood and Adolescent Development (3)
- HLTH 3500 - Human Sexuality (3)

Block Courses Semester 2

- CHF 3350 DV - Diverse Families (3)
- CHF 3450 - Adult Development (3)
- CHF 3550 - Parenting Education (3)
- CHF 3650 - Family Processes (3)

Block Courses Semester 3

- CHF 4400 - The Family in Stress (3)
- CHF 4650 - Family Life Education Methods (3)
- CHF 4860 - Practicum (2-6)
(3 credit hours required)
- CHF 4990B - Senior Seminar in Family Studies (3)

Students who are planning to apply to a graduate program are strongly encouraged to take a statistics course. See the Child and Family Studies department academic advisor for a list of appropriate classes.

Child and Family Studies (BIS)

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 9 hours of required courses and 9 hours of electives. Two courses (6 credits) must be upper division (3000 level or above).

Required Courses (9 credit hours)

- CHF 1400 - Marriage as an Interpersonal Process (3)
- CHF 1500 SS - Human Development (3) *
- CHF 2400 - Family Relations (3)

** If taken for Social Science general education credit, CHF course (3 credits) must be added.*

Electives (minimum 9 credit hours)

Elective courses to be determined in conference with a department chair.

- *At least six credit hours must be upper-division (courses numbered 3000 and higher).*

Child Development 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 (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.

Students enrolling in CHF 2600, CHF 2610 and CHF 2620 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. A handout available from the department secretary explains the procedure and nominal expenses. If the background check reveals misconduct, you will not be allowed to enroll in these courses or any others which include field experience, practica or student teaching. Background checks require up to eight weeks and should be completed, or in progress, prior to enrolling in CHF 2600, CHF 2610 and CHF 2620. See the department secretary for further details.

Course Requirements for Minor

Required Courses (12 credit hours)

- CHF 2500 - Development of the Child: Birth Through Eight (3)
- CHF 2570 - Middle Childhood Development (3)
- CHF 2610 - Guidance Based on Developmental Theory (3) *(lab required)*
- CHF 4500 - Comparative Study of Childhood and Adolescent Development (3)

Electives (6 credit hours)

Select at least two courses from the following

- CHF 2400 - Family Relations (3)
- CHF 2600 - Introduction to Early Childhood Education (3) *(lab required)*
- CHF 2620 - Planning Creative Experiences for Young Children (3) *(lab required)*
- CHF 3350 DV - Diverse Families (3)
- CHF 3500 - Young Children at Risk (3)
- CHF 3550 - Parenting Education (3)

- CHF 3640 - Working with Parents (3)
- CHF 4710 - Advanced Guidance and Planning for Early Childhood Education (3) *
- CHF 4860 - Practicum (2-6) (3 credit hours required) *

* Taken concurrently

For students using the Child Development minor with a Family Studies degree, the required courses will change. Students must have 18 credits beyond their major for a minor in Child Development. See the department advisor located in the McKay Education Building, Room 248 (801-626-6411).

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.

Course Requirements for Minor

Required Courses (9 credit hours)

- CHF 1400 - Marriage as an Interpersonal Process (3)
- CHF 1500 SS - Human Development (3)
- CHF 2400 - Family Relations (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)

- CHF 2100 - Family Resource Management (3)
- CHF 2500 - Development of the Child: Birth Through Eight (3)
- CHF 2610 - Guidance Based on Developmental Theory (3)
- CHF 3150 - Consumer Rights and Responsibilities (3)
- CHF 3350 DV - Diverse Families (3)
- CHF 3450 - Adult Development (3)
- CHF 3500 - Young Children at Risk (3)
- CHF 3550 - Parenting Education (3)
- CHF 3640 - Working with Parents (3)
- CHF 3650 - Family Processes (3)
- CHF 3850 - Current Research Methods in Child and Family Studies (3)
- CHF 4400 - The Family in Stress (3)
- CHF 4500 - Comparative Study of Childhood and Adolescent Development (3)
- CHF 4650 - Family Life Education Methods (3)

For students using the Family Studies minor with an Early Childhood degree, the required courses will change. Students must have 18 credits beyond their major for a minor in Family Studies. See the department advisor located in the McKay Education Building, Room 248 (801-626-6411).

Child and Family Studies Departmental Honors

Please contact the Child and Family Studies Department for advisement and permission prior to enrolling in Honors courses.

To earn Departmental Honors in Child and Family Studies, a student must:

1. Complete all the BA/BIS requirements for one of the majors in Child and Family Studies
2. Earn a cumulative GPA of 3.0 or higher
3. Earn a major GPA of 3.5 or higher
4. Take one (1) HNRS 3000/4000 level class
5. Complete one (1) of the following:
 - a. Presentation of scholarly work (such as original research) at a local, state, or national forum (e.g., Weber State University Undergraduate Research Symposium and Celebration, NCFR, UCFR, NAEYC, UAEYC)
 - b. Submission of scholarly work for public/professional dissemination (e.g., professional journals, Weber State University Ergo)
 - c. Completion of 20 hours of community service (e.g., volunteer work, practicum) that is clearly pertinent to one of the Child and Family Studies majors
6. Actively engage in the Child and Family Studies Student Association (CFSSA) for at least two (2) semesters (e.g., officer)

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

Department of Health Promotion and Human Performance

Department Chair: Jennifer Turley, PhD

Location: Reed K. Swenson Building, Room 102D

Telephone Contact: Lisa Pedersen 801-626-6742; Danielle Orozco 801-626-6691

Professors: Jack Loughton, Michael Olpin, Molly Smith, Jennifer Turley; **Associate Professors:** Rodney Hansen, Valerie Herzog, Joan Thompson; **Assistant Professors:** Gerilynn Conlin, Patricia Cost, Matthew Donahue, Chris Eisenbarth, Jordan Hamson-Utley, Brian Lyons, Melissa Masters, Brian McGladrey, Jennifer Ostrowski, Chad Smith, James Zagrodnik

The Department of Health Promotion and Human Performance (HHP) 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 fully equipped human performance exercise biochemistry, nutrition and athletic training/ physical therapy laboratories, a networked computer lab, swimming and hydrotherapy pool, and 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 fitness settings.

Through instruction, scholarship and service, the department of Health Promotion and Human Performance offers a Master of Science degree in athletic training and Bachelor of Science degrees in athletic training, athletic therapy, health promotion, human performance management and physical education. Minors include coaching sport, health promotion and health promotion teaching, nutrition education, 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, nutrition education, physical education/coaching, recreation/leisure services, exercise science, and sports medicine as emphases for the BIS Program.

Mission Statement

The Department of Health Promotion and Human Performance supports and enhances the mission of the University by promoting and integrating into the University experience the applied sciences of exercise, athletic training, physical education, sport, health, and nutrition through effective and impactful instruction, scholarship and service. This is accomplished by professional preparation and personal service that helps individuals maintain and enhance human performance and quality of life.

See also Master of Science in Athletic Training (MS)

Athletic Therapy (BS)

The Department of Health Promotion and Human Performance (HHP) offers an undergraduate program in Athletic Therapy. This program is designed for students preparing to enter graduate school for 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. These students take many of the support courses, professional knowledge courses, and many of the AT major courses (see Course Requirements). However, Athletic Therapy students DO NOT take the Clinical Application courses. Instead, these students complete the prerequisites required to enter their chosen graduate program.

Program Prerequisites: Make application and be accepted to Weber State University. Formally declare Athletic Therapy as an intended major with the HHP advisement coordinator. (See Admission Requirements below.)

Minor: Not required.

Grade Requirements: Grade of "B" or better in all Athletic Therapy major courses and grade of "C" or better in all support courses in addition to a cumulative 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).

Advisement

The Athletic Therapy Program Director serves as the faculty advisor to Athletic Therapy majors. The advisor is available to the student for counseling on grades and progress toward graduation. Athletic Therapy majors must meet with a faculty advisor at least once within the first two weeks of each semester. It is the responsibility of the student to schedule the required meetings with the advisor. The HHP department advisement coordinator will serve as the academic advisor prior to admission to the program, and will assist with advisement through completion of the program of study. Call 801-626-7425 for more information or to schedule an appointment.

Admission Requirements

- A. Before a student can be considered for the Athletic Therapy program, the following application requirements must be met:
 1. Admission to Weber State University.
 2. Submit an Athletic Therapy Student Application and student transcript which demonstrates the following:
 - Completion of 25 credit hours with a minimum 3.00 Weber State University GPA. Of these 25 credits, the students must demonstrate completion of
 - a. HTHS 1110 and HTHS 1111 or ZOOL 2100 and ZOOL 2200
 - b. NUTR 1020 LS - Science and Application of Human Nutrition
 - c. PSY 1010 SS - Introductory Psychology
 - Grade "B" or better in all Athletic Therapy major courses and "C" or better in support courses.
- B. Applications may be obtained from Athletic Therapy Program Director or HHP department advisement coordinator.
- C. Applications will be accepted on a rolling admissions. Students who fail to meet admission requirements will not be allowed to enroll in AT 4100, AT 4200, AT 4550, or AT 4600.

Retention Requirements

- A. After students are selected into the Athletic Therapy Major, retention in the program will be based on the following criteria:
 1. Grade "B" or better in all athletic therapy major courses.
 2. Grade "C" or better in all the support courses.
 3. Students must maintain an overall Weber State University GPA of 3.0 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 Athletic Therapy 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 B in an athletic therapy major 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 an athletic therapy 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 and General Education Requirements for Bachelor of Science requirements.

Major Course Requirements for BS Degree (63-68 credit hours)

Athletic Therapy Courses (30 credit hours)

- HLTH 2300 - Emergency Response (3) or
- AT 2300 - Emergency Response (3)
- AT 3200 - Psychology of Sport, Injury & Rehabilitation (3) or
- PSY 3200 - Psychology of Sport, Injury & Rehabilitation (3)
- AT 3300 - Evaluation and Care of Musculoskeletal Injuries: Lower Extremities (3)
- AT 3301 - Evaluation and Care of Musculoskeletal Injuries: Upper Extremities (3)
- AT 4100 - Basic Therapeutic Modalities for Musculoskeletal Injuries (3)
- AT 4200 - Basic Rehabilitation of Musculoskeletal Injuries (3)
- AT 4600 - Administration & Management in Athletic Training (3)
- AT 4700 - Introduction to Radiology for the Athletic Training Profession (1)

Support Courses (33-38 credit hours)

- HLTH 1030 SS - Healthy Lifestyles (3) *
- HTHS 2240 - Introduction to Pharmacology (3) **
- NUTR 1020 LS - Science and Application of Human Nutrition (3) *
- PEP 3500 - Kinesiology (3) *
- PEP 3510 - Exercise Physiology (3)
- PEP 3600 - Measurement for Evaluation and Research (3) *
- PEP 4890 - Cooperative Work Experience (1-6) ***
- PSY 1010 SS - Introductory Psychology (3) *
- PSY 3010 - Abnormal Psychology (3)
- ZOOL 2100 - Human Anatomy (4) ****
- ZOOL 2200 - Human Physiology (4) ****

* These courses also fulfill General Education or degree requirements.

** These courses may be substituted on a case-by-case basis when students are required to fulfill science requirements for admittance to graduate school with permission from the Program Director.

*** Some students will be required to complete an FBI background check and drug test prior to completing the work experience. The expenses, approximately \$75, 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, approximately \$40-100, will be paid for by the students.

**** Students may also take HTHS 1110 and HTHS 1111 instead of ZOOL 2100 and ZOOL 2200. However, it is the student's responsibility to ensure that HTHS 1110 and HTHS 1111 will be accepted as prerequisite courses for their graduate program of choice.

Other Pre-Professional Courses

Athletic Therapy Students also generally take the coursework needed for their professional graduate school (physical therapy, occupational therapy, physician's assistant, or medicine). These courses typically include CHEM 1110 and CHEM 1120, PHYS 2010 and PHYS 2020, and MATH 1060 (Trigonometry). 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.

Optional Elective

- AT 4800 - Individual Projects (1-4)

Athletic Training (BS)

The Department of Health Promotion and Human Performance (HPHP) offers an undergraduate program in Athletic Training. The Athletic Training Education Program (ATEP) at Weber State University is accredited by the Commission on Accreditation of Athletic Training Education (CAATE), which enables students to obtain eligibility for the Board of Certification (BOC) examination. The ATEP is specifically designed to prepare students for careers in allied health care. The program will provide students with skills in the prevention, evaluation, treatment, and rehabilitation of musculoskeletal injuries. Athletic trainers are employed in corporations, public schools, physical therapy clinics, universities, professional organizations, the military, factories, and hospitals.

Program Director: J. Jordan Hamson-Utley, PhD, LAT, ATC

Program Prerequisites: Apply and be accepted to Weber State University. Formally declare Athletic Training as an intended major with the HPHP advisement coordinator. (See Admission Requirements below).

Minor: Not required.

Grade Requirements: A cumulative GPA of 2.50 or higher in all courses required for this major. Experiential credit will not be accepted for any Athletic Training major requirements.

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).

Note: Required support courses, professional knowledge courses, and athletic training major courses will not be accepted if older than 10 years.

Advisement

Each student is assigned a faculty advisor upon admission to the ATEP. The advisor is available to the student for counseling on grades and progress toward graduation. Athletic Training majors must meet with a faculty advisor

at least once within the first two weeks of each semester. It is the responsibility of the student to schedule the required meetings with the advisor. The HPHP department advisement coordinator (Sherrie Jensen) will serve as the academic advisor prior to admission to the program, and will assist with advisement through completion of the program of study. Call Sherrie at 801-626-7425 for more information or to schedule an appointment (also refer to the Department Advisor Referral List).

Admission Requirements

- A. Before a student can be considered for the program, the following application requirements must be met:
1. Admission to Weber State University
 2. Minimum 2.5 Weber State University GPA
 3. Submit Athletic Training Education Program (ATEP) Student Application
 4. Submit Letter of Application
 5. Completion of 5 clinical observation hours (within AT 1500)
 6. Interview with program faculty
 7. Complete Technical Standards form
 8. Submit unofficial transcripts from other colleges/universities attended
 9. Physical examination and proof of immunizations
 10. Hepatitis-B Vaccination (may be obtained following acceptance to the program)
 11. Current Emergency Response and CPR for Professional Rescuer cards
 12. For students participating in varsity and club sports, a contract must be signed by both the student/athlete and his/her coach. The contract stipulates that AT students may participate in one sport only, beginning with their second clinical year in the ATEP. More details can be found in the ATEP Student Handbook.

After formal admission to the Athletic Training program, students are required to complete an FBI background check and drug test. The expenses, approximately \$75, will be paid for by the student.

- B. Application deadline is the **third Wednesday in March and the third Wednesday in November** for consideration for each spring semester. Applicants will be notified of the selection committee's decision following the submission of fall/spring grades. Applications may be obtained within AT 1500 only.
- C. Students interested in transferring from another institution or from another major at Weber State University must meet University and College transfer requirements and complete the same requirements as freshmen in the Athletic Training Program.
- D. Accelerated Track
An accelerated track is available for qualifying students and must be approved by the ATEP director. For information contact the HPHP advisement coordinator (Sherrie Jensen) or the ATEP director (Dr. Jordan Hamson-Utley). Students who meet the requirements below are eligible for an interview and may be accepted into the accelerated track:
2. Admission to Weber State University
 3. Minimum of 60 transferable credits with all general education requirements completed*

4. Minimum 3.3 Weber State University GPA
5. Completion of HTHS 1110 & HTHS 1111 or ZOOL 2100 & ZOOL 2200
6. Completion of AT 3300
7. Students accepted into the accelerated track will be notified regarding selection following completion of the Secondary Admissions process outlined above under Section A.

**Students who have completed a minimum of 60 transferable credits and a 3.3 GPA but not all of the general education and required support courses may also be eligible for a modified accelerated program as determined by the ATEP director.*

Selection Process

- A. All applicants will be ranked using a numerical scale on the following criteria:
1. Cumulative Weber State University GPA [0-4 weight in selection formula = 25%]
 2. AT 1500 - Introduction to Athletic Training (First Semester) grade [0-4 weight in selection formula = 30%]
 3. Letter of Application [0-4 weight in selection formula = 20%]
 4. Strength of athletic training student's commitment as reflected in interview responses. [0-4 weight in selection formula = 25%]
- B. Students receiving the highest scores in the rating process will be invited to enter the athletic training major. The selection committee is comprised of the ATEP faculty and Weber State University clinical instructors. Approximately **twenty** students can be chosen to enter the major each year, in compliance with accreditation guidelines concerning clinical instructor-to-student ratios. Selection into the ATEP is competitive and satisfaction of the minimum requirements does not guarantee admission.
- C. Applicants not invited to enter the athletic training program may reapply the following year. All applicants who eventually re-apply must meet all requirements in effect at the time of application. Students are encouraged to contact the ATEP Director for current admission requirements.
- D. All students selected for athletic training program 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.**

Retention Requirements

- A. After students are selected into the Athletic Training Major, retention in the program will be based on the following criteria:
1. Grade "C" or better in all athletic training major courses (*includes clinical application courses*).
 2. Grade "C" or better in all the professional knowledge and support courses.
 3. Students must maintain an overall Weber State University GPA of 2.5.
 4. Adhere to Athletic Training Policies and Procedures.
 5. Adhere to ATEP AT Student Handbook Policies.

- B. Students who fail to meet the retention criteria will be placed on probation in the Athletic Training 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. Students who receive any grade below a C in an athletic training major course, professional knowledge course, and/or support course must repeat that course and receive a grade of "C" or higher to remain in the major. Failure to repeat the course (*when offered*) will result in dismissal from the program. Athletic Training Policies and Procedures are available in the athletic training student handbook.

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements.

Major Course Requirements for BS Degree

Required Support Courses (17 credit hours)

- HLTH 1030 SS - Healthy Lifestyles (3)
- HTHS 1110 LS - Biomedical Core (4) *
- HTHS 1111 - Biomedical Core (continued) (4) *
- PSY 1010 SS - Introductory Psychology (3)
- PEP 3600 - Measurement for Evaluation and Research (3) OR
- PSY 3600 - Statistics in Psychology (3) OR
- GERT 3600 - Social Statistics (3)

*ZOO 2100 (*Human Anatomy*) (4) and ZOO 2200 (*Human Physiology*) (4) will also be accepted in place of HTHS 1110 and HTHS 1111.

Professional Knowledge Courses Required (17 credit hours)

- NUTR 1020 LS - Science and Application of Human Nutrition (3)
- HLTH 2300 - Emergency Response (3) or
- AT 2300 - Emergency Response (3)
- PEP 3280 - Teaching Neuromuscular Conditioning (2)
- PEP 3500 - Kinesiology (3)
- PEP 3510 - Exercise Physiology (3)
- HTHS 2240 - Introduction to Pharmacology (3)

Athletic Training Major Courses Required (30 credit hours)

- AT 2431 - Taping, Wrapping, Bracing, Padding, and Splinting (3)
- AT 3200 - Psychology of Sport, Injury & Rehabilitation (3)
- AT 3300 - Evaluation and Care of Musculoskeletal Injuries: Lower Extremities (3)
- AT 3301 - Evaluation and Care of Musculoskeletal Injuries: Upper Extremities (3)
- AT 4100 - Basic Therapeutic Modalities for Musculoskeletal Injuries (3)
- AT 4101 - Advanced Therapeutic Modalities for Musculoskeletal Injuries (3)
- AT 4200 - Basic Rehabilitation of Musculoskeletal Injuries (3)
- AT 4201 - Advanced Rehabilitation of Musculoskeletal Injuries (3)
- AT 4550 - General Medical Conditions and Advances in Athletic Training (3)

- AT 4600 - Administration & Management in Athletic Training (3)
- AT 4700 - Introduction to Radiology for the Athletic Training Profession (1)
- AT 4999 - Critical Thinking for Musculoskeletal Injury Management (1)

Clinical Application Courses Required (16-19 credit hours)

- AT 1500 - Introduction to Athletic Training (First Semester) (2)
- AT 1501 - Clinical Application of Athletic Training I (1)
- AT 2500 - Clinical Application of Athletic Training II (2)
- AT 2501 - Clinical Application of Athletic Training III (2)
- AT 3500 - Clinical Application of Athletic Training IV (3)
- AT 3501 - Clinical Application of Athletic Training V (3)
- AT 3550 - Clinical Application of Athletic Training-Supplement (3) *
- AT 4500 - Clinical Application of Athletic Training VI (3)

*Required by the Accelerated Track only

Optional Electives

- AT 4800 - Individual Projects (1-4)
- AT 4998 - Preparation for the Board of Certification (BOC) Exam (1)

Health Promotion (BS)

Also refer to the Dr. Ezekiel R. Dumke College of Health Professions for Health Promotion Major requirements. Degree awarded is Health Services Administration with emphasis in Health Promotion.

Program Prerequisite: Acceptance into the program (see Admission Requirements below).

Minor: Not Required.

Grade Requirement: A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable), 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.

Advisement

Students are encouraged to meet with a faculty advisor annually for course and program advisement. Health Promotion advisors can be reached directly by calling 801-626-6485 or students can visit Health Promotion advisors in the Reed K. Swenson Building, room 125G.

The HPHP department advisement coordinator will serve as the academic advisor prior to admission to the program, and will assist with advisement through completion of the program of study. Call 801-626-7425 or email sjensen3@weber.edu for more information or to schedule an appointment.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). In addition, the following steps are required:

1. Make application to the program.
2. Interview.
3. Complete academic contract for specific course of study.

For more information call 801-626-6485 or visit Health Promotion advisors in the Reed K. Swenson Building, room 125G.

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements.

Graduates of the program are eligible to sit for the examination for certification as a Certified Health Education Specialist (CHES) with a minimum of 25 semester hours in Health Courses.

Major Course Requirements for BS Degree

Prerequisite Courses Required (6-7 credit hours)

- HLTH 1030 SS - Healthy Lifestyles (3)
- HTHS 1110 LS - Biomedical Core (4) or
- ZOOL 1020 LS - Human Biology (3)

Courses Required (32 credit hours)

HAS courses are described in the Dr. Ezekiel R. Dumke College of Health Professions

- HLTH 3000 - Foundations of Health Promotion (3)
- HLTH 3200 - Methods in Health Education (3) *
- HLTH 4013 - Health Promotion Research and Assessment (3)
- HLTH 4150 - Needs Assessment & Planning Health Promotion Programs (4)
- HLTH 4860 - Field Experience (2-6) (3 credit hours required)
- HLTH 4990 - Senior Seminar (1)
- HAS 3000 - The Health Care System (3)
- HLTH 3150 - Community Health Agencies and Services (3) or
- HAS 3150 - Community Health Agencies and Services (3)
- HAS 3190 DV - Cultural Diversity in Patient Education (3) or
- HLTH 3420 DV - Multicultural Health and Nutrition (3)
- HAS 3230 - Health Communication (3)
- HIM 3200 - Epidemiology and Biostatistics (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 (3)
- HLTH 2700 - Consumer Health (3)
- HLTH 3100 - Applications of Technology in Health Promotion (3)
- HLTH 3160 - Health Behavior and Special Populations (3)
- HAS 3020 - Health Care Marketing (3)

- HAS 3260 - Health Care Administrative and Supervisory Theory (3)
- HAS 4320 - Health Care Economics and Policy (3)

Elective Courses (15 credit hours)

- AT 3600 - Ergonomics for Health and Safety (2)
- HLTH 1110 - Stress Management (3)
- HLTH 1300 - First Aid: Responding to Emergencies (2)
- HLTH 2300 - Emergency Response (3)
- HLTH 3050 - School Health Program (3)
- HLTH 3400 - Substance Abuse Prevention (3)
- HLTH 3500 - Human Sexuality (3)
- HLTH 4220 - Women's Health Issues (3)
- HLTH 4250 - Contemporary Health Issues of Adolescents (2)
- HLTH 3320 - Health and Nutrition in the Older Adult (3)
- HLTH 4700 - Wellness Coaching (3)
- HLTH 4800 - Individual Projects (1-3)
- HLTH 4860 - Field Experience (2-6) (3 credit hours required)
- HLTH 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4) (1 credit hours required)
- HLTH 1020 LS - Science and Application of Human Nutrition (3) or
- NUTR 1020 LS - Science and Application of Human Nutrition (3)
- HAS 3240 - Human Resource Development in Health Care (3)
- HAS 4400 - Legal and Ethical Aspects of Health Administration (3)
- HAS 4410 - Clinical Instructional Design and Evaluation (3) *
- HAS 4420 - Clinical Instructional Skills (3)
- HTHS 1101 - Medical Terminology (2)
- HTHS 2230 - Introductory Pathophysiology (3)
- GERT 3000 - Death and Dying (3)
- NUTR 2320 - Food Values, Diet Design and Health (3)
- NUTR 4420 - Nutrition and Fitness (3)
- PEP 2300 - Health/Fitness Evaluation and Exercise Prescription (3)

*HAS 4410 may be substituted for HLTH 3200.

Human Performance Management (BS)

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; a total of 63 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 34-36 upper division hours possible within the required courses for this major.

Advisement

All Human Performance Management students are encouraged to meet with a faculty advisor or the department advisement coordinator each semester for course and

program advisement. Call 801-626-7425 or send a message to sjensen3@weber.edu for more information or to schedule an appointment.

Admission Requirements

Make application with the HPHP Department and declare program of study (see Enrollment Services and Information).

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements.

Major Course Requirements for BS Degree

Required Core Courses (26 credit hours)

- HAS 3020 - Health Care Marketing (3)
- HLTH 1030 SS - Healthy Lifestyles (3)
- HLTH 2300 - Emergency Response (3)
- HLTH 3200 - Methods in Health Education (3)
- PEP 2200 - Foundations of Human Performance Management Professions (2)
- PEP 3600 - Measurement for Evaluation and Research (3)
- PEP 4620 - Leadership Concepts for Human Performance Management (3)
- PEP 4800 - Individual Projects (1-4) (1 credit hours required) and
- PEP 2890/PEP 4890, REC 2890/REC 4890 Cooperative Work Experience (4 credit hours required)
- or
- PEP 2890/PEP 4890, REC 2890/REC 4890 Cooperative Work Experience (5 credit hours required)
- AT 4990 - Senior Seminar (1)

Professional Areas of Emphasis

A student must complete the required and support courses in either the Wellness or the Sports and Recreation Services Emphasis.

Wellness Emphasis

Required Core (25 credit hours)

- AT 3600 - Ergonomics for Health and Safety (2)
- HLTH 4150 - Needs Assessment & Planning Health Promotion Programs (4)
- NUTR 2320 - Food Values, Diet Design and Health (3)
- NUTR 3020 - Sports Nutrition (3) or
- NUTR 4420 - Nutrition and Fitness (3)
- PEP 2300 - Health/Fitness Evaluation and Exercise Prescription (3)
- PEP 3270 - Teaching Aerobic Conditioning (2)
- PEP 3500 - Kinesiology (3)
- PEP 3510 - Exercise Physiology (3)
- PEP 4370 - Exercise Management for Special Populations (2)

Electives (3-4 credit hours total [students may need upper division credit])

- HLTH 2400 - Mind/Body Wellness (3)
- HLTH 3400 - Substance Abuse Prevention (3)
- PEP 3280 - Teaching Neuromuscular Conditioning (2)

- NUTR 2220 - Prenatal and Infant Nutrition (2)
- NUTR 2420 - Childhood and Adolescent Nutrition (2)
- NUTR 3220 - Foundations in Diet Therapy (2)
- NUTR 3420 DV - Multicultural Health & Nutrition (3)
- NUTR 3020 - Sports Nutrition (3) or
- NUTR 4420 - Nutrition and Fitness (3) (if not taken in the core)
- NUTR 3320 - Health and Nutrition in the Older Adult (3)
- NUTR 4320 - Current Issues in Nutrition (2)
- PE 1010 - Aerobics, Level I (1)
- PE 1040 - Walking for Fitness, Level I (1)
- PE 1043 - Jogging, Level I (1)
- PE 1070 - Cross Training For Fitness, Level I (1)
- PE 1080 - Strength Training, Level I (1)
- PE 1300 - Swimming, Level I (1)
- PE 1310 - Water Aerobics, Level I (1)
- PE 1630 - Cross Country Skiing, Level I (1)

Required Support Courses (9-10 credit hours)

- HTHS 1110 LS - Biomedical Core (4) or
- ZOOL 1020 LS - Human Biology (3)
- NUTR 1020 LS - Science and Application of Human Nutrition (3)
- CHEM 1010 PS - Introductory Chemistry (3)

Sports and Recreation Services Emphasis

Required Core (19 credit hours)

- PEP 3550 - Issues in Sport (2)
- PEP 3700 - Recreation and Sports Facilities and Events Management (3)
- PEP 4830 - Directed Readings (1-3) (3 credit hours required)
- REC 3050 - Recreation and Leisure (3)
- REC 3810 - Recreation Leadership & Management (3)
- REC 3600 - Outdoor Adventure Recreation (3) or
- REC 3840 - Therapeutic and Social Recreation (3)
- REC 4550 - Outdoor Education Philosophies & Principles (2)

Electives (10 credit hours total [student may need upper division credits])

(Choose 5-8 credit hours from the following elective courses)

- HLTH 2400 - Mind/Body Wellness (3)
- HLTH 3400 - Substance Abuse Prevention (3)
- REC 3600 - Outdoor Adventure Recreation (3) or
- REC 3840 - Therapeutic and Social Recreation (3) (if not taken in the core)
- PEP 3540 - Physiological Aspects of Human Performance (2)

(Choose 2-5 credit hours from the following elective courses)

- PE 1010 - Aerobics, Level I (1)
- PE 1040 - Walking for Fitness, Level I (1)
- PE 1043 - Jogging, Level I (1)
- PE 1070 - Cross Training For Fitness, Level I (1)
- PE 1080 - Strength Training, Level I (1)
- PE 1310 - Water Aerobics, Level I (1)
- PE 1520 - Hiking, Level I (1)
- PE 1527 - Rock Climbing, Level I (1)
- PE 1630 - Cross Country Skiing, Level I (1)

Required Support Courses (9 credit hours)

- COMM 1020 HU - Principles of Public Speaking **(3)**
or
- COMM 2110 HU - Interpersonal & Small Group Communication **(3)**
- COMM 2010 HU - Mass Media & Society **(3)**
- ECON 2010 SS - Principles of Microeconomics **(3)**

Physical Education (BS)

The Department of Health Promotion and Human Performance offers an undergraduate degree in Physical Education. The Physical Education Track I Major is designed to prepare students to work in a physical activity venue. A minor must also be selected. The Physical Education Track II Major is designed to prepare students to teach physical education in the public 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 the public school system.

Track I (non-teaching) - Physical Education Major K-12. Students selecting Track I must meet all requirements except those necessary for Licensure.

Track II (teaching) - Physical Education Major K-12/Licensure. Students selecting Track II must meet all requirements of Track I, plus those required for Licensure.

Program Prerequisite: Students selecting Track II, Physical Education Major K-12/Licensure, must meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

Minor: Track I requires a minor. Track II requires a teaching minor.

Grade Requirements: Students selecting Track I, Physical Education Major K-12 – a GPA of 2.85 or better is required in all physical education courses used toward the major. No more than one “D” grade is acceptable. Students selecting Track II, Physical Education Major K-12/Licensure – a GPA of 2.85 or better is required in all physical education courses used toward the major.

Credit Hour Requirements: A minimum of 120 credit hours is required for graduation. A minimum of 40 upper division credit hours is required (courses number 3000 and above).

Track I - Total credit hours received in the Major (39-43), the Minor (20-24) and General Education (38) = 97-105. The 15-23 additional credits needed can be obtained through the selection of one of the following: 1) selection of a second minor; 2) selection of suggested support courses within the program; or 3) selection of elective courses.

Track II - Total minimum credit hours received in the Major (39), the Minor (18), General Education (38), Teacher Education (24), and Teacher Education support courses (9) = 128.

Advisement

All Physical Education students are encouraged to meet with a faculty mentor or the department advisement coordinator each semester for course and program advisement. Call 801-626-7425 or send a message to sjensen3@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).

Admission Requirements

Students applying for Track I or Track II should apply with the HPHP department and formally declare a program of study with a faculty mentor (see Enrollment Services and Information). Call 801-626-7425 for more information. Students applying for Track II must also meet the Teacher Education admission and licensure requirements (see Teacher Education Department in this catalog).

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements.

Both Tracks I and II are K-12 majors. Track II Physical Education Major K-12/Licensure qualifies graduates to teach physical education at both the elementary and secondary levels.

Major Course Requirements for BS Degree**Professional Knowledge (23 credit hours)**

- PEP 2000 - Foundations of Physical Education **(3)**
- PEP 2600 - Growth and Motor Development **(3)**
- PEP 3500 - Kinesiology **(3)**
- PEP 3510 - Exercise Physiology **(3)**
- PEP 3520 - Curriculum Development/ Instructional Strategies **(3)**
- PEP 3610 - Assessment/Technology in Physical Education **(3)**
- PEP 3630 - Physical Education K-6 **(3)**
- PEP 3660 - Physical Education for Students with Disabilities **(2)**

Field Experience (2 credit hours)

- PEP 4990 - Field Experience/Senior Seminar **(2)**

Skill Development and Methods of Teaching (12-15 credit hours)

Students must select PEP 3290 plus one course each from the areas of team sports and individual sports plus two additional courses from any of the following three areas (total of five courses).

Area 1 Team Sports:

- PEP 3240 - Skill Development and Methods of Teaching Field Sports **(3)**
- PEP 3242 - Skill Development and Methods of Teaching Court Sports **(3)**

Area 2 Individual Sports:

- PEP 3260 - Teaching Lifelong Leisure Activities **(2)**
- PEP 3262 - Skill Development and Methods of Teaching Individual Sports **(3)**
- PEP 3264 - Skill Development and Methods of Teaching Racket Sports **(3)**

Area 3 Conditioning:

- PEP 3270 - Teaching Aerobic Conditioning **(2)**
- PEP 3280 - Teaching Neuromuscular Conditioning **(2)**
- PEP 3290 - Skill Development and Methods of Teaching Fitness for Life **(3)**

Required Support Course (2-3 credit hours)

- HLTH 1300 - First Aid: Responding to Emergencies **(2)** or
- AT 2175 - Introduction to Sports Medicine **(3)**

Suggested Support Courses for Track I: Additional Skill Development and Methods Courses, PEP 2500, PEP 3550, PEP 4860C, HLTH 2300. An additional 7 credit hours of PEP elective courses are required for Track I.

Exercise Science (BIS)

Program Prerequisite: Consult the Health Promotion (BIS) Bachelor of Integrated Studies section of this catalog for specific requirements associated with the BIS degree.

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 HPHP and campus wide.

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

Community Health Promotion
Occupational Health Education
Clinical Health Education (*See Department 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

Coaching Sport
Corporate Fitness
Community Fitness
Sports Medicine
Sport Communication
Commercial/Facility Management
Sport Psychology

BIS Requirements

Also refer to individual minor programs.

Exercise Science Emphasis

Upper Division Hours 17, Total Hours Required 22

- AT 3530 - Sports Injuries **(3)**
- HLTH 1300 - First Aid: Responding to Emergencies **(2)**
- NUTR 3020 - Sports Nutrition **(3)**
- PEP 2300 - Health/Fitness Evaluation and Exercise Prescription **(3)**
- PEP 3500 - Kinesiology **(3)**
- PEP 3510 - Exercise Physiology **(3)**
- PEP 4370 - Exercise Management for Special Populations **(2)**

Internship/Seminar

- AT 4990 - Senior Seminar **(1)**
- PEP 4890 - Cooperative Work Experience **(1-6)** (2 credit hours required)

Health Promotion (BIS)

Program Prerequisite: Consult the Health Promotion (BIS) Bachelor of Integrated Studies section of this catalog for specific requirements associated with the BIS degree.

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 HPHP and campus wide.

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

Community Health Promotion
Occupational Health Education
Clinical Health Education (*See Department 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

Coaching Sport
Corporate Fitness
Community Fitness
Sports Medicine

Sport Communication
Commercial/Facility Management
Sport Psychology

BIS Requirements

Also refer to individual minor programs.

Health Promotion Emphasis

18 Credit Hours Total Required

Recommended Courses

- HLTH 1030 SS - Healthy Lifestyles (3) * OL
- HLTH 2400 - Mind/Body Wellness (3)
- HLTH 3000 - Foundations of Health Promotion (3) ** IS
- HLTH 4150 - Needs Assessment & Planning Health Promotion Programs (4) *** OL

Elective Courses

- HLTH 1110 - Stress Management (3) OL
- HLTH 2700 - Consumer Health (3) OL
- HLTH 3100 - Applications of Technology in Health Promotion (3)
- HLTH 3150 - Community Health Agencies and Services (3) IS
- HLTH 3160 - Health Behavior and Special Populations (3)
- HLTH 3200 - Methods in Health Education (3) ***
- HLTH 3400 - Substance Abuse Prevention (3) OL
- HLTH 3500 - Human Sexuality (3) OL
- HLTH 4013 - Health Promotion Research and Assessment (3) *** IS
- HLTH 4220 - Women's Health Issues (3)
- HLTH 4250 - Contemporary Health Issues of Adolescents (2) OL

OL=Online

IS=Independent Study

**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 18 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.*

Nutrition Education (BIS)

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).

Course Requirements for BIS Emphasis

Required Core Courses (11 credit hours)

- NUTR 1020 LS - Science and Application of Human Nutrition (3)
- NUTR 2320 - Food Values, Diet Design and Health (3)
- NUTR 3420 DV - Multicultural Health & Nutrition (3)
- NUTR 4320 - Current Issues in Nutrition (2)

Elective Courses (7 credit hours)

Select 7 credits hours from the following:

- NUTR 2220 - Prenatal and Infant Nutrition (2)
- NUTR 2420 - Childhood and Adolescent Nutrition (2)
- NUTR 3020 - Sports Nutrition (3)
- NUTR 3220 - Foundations in Diet Therapy (2)
- NUTR 3320 - Health and Nutrition in the Older Adult (3)
- NUTR 4420 - Nutrition and Fitness (3) or
- NUTR 6420 - Nutrition and Fitness (3)
- NUTR 4520 - Directed Undergraduate Nutrition Research (1-4) or
- NUTR 6520 - Directed Graduate Nutrition Research (1-4)
- HLTH 3200 - Methods in Health Education (3)

Physical Education (BIS)

Program Prerequisite: Consult the Health Promotion (BIS) Bachelor of Integrated Studies section of this catalog for specific requirements associated with the BIS degree.

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 HPHP and campus wide.

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

Community Health Promotion
Occupational Health Education
Clinical Health Education (*See Department 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

Coaching Sport
 Corporate Fitness
 Community Fitness
 Sports Medicine
 Sport Communication
 Commercial/Facility Management
 Sport Psychology

BIS Requirements

Also refer to individual minor programs.

Physical Education Emphasis**20 Credit Hours Total Required**

Complete the following Required Courses (14 credit hours)

- PEP 2000 - Foundations of Physical Education (3)
- PEP 2600 - Growth and Motor Development (3)
- PEP 3520 - Curriculum Development/ Instructional Strategies (3)
- PEP 3610 - Assessment/Technology in Physical Education (3)
- PEP 4990 - Field Experience/Senior Seminar (2) *

**May not be taken until all other requirements have been met.*

In addition

*Choose any combination of classes from the following three areas for a minimum of 6 credits. These classes need to be taken **prior to PEP 3520**.*

1. Team Sports

- PEP 3240 - Skill Development and Methods of Teaching Field Sports (3)
- PEP 3242 - Skill Development and Methods of Teaching Court Sports (3)

2. Individual Sports

- PEP 3260 - Teaching Lifelong Leisure Activities (2)
- PEP 3262 - Skill Development and Methods of Teaching Individual Sports (3)
- PEP 3264 - Skill Development and Methods of Teaching Racket Sports (3)

3. Conditioning

- PEP 3270 - Teaching Aerobic Conditioning (2)
- PEP 3280 - Teaching Neuromuscular Conditioning (2)
- PEP 3290 - Skill Development and Methods of Teaching Fitness for Life (3)

Recreation (BIS)

Program Prerequisite: Consult the Health Promotion (BIS) Bachelor of Integrated Studies section of this catalog for specific requirements associated with the BIS degree.

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 HPHP and campus wide.

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

Community Health Promotion
 Occupational Health Education
 Clinical Health Education (*See Department 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

Coaching Sport
 Corporate Fitness
 Community Fitness
 Sports Medicine
 Sport Communication
 Commercial/Facility Management
 Sport Psychology

BIS Requirements

Also refer to individual minor programs.

Recreation Emphasis**Leisure Services (12 hours)**

- REC 3050 - Recreation and Leisure (3)
- REC 3600 - Outdoor Adventure Recreation (3)
- REC 3810 - Recreation Leadership & Management (3)

Electives

- PE 1130 - Golf, Level I (1)
- PE 1520 - Hiking, Level I (1)
- PE 1527 - Rock Climbing, Level I (1)

- PE 1610 - Skiing, Level I (1)
- PE 1630 - Cross Country Skiing, Level I (1)
- REC 3610 - Outdoor Survival (2)
- REC 3840 - Therapeutic and Social Recreation (3)
- REC 4550 - Outdoor Education Philosophies & Principles (2)
- REC 4930 - Outdoor Education Workshop (2)

Sports Medicine (BIS)

Program Prerequisite: Consult the Health Promotion (BIS) Bachelor of Integrated Studies section of this catalog for specific requirements associated with the BIS degree.

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 HPHP and campus wide.

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

Community Health Promotion
Occupational Health Education
Clinical Health Education (*See Department 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

Coaching Sport
Corporate Fitness
Community Fitness
Sports Medicine
Sport Communication
Commercial/Facility Management
Sport Psychology

BIS Requirements

Also refer to individual minor 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 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)
- AT 2175 - Introduction to Sports Medicine (3) or
- AT 3200 - Psychology of Sport, Injury & Rehabilitation (3)
- AT 3300 - Evaluation and Care of Musculoskeletal Injuries: Lower Extremities (3)
- AT 3301 - Evaluation and Care of Musculoskeletal Injuries: Upper Extremities (3)
- AT 4100 - Basic Therapeutic Modalities for Musculoskeletal Injuries (3)
- AT 4200 - Basic Rehabilitation of Musculoskeletal Injuries (3)

Elective Courses

- AT 4101 - Advanced Therapeutic Modalities for Musculoskeletal Injuries (3)
- AT 4201 - Advanced Rehabilitation of Musculoskeletal Injuries (3)
- AT 4550 - General Medical Conditions and Advances in Athletic Training (3)
- AT 4600 - Administration & Management in Athletic Training (3)

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 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)
- AT 2300 - Emergency Response (3)
- AT 3300 - Evaluation and Care of Musculoskeletal Injuries: Lower Extremities (3)
- AT 3301 - Evaluation and Care of Musculoskeletal Injuries: Upper Extremities (3)
- AT 4100 - Basic Therapeutic Modalities for Musculoskeletal Injuries (3)
- AT 4200 - Basic Rehabilitation of Musculoskeletal Injuries (3)

Elective Courses

- AT 4550 - General Medical Conditions and Advances in Athletic Training (3)
- AT 4600 - Administration & Management in Athletic Training (3)
- PEP 3500 - Kinesiology (3)
- PEP 3510 - Exercise Physiology (3)

Coaching Sport Minor

This minor cannot be counted as a teaching minor.

Grade Requirements: A minimum grade of 2.75 or better in each of the courses.

Credit Hour Requirements: A total of 15-16 semester hours are required for the sport coaching minor; an additional 3 hours is required for the BIS minor.

Course Requirements for Minor

Required Courses (15-16 credit hours)

- HLTH 1300 - First Aid: Responding to Emergencies (2) or
- AT 2175 - Introduction to Sports Medicine (3)
- PEP 2100 - Introduction to Coaching Sport (3)
- PEP 2500 - Skills, Drills, and Strategies for Coaches (3)
- PEP 3280 - Teaching Neuromuscular Conditioning (2)
- PEP 3550 - Issues in Sport (2)
- PEP 4860C - Field Experience Coaching (3)

Additional Course required for BIS Emphasis

- PEP 4800 - Individual Projects (1-4) or approved elective

Health Promotion: (Community, Worksite, Clinical, School) Minor

Program Prerequisite: HLTH 1030 SS - Healthy Lifestyles (3)

Grade Requirements: A GPA of 2.25 in courses used toward the minor.

Credit Hours Requirements: Minimum of 22 credit hours.

Required Courses (13 credit hours)

- HLTH 3000 - Foundations of Health Promotion (3)
- HLTH 3050 - School Health Program (3)
- HLTH 3150 - Community Health Agencies and Services (3) and/or *
- HLTH 3200 - Methods in Health Education (3)
- HLTH 4150 - Needs Assessment & Planning Health Promotion Programs (4)

Electives

Select 9 credit hours from the following

- HLTH 1020 LS - Science and Application of Human Nutrition (3)
- HLTH 1110 - Stress Management (3)
- HLTH 1300 - First Aid: Responding to Emergencies (2)
- HLTH 2220 - Prenatal and Infant Nutrition (2) (Cross listed with NUTR 2220)
- HLTH 2400 - Mind/Body Wellness (3)
- HLTH 2420 - Childhood and Adolescent Nutrition (2) (Cross listed with NUTR 2420)
- HLTH 2700 - Consumer Health (3)

- HLTH 3320 - Health and Nutrition in the Older Adult (3) (Cross listed with NUTR 3320)
- HLTH 3400 - Substance Abuse Prevention (3)
- HLTH 3420 DV - Multicultural Health and Nutrition (3) (Cross listed with NUTR 3420)
- HLTH 3500 - Human Sexuality (3)
- HLTH 4220 - Women's Health Issues (3)
- HLTH 4250 - Contemporary Health Issues of Adolescents (2)
- HLTH 4300 - Health Education in the Elementary School (2)
- HLTH 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- HLTH 4860 - Field Experience (2-6)
- HLTH 2890 - Cooperative Work Experience (1-6) or
- HLTH 4890 - Cooperative Work Experience (1-6)
- HLTH 4800 - Individual Projects (1-3)
- HAS 3000 - The Health Care System (3)
- HAS 3020 - Health Care Marketing (3)
- HAS 3150 - Community Health Agencies and Services (3) *
- HAS 3190 DV - Cultural Diversity in Patient Education (3)
- HIM 3200 - Epidemiology and Biostatistics (3)

**HAS 3150 or HAS 3190 may substitute for HLTH 3150*

Courses Required for Minors Seeking Teaching Certification

Selection/substitution of courses to meet the minimum 22 hours for minor must be approved by advisor.

- HLTH 3000 - Foundations of Health Promotion (3)
- HLTH 3050 - School Health Program (3)
- HLTH 3200 - Methods in Health Education (3)
- HLTH 4150 - Needs Assessment & Planning Health Promotion Programs (4)

Courses Elected by Advisement for Minors Seeking Teaching Certification

- HLTH 1020 LS - Science and Application of Human Nutrition (3)
- HLTH 1110 - Stress Management (3) or
- HLTH 1300 - First Aid: Responding to Emergencies (2)
- HLTH 2400 - Mind/Body Wellness (3)
- HLTH 2700 - Consumer Health (3)
- HLTH 3400 - Substance Abuse Prevention (3)
- HLTH 3500 - Human Sexuality (3)

Courses developed/selected based on providing students with the minimum competencies for entry-level health educators. Students must complete 25 semester hours of Health courses to qualify to sit to take national exam for qualification as a Certified Health Education Specialist (CHES).

A teaching major is required for teacher certification.

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).

Course Requirements for Minor

Required Core Courses (11 credit hours)

- NUTR 1020 LS - Science and Application of Human Nutrition (3)
- NUTR 2320 - Food Values, Diet Design and Health (3)
- NUTR 3420 DV - Multicultural Health & Nutrition (3)
- NUTR 4320 - Current Issues in Nutrition (2)

Elective Courses (7 credit hours)

Select 7 credit hours from the following:

- NUTR 2220 - Prenatal and Infant Nutrition (2)
- NUTR 2420 - Childhood and Adolescent Nutrition (2)
- NUTR 3020 - Sports Nutrition (3)
- NUTR 3220 - Foundations in Diet Therapy (2)
- NUTR 3320 - Health and Nutrition in the Older Adult (3)
- NUTR 4420 - Nutrition and Fitness (3) or
- NUTR 6420 - Nutrition and Fitness (3)
- NUTR 4520 - Directed Undergraduate Nutrition Research (1-4) or
- NUTR 6520 - Directed Graduate Nutrition Research (1-4)
- HLTH 3200 - Methods in Health Education (3)

Physical Education/ Coaching Dual Minor

Track I (non-teaching) - Physical Education/Coaching Dual Minor

Track II (teaching) - Physical Education Licensure/Coaching Dual Minor

Grade Requirements: Students selecting Track I, Physical Education/Coaching Dual Minor - a GPA of 2.85 or better in courses used toward the minor. No more than one "D" grade is acceptable. Students selecting Track II, Physical Education Licensure/Coaching Dual Minor - a GPA of 2.85 or better is required in all physical education courses used toward the major.

Credit Hour Requirements: Track I - a total of 28-30 credit hours is required. Track II - in addition to the 28 credit hours, 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).

Course Requirements for Minor

Professional Knowledge (14 credit hours)

- PEP 2000 - Foundations of Physical Education (3)
- PEP 2500 - Skills, Drills, and Strategies for Coaches (3)
- PEP 2600 - Growth and Motor Development (3)
- PEP 3520 - Curriculum Development/Instructional Strategies (3)
- PEP 3550 - Issues in Sport (2)

Field Experiences (5 credit hours)

- PEP 4860C - Field Experience Coaching (3)
- PEP 4990 - Field Experience/Senior Seminar (2)

Skill Development and Methods of Teaching (7-8 credit hours)

Students must select PEP 3280 and PEP 3290 plus one course from the area of team sports or individual sports (total of three courses).

Area 1 Team Sports:

- PEP 3240 - Skill Development and Methods of Teaching Field Sports (3)
- PEP 3242 - Skill Development and Methods of Teaching Court Sports (3)

Area 2 Individual Sports:

- PEP 3260 - Teaching Lifelong Leisure Activities (2)
- PEP 3262 - Skill Development and Methods of Teaching Individual Sports (3)
- PEP 3264 - Skill Development and Methods of Teaching Racket Sports (3)

Area 3 Conditioning (required):

- PEP 3280 - Teaching Neuromuscular Conditioning (2)
- PEP 3290 - Skill Development and Methods of Teaching Fitness for Life (3)

Required Support Course (2-3 credit hours)

- HLTH 1300 - First Aid: Responding to Emergencies (2) or
- AT 2175 - Introduction to Sports Medicine (3)

Recreation Minor

Grade Requirements: A minimum grade of "C" (2.0) in each of the courses used toward the minor.

Credit Hour Requirements: Complete a minimum of 18 credit hours selected and approved from among the following:

Course Requirements for Minor

Required Core Courses (9 credit hours)

- REC 3050 - Recreation and Leisure (3)
- REC 3600 - Outdoor Adventure Recreation (3)
- REC 3810 - Recreation Leadership & Management (3)

Elective Courses (9 credit hours)

Select 9 credit hours from the following

- REC 3610 - Outdoor Survival (2)
- REC 3840 - Therapeutic and Social Recreation (3)
- REC 4550 - Outdoor Education Philosophies & Principles (2)
- REC 4930 - Outdoor Education Workshop (2)
- PE 1520 - Hiking, Level I (1)
- PE 1527 - Rock Climbing, Level I (1)
- PE 1630 - Cross Country Skiing, Level I (1)
- PEP 2890 - Cooperative Work Experience (1-6)
- PEP 4890 - Cooperative Work Experience (1-6)
- PEP 4800 - Individual Projects (1-4)
- HLTH 1300 - First Aid: Responding to Emergencies (2)

Athletic Therapy Departmental Honors

Please contact the Athletic Therapy Program Director for advisement and permission prior to enrolling in Honors courses.

To earn departmental honors in Athletic Therapy, a student must:

1. Fulfill all the requirements for a bachelor's degree in Athletic Therapy as described in the catalog, maintaining an Athletic Therapy GPA of 3.75.
2. Complete nine (9) credits hours of upper division Athletic Therapy major courses from the following:
 - a. AT 3200
 - b. AT 3300 or AT 3301
 - c. AT 4100 or AT 4101
 - d. AT 4200 or AT 4201
 - e. AT 4600
3. Demonstrate evidence of excellence through the completion of an honors project within one of the courses listed in #2 above as defined and approved by the course instructor and Athletic Therapy Program Director and as agreed upon by the student. The assigned project(s) may take many forms including:
 - a. completing a research project which includes completion of an IRB
 - b. writing a case study
 - c. completing a literature or systematic review evidence based medicine paper using technology to disseminate information to peers, colleagues, and or patients.

In addition to the Athletic Therapy major courses listed, the student may opt to create his/her honors project through the completion of AT 4800 - Individual Projects. If the student decides to seek this option, prior approval is required from the Athletic Therapy Program Director.

4. Perform 50 hours of documented community service related to the student's professional program (i.e., physical therapy, occupational therapy, physician assistant, medicine). For example, work at the Ogden Rescue Mission, Special Olympics, or GOAL. Please see the Athletic Therapy Program Director prior to performing these hours.
5. Complete one (1) of the following:
 - Presentation of scholarly work from requirement # 3 at a local, state, or national forum (e.g., Weber State University Undergraduate Research Symposium and Celebration, Utah Academy of Sciences, Arts, & Letters)
 - Submission of scholarly work from requirement # 3 for public/professional dissemination (e.g., professional journal, Weber State University Ergo).

Students who have not completed their General Education requirements are strongly encouraged to fulfill them with Honors General Education courses.

Athletic Training Departmental Honors

Please contact the Athletic Training Program Director (Dr. Hamson-Utley) for advisement and permission prior to enrolling in Honors courses.

To earn departmental honors in Athletic Training, a student must meet the following criteria:

1. **Academic Excellence**
 - Major GPA: 3.7; Total Institution Cumulative GPA: 3.5
2. **Public Demonstration of Discipline Expertise**

One of the following:

- Excellence in Community Service (Project)
- Present a poster or talk and/or publish a paper
- Excellence in Research (including IRB application & OUR funding application)

and Two of the following:

- NATA student membership
- Service on an athletic training student committee at the state, district, or national level
- Membership and Involvement with the WSU student Athletic Training Association
- Attend a state, regional and/or national Athletic Training Conference

3. Honors Courses

- Fulfill the requirement for the AT major in the HPHP department, of which **9 credit hours** must include an **additional project** within each selected course (AT 3200, AT 3300, AT 3301, AT 4100, AT 4101, AT 4200, AT 4201, AT 4550, AT 4600), with each project relating to a central theme for AT 4800 (see below).
- Additionally, students must complete **3 credits of AT 4800 - Individual Projects** during which time they will complete a senior theses project.

Students who have not completed their General Education requirements are strongly encouraged to fulfill them with Honors General Education courses.

Physical Education Departmental Honors

Please contact the HPHP Department for advisement and permission prior to enrolling in Honors courses.

Requirements for Physical Education Departmental Honors:

1. Maintain a cumulative GPA of 3.5 and a Physical Education Program GPA of 3.7;
2. Complete all the required course work for the major;
3. Become a member of the national professional organization, AAHPERD, as well as the state organization, UAHPERD;
4. Attend UAHPERD Conferences. Honors students are encouraged to attend AND present at conferences as part of their professional development.
5. Participate in undergraduate research and development by presenting research at a UAHPERD Conference or at the Weber State University Undergraduate Research Symposium and Celebration.

- As an alternative to presenting at one of the professional conferences listed above, an Honors student may choose to register for and earn an A- grade or better in PEP 4830 Directed Readings in Physical Education.
6. Demonstrate and model physical fitness and active healthy living by passing at least 4 of the 5 fitness components of the Presidential Fitness Test at the Presidential Level or the Fitnessgram Fitness Test above the Healthy Zone or other approved fitness test used in the PEP 3290 - Skill Development and Methods of Teaching Fitness for Life course;
 7. Demonstrate exceptional skills in at least 3 team sports/activities and 3 individual sports/activities;
 8. Keep an activity journal for 6 months with an average of four days of moderate to vigorous physical activity per week as prescribed by the American Heart Association and/or the Centers for Disease Control and Prevention and/or the American College of Sports Medicine;
 9. EITHER serve as a new student mentor when the mentor program is in place, OR volunteer in the community in a setting such as Boys and Girls Clubs or an After School Program, spending at least 20 hours coaching or teaching a physical activity.

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 Promotion and Human Performance) for more information.

Department of Teacher Education

Department Chair: Jack Mayhew

Location: McKay Education Building, Room 224

Telephone Contact: Lynda L. Olmstead 801-626-7171

Advisement Contact: Kristin Radulovich 801-626-6309

Professors: Frances Butler, Michael Cena, Forrest

Crawford, Linda Gowans, Vicki Napper; **Associate**

Professors: Melina Alexander, Ann Ellis, Kristin Hadley,

Jack Mayhew, Louise Moulding, Richard Pontius, Peggy

Saunders, Pene'e Stewart, Natalie Allen Williams; **Assistant**

Professors: Vincent Bates, David Byrd, Anette Melvin,

Kristin Nelson, Clay Rasmussen, Sue Womack

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), Basic Reading (graduate level only), and Education of the Gifted (graduate level only). All programs are approved by the Utah State Board of Education and the National Council for Accreditation of Teacher Education (NCATE) and Northwest/North Central Associations.

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 select one 9-hour content area specialization. The professional education program outlines acceptable subject specialization areas and requirements. Special Education majors choose one 9-hour specialization or a teaching minor. Secondary school 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. Either the major or minor must be a subject which Utah secondary schools are required to teach.
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; 43 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.

Teacher Education Conceptual Framework

The Department of Teacher Education's conceptual framework theme is "Student Achievement: Students, Teachers, & Communities Working Together." The model that illustrates the program's purposes, philosophy, outcomes and evaluation is represented by an easel, at the center of which are three overlapping components: *Reflecting, Engaging, and Collaborating*. The program standards are performance-based: that is, they describe what teachers should know and be able to do in order to be awarded a license. Course outcomes and objectives are geared around the conceptual framework. Students may view the conceptual framework, INTASC Standards and the critical performances for each level on the teacher education Web site (<http://departments.weber.edu/teachereducation>).

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. A specific number of applicants are provisionally admitted each semester after having made application and

met the minimum admission criteria listed below. **Meeting the minimum requirements only qualifies a student to be considered for admission.** Students are admitted two times per year: fall semester and spring semester. Applicants are evaluated using a 100 point system using GPA, Praxis II/CAAP writing scores, and interviews.

Minimum Admission Requirements

1. Formal Application submitted online and provisional Admission form submitted to Teacher Education Advisement Center (ED 230) by the deadline date. Transcripts of all college course work must accompany the application along with a current degree evaluation.
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 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.*

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 is required for admission to the Elementary Education and Special Education 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.
4. Minimum score on the Collegiate Assessment of Academic Proficiency (CAAP) – Writing section. Registration should be completed at least 15 days prior to the test date. Dates for testing and administration are available in ED 230 and the University Testing Center in the Student Services Center.
5. 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).
6. Composition general education requirement completed (grade "C" or above in ENGL 2010 EN, or equivalent).
7. Quantitative Literacy requirement completed (see General Requirements in this catalog).
Note: Elementary and Early Childhood Education majors need MATH 1050 as prerequisite for Mathematics Education support courses.

8. Communication competency completed (grade "B-" or above in COMM 1020 or COMM 2110 or equivalent).
9. University Computer and Information Literacy competency completed (see General Requirements in this catalog).
10. EDUC 1010 Exploring Teaching or approved equivalent course completed.
11. 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.
12. 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.** See Teacher Education Advisement Center (ED 230) for further information.
- 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. Applicants with BS or BA degrees seeking initial licensure in Early Childhood Education, Elementary Education, Special Education, or Secondary Education, must submit a formal application and transcripts and complete the interview/ statement (see Requirements 1, 2, 3 [if applicable] of Admission to Teacher Education Program). They are then placed in the pool with others seeking admission.
- 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.

Dual Licensure

Dual Licensure is a possibility for a student who desires to qualify to teach at early childhood and elementary, or elementary and secondary levels. Ordinarily, this requires two or more semesters of work beyond that required for the single license.

Returning Early Childhood Education students desiring the dual licensure in Elementary Education must complete at least one Exceptional Child course (usually EDUC 3260E EDUC 3260S).

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 Kindergarten through sixth grade graduate with a major in Elementary Education.

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 and Interdisciplinary Programs section of this catalog.)

Elementary Education (BS)

Program Prerequisite: Provisional admission to a Teacher Education Program (see the admission requirements described under the Department of Teacher Education).

Minor/Specialization: One subject area specialization (9 or 18 hours) or a teaching minor (16 hours minimum) must be selected.

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 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).

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 801-626-6309 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. Professional Education Courses; and IV. Subject Area Specialization(s). Details for each of these required areas follow.

General Education

I. University and General Education Requirements

Refer to Degree and General Education 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 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-6 License

II. Support Courses Required (or equivalent) (36-38 credit hours)

- CHF 1500 SS - Human Development (3)
- CHF 2610 - Guidance Based on Developmental Theory (3) *Must be completed prior to Level 1*
- CHF 2620 - Planning Creative Experiences for Young Children (3) *Must be completed prior to Level 1*
- COMM 1020 HU - Principles of Public Speaking (3) or
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- EDUC 1010 - Exploring Teaching (3)
- EDUC 2000 - Social Studies Concepts for Elementary Teachers (3)
- ENGL 3300 - Children's Literature (3)
- HLTH 4300 - Health Education in the Elementary School (2)
- MATH 2010 - Mathematics for Elementary Teachers I (3) *Grade of C or above required*

- MATH 2020 - Mathematics for Elementary Teachers II **(3)** *Grade of C or above required*
- PEP 3630 - Physical Education K-6 **(3)**
Must be taken after Level 1

At least one course from the following

- ART 1030 CA - Studio Art for the Non-Art Major **(3)**
- MUSC 3824 - Music for Elementary Teachers **(4)**
- EDUC 3430 - Creative Processes in the Elementary School **(3)**
- DANC 3640 - Teaching Creative Dance in the Elementary School **(2)**
- THEA 4603 - Creative Drama **(3)**

In addition

Based on a technology proficiency assessment, students will complete one of the following prior to or concurrent with Level 1:

- EDUC 3110 - Instructional Technology **(2)**
- EDUC 3370 - Advanced Instructional Technology **(2)**

III. Professional Education Courses Required (48 credit hours)

Admission to teacher education is required prior to enrollment in Professional Education courses.

Level 1 (12 credit hours, includes practicum)

- EDUC 3100 - Instructional Planning & Assessment **(3)**
- EDUC 3120 - Reading Instruction in the Primary Grades **(3)**
- EDUC 3140 - Educational Psychology, Interpersonal Skills and Classroom Management (Elementary) **(3)**
- CHF 4710 - Advanced Guidance and Planning for Early Childhood Education **(3)**

Level 2 (12 credit hours, includes practicum)

- EDUC 3200E DV - Foundations of Diversity: Culturally, Linguistically Responsive Teaching (Elementary) **(3)**
- EDUC 3240 - Reading Instruction in the Intermediate Grades **(3)**
- EDUC 3260E DV - The Exceptional Student (Elementary) **(3)**
- EDUC 3280 - Elementary Social Studies Methods **(3)**

Level 3 (12 credit hours, includes practicum)

- EDUC 4300 - Elementary Mathematics Methods **(3)**
- EDUC 4320 - Elementary Language Arts Methods **(3)**
- EDUC 4330 - Elementary Science Methods **(3)**
- EDUC 4340 - Elementary Art/Music Methods **(3)**

Level 4 (12 credit hours)

- EDUC 4840 - Student Teaching in Elementary Education **(8)** [K-2 and 3-6]
- EDUC 4850 - Integrated Elementary Education Student Teaching Seminar and Synthesis **(4)**

Additional Information:

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. Required Area of Specialization (9 credit hours)

Grades K-6 License

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.

- Art
- Early Childhood
- Educational Computing
- English as a Second Language (ESL)
- Fine Arts
- Foreign Language
- General Science
- Mathematics
- Multicultural Education
- Music
- Physical Education
- Reading/Language Arts
- Social Science
- Special Education (Mild/Moderate)

To extend license to Grades 1-8

Complete an 18-hour area of specialization in one of the areas listed below, or a teaching minor. (See the Secondary Education section for teaching minors.) For further information concerning the courses involved in the areas of specialization, see the Teacher Advisement Center, ED230.

- English as a Second Language (ESL)
- Mathematics

Licensure in Special Education (Mild/Moderate) is also available. See Special Education Licensure Mild/Moderate Endorsement requirement.

Special Education (BS)

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 from the following specialization areas:

- Mathematics
- Reading/Language Arts
- ESL
- Early Childhood

Grade Requirements: Special Education majors must maintain a cumulative GPA of 3.00 or higher in all college/university work. They must also achieve at least a "B-" grade in each course in the major to continue in the program.

Credit Hour Requirements: A minimum of 120 credit hours is required for graduation. The following are required within the program: Support Courses 18; Specialization 9; Professional Education 7; Special Education 46. A total of 40 upper division credit hours is required (courses number 3000 and above).

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 Special Education majors should meet with an advisor in the Teacher Education Advisement Center and also an assigned advisor from the Special Education faculty. Call 801-626-6309 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. Professional Education Courses; and, IV Mild/Moderate Specialization Courses. Details for each of these required areas follow.

General Education

I. University and General Education Requirements

Refer to Degree and General Education 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 and CHF 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 1350 PS (Principles of Earth Science), CHEM 1360 PS/PHYS 1360 PS (Principles of Physical Science), or BTNY 1370 LS/MICR 1370 LS/ZOOL 1370 LS (Principles of Life Science), or at least one science lab course.

Major Course Requirements for BS Degree

II. Support Courses Required (or equivalent) (18 credits)

- EDUC 1010 - Exploring Teaching (3)
- EDUC 2010 - Human Exceptionality (3)
- CHF 1500 SS - Human Development (3)
- COMM 1020 HU - Principles of Public Speaking (3) or
- COMM 2110 HU - Interpersonal & Small Group Communication (3)

And at least 6 credit hours from the following

- ENGL 3300 - Children's Literature (3)
- EDUC 3390 - Literacy in the Primary Grades (2)
- EDUC 3430 - Creative Processes in the Elementary School (3)
- EDUC 4250 - Second Language Acquisition: Theories and Implementation (3)
- EDUC 4270 - Literacy Strategies for Teaching English Language Learners (3)
- CHF 2400 - Family Relations (3)
- CHF 2500 - Development of the Child: Birth Through Eight (3)
- CHF 2570 - Middle Childhood Development (3)
- CHF 3640 - Working with Parents (3)
- PSY 3000 - Child Psychology (3)
- PSY 3140 - Psychology of Adolescence (3)

- PSY 3250 - Conditioning & Learning (3)
- PSY 3300 - Applied Behavior Intervention (3)
- PEP 3660 - Physical Education for Students with Disabilities (2)

III. Courses Required for the Major (54 credits)

Professional Education Courses (8 credits)

- EDUC 3110 - Instructional Technology (2)
- EDUC 3140 - Educational Psychology, Interpersonal Skills and Classroom Management (Elementary) (3)
- EDUC 3200D DV - Foundations of Diversity: Culturally, Linguistically Responsive Teaching (Special Education) (3)

Special Education Courses (46 credits)

Mild/Moderate Core (22 credits)

- EDUC 4510 - Foundations in Special Education Practice and Law (3) or
- MED 6510 - Advanced Foundations in Special Education Practice and Law (Elementary and Secondary Teachers) (3)
- EDUC 4520 - Collaboration, Consultation, and IEP Development (3) or
- MED 6520 - Collaboration, Consultation, and IEP Development (3)
- EDUC 4530 - Principles and Applications of Special Education Assessment (3) or
- MED 6530 - Principles and Applications of Special Education Assessment (3)
- EDUC 4540 - Managing Student Behavior (3) or
- MED 6540 - Advanced Managing Student Behavior (3)
- EDUC 4550 - Instructional Planning and Learning Environments for Special Education Students (3) or
- MED 6550 - Advanced Instructional Planning and Learning Environments for Special Education Students (3)
- EDUC 4580 - Learning Strategies and Transition for Special Education Students (3) or
- MED 6580 - Advanced Learning Strategies and Transition for Special Education Students (3)
- EDUC 4581 - Pre-Student Teaching in Special Education: Assessment, Behavior Management, Instruction (4) or
- MED 6581 - Pre-Student Teaching in Special Education (4)

Math, Reading, and Written Language Block (12 credits)

- EDUC 4640 - Validated Instructional Methods and Practicum: Mathematics (4) or
- MED 6560 - Advanced Instructional Methods and Practicum: Mathematics (4)
- EDUC 4650 - Validated Instructional Methods and Practicum: Reading (4) or
- MED 6555 - Advanced Instructional Methods and Practicum: Reading (4)
- EDUC 4660 - Validated Instructional Methods and Practicum: Written Expression (4) or
- MED 6570 - Advanced Instructional Methods and Practicum: Written Expression (4)

Student Teaching in Special Education (12 credits)

- EDUC 4680 - Special Education Student Teaching (8)
- EDUC 4686 - Special Education Student Teaching Seminar & Synthesis for Special Education Majors (4)

Specialization options (9 credits)

Mathematics - choose from the following:

(*MATH 1050, MATH 2010 and MATH 2020 are prerequisites*)

- MATH 1060 - Trigonometry (3)
- MTHE 3060 - Probability and Statistics for Elementary Teachers (3)
- MTHE 3070 - Geometry for Elementary Teachers (3)
- MTHE 3080 - Number Theory for Elementary Teachers (3)
- MTHE 4040 - Mathematical Problem Solving for Elementary Teachers (3)

Reading/Language Arts - choose from the following:

- EDUC 3390 - Literacy in the Primary Grades (2)
- EDUC 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
- MED 6330 - Using Children's Literature and Informational Text in the Classroom (2)
- MED 6360 - Foundations of Literacy (3)
- EDUC 5120 - Culture and Language (3)
- ENGL 3040 - History of the English Language (3)
- ENGL 3310 - Young Adult Literature (3)
- ENGL 4400 - Multicultural Perspectives on Literature for Young People (3)

ESL - choose from the following:

- EDUC 4250 - Second Language Acquisition: Theories and Implementation (3)
- ENGL 4420 - English Phonology and Syntax for ESL/Bilingual Teachers (3)
- EDUC 4270 - Literacy Strategies for Teaching English Language Learners (3)
- ENGL 4410 - Strategies and Methodology of Teaching ESL/Bilingual (3) *
- ENGL 4450 - ESL/Bilingual Assessment: Theory, Methods, and Practices (3)
- EDUC 4740 - Building School Partnerships with ESL/Bilingual Families (1)
- EDUC 5770 - Field Experience in ESL/Bilingual Education (2)

* *FL 4400 - Methods of Teaching a Foreign Language can be used in lieu of this course.*

Early Childhood

- CHF 2500 - Development of the Child: Birth Through Eight (3)
- CHF 2600 - Introduction to Early Childhood Education (3)
- CHF 2610 - Guidance Based on Developmental Theory (3)
- CHF 2620 - Planning Creative Experiences for Young Children (3)
- CHF 3850 - Current Research Methods in Child and Family Studies (3)
- CHF 4710 - Advanced Guidance and Planning for Early Childhood Education (3)

ESL (English as a Second Language) Minor

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.

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 (3) (MED 6250)
- EDUC 4270 - Literacy Strategies for Teaching English Language Learners (3) (MED 6270)
- EDUC 4740 - Building School Partnerships with ESL/Bilingual Families (1)
- EDUC 5770 - Field Experience in ESL/Bilingual Education (2) **
- ENGL 4410 - Strategies and Methodology of Teaching ESL/Bilingual (3) * (MENG 6410)
- ENGL 4420 - English Phonology and Syntax for ESL/Bilingual Teachers (3) (MENG 6420)
- ENGL 4450 - ESL/Bilingual Assessment: Theory, Methods, and Practices (3) (MENG 6450)

* *FL 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.

Elementary Education Departmental Honors

Please contact the Teacher Education Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Enroll in the General Honors Program and complete at least 9 credit hours of general Honors courses.

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Fill the requirements of the Elementary Education major, of which at least 12 credit hours in the professional education sequence, education support courses, or graduate courses must be taken for Honors credit. All 3000 level and above courses may be considered by the student for his/her course of study.

Content in the Education courses will be different and more challenging for Honors students than the content for regular students.

Basic Reading Endorsement

Level I—Basic Reading Endorsement

These courses will meet the requirement for a Level I Basic Reading Endorsement to be added to the Elementary or Secondary Education licensure. The Teacher Education Department provides the courses required for these two endorsements but does not give the endorsement. It is the teacher's responsibility to submit application to the USOE (<http://www.usoe.k12.ut.us>) for the reading endorsement. The USOE does the endorsing after reviewing the student's application and coursework.

Course Requirements for Elementary Reading Endorsement

- MED 6360 - Foundations of Literacy (3)
- MED 6320 - Content Area Literacy Instruction (3)
- MED 6330 - Using Children's Literature and Informational Text in the Classroom (2)
- MED 6340 - Reading Assessment and Instructional Interventions (3)
- MED 6350 - Reading Comprehension Instruction (3)
- MED 6352 - Early Literacy Instruction (K-6) (2)
- MENG 6110 - Writing for Teachers (3)

Course Requirements for Secondary Reading Endorsement

- MED 6360 - Foundations of Literacy (3)
- MED 6320 - Content Area Literacy Instruction (3)
- MED 6340 - Reading Assessment and Instructional Interventions (3)
- MED 6350 - Reading Comprehension Instruction (3)
- MED 6353 - Understanding and Supporting Reading Development (grades 6-12) (3)
- MENG 6110 - Writing for Teachers (3)
- MENG 6210 - Teaching Literature in the Secondary Schools (3)

Level II—Advanced Reading Endorsement

- MED 6354 - Literacy Leadership and Professional Development (2)
- MED 6355 - Research in Reading (3)
- MED 6356 - Internship in Reading (3)

Bilingual Endorsement

This program will meet the requirements for the Bilingual Endorsement to be added to the Early Childhood, Elementary, or Secondary Education licensure. Students must also demonstrate language proficiency at the Intermediate High 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 (18 credit hours)

Graduate students should contact the MEd director for approved substitutions.

- EDUC 4250 - Second Language Acquisition: Theories and Implementation (3) (MENG 6250)
- EDUC 4270 - Literacy Strategies for Teaching English Language Learners (3) (MED 6270)
- EDUC 4740 - Building School Partnerships with ESL/Bilingual Families (1)
- EDUC 5770 - Field Experience in ESL/Bilingual Education (2) *
- ENGL 4410 - Strategies and Methodology of Teaching ESL/Bilingual (3) (MENG 6410)
- ENGL 4420 - English Phonology and Syntax for ESL/Bilingual Teachers (3) (MENG 6420)
- ENGL 4450 - ESL/Bilingual Assessment: Theory, Methods, and Practices (3) (MENG 6450)

* EDUC 5770 needs to be completed with Student Teaching.

Endorsement programs are also offered through the graduate program as electives.

Education of the Gifted Endorsement

These courses 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 (14 credit hours)

- MED 6420 - Foundations of Education of the Gifted (3)
- MED 6440 - Social and Emotional Needs of the Gifted (2)
- MED 6480 - Differentiated Curriculum for the Gifted (3)
- MED 6490 - Assessment and Evaluation in Education of the Gifted (3)
- MED 6495 - Action Research in Education of the Gifted (3)

Elective (at least 2 credit hours)

Select one of the following options:

- MED 6450 - Creativity and Applied Imagination (2)
- MED 6470 - Teaching for Thinking (2)
- Approved graduate credit through professional development course of conference

Elementary Education Mathematics Endorsement

A candidate desiring to receive Elementary Education Mathematics Endorsement must

- Fill the requirements of the Elementary Education major, with the exception of EDUC 4300 which is not required for the Elementary Education Mathematics Endorsement.

- Select math as a 9-hour content specialization and take the remainder of the classes required for the Endorsement.

Courses Required for Endorsement

Mathematics Courses Required (18 hours)

- MATH 1060 - Trigonometry (3)
- MATH 1210 - Calculus I (4)
- MTHE 3060 - Probability and Statistics for Elementary Teachers (3)
- MTHE 3070 - Geometry for Elementary Teachers (3)
- MTHE 3080 - Number Theory for Elementary Teachers (3)
- MTHE 4040 - Mathematical Problem Solving for Elementary Teachers (3)
or other approved courses numbered above 3000

Elementary education majors desiring an Elementary Mathematics Endorsement should consult with the Mathematics Department Chair early in their program. The student will be assigned an advisor to help design his/her course of study.

ESL (English as a Second Language) 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.

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 (3) (MED 6250)
- EDUC 4270 - Literacy Strategies for Teaching English Language Learners (3) (MED 6270)
- EDUC 4740 - Building School Partnerships with ESL/Bilingual Families (1)
- EDUC 5770 - Field Experience in ESL/Bilingual Education (2) **
- ENGL 4410 - Strategies and Methodology of Teaching ESL/Bilingual (3) * (MENG 6410)
- ENGL 4420 - English Phonology and Syntax for ESL/Bilingual Teachers (3) (MENG 6420)
- ENGL 4450 - ESL/Bilingual Assessment: Theory, Methods, and Practices (3) (MENG 6450)

* FL 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.

Special Education Mild/Moderate Endorsement

The Department of Teacher Education offers course work leading to a Special Education license with a Mild/Moderate Endorsement. This license allows the holder to teach students with mild-to-moderate disabilities from kindergarten through twelfth grade. The Special Education license may be earned concurrently with the Early Childhood or Elementary Education Major or a Secondary Education Teaching Major. Special Education courses taken in the early childhood and elementary education subject area specializations may count toward the licensure. Check at the Teacher Education Advisement Center for a Special Education course schedule.

Grade Requirements: A GPA of 3.00 or better in required courses in addition to an overall GPA of 3.00 or higher.

Credit Hour Requirements: 35 credit hours required.

Admission Requirements

- Students must be admitted to the Teacher Education Program or to the MEd program, or have a current teaching license.
- Teachers holding a current teaching license who are only seeking the Special Education licensure must make application through the Department of Teacher Education Advisement Center (ED 230) and complete a separate admissions procedure.
- Meet Computer and Information Literacy general education requirement.

Course Requirements

Courses Required (31 or 35 credit hours)

- EDUC 4510 - Foundations in Special Education Practice and Law (3)
- EDUC 4520 - Collaboration, Consultation, and IEP Development (3)
- EDUC 4530 - Principles and Applications of Special Education Assessment (3)
- EDUC 4540 - Managing Student Behavior (3)
- EDUC 4550 - Instructional Planning and Learning Environments for Special Education Students (3)
- EDUC 4580 - Learning Strategies and Transition for Special Education Students (3)
- EDUC 4581 - Pre-Student Teaching in Special Education: Assessment, Behavior Management, Instruction (4)
- EDUC 4650 - Validated Instructional Methods and Practicum: Reading (4)
- EDUC 4670 - Special Education Student Teaching (4)
- EDUC 4685 - Special Education Student Teaching Seminar and Synthesis (1)
- EDUC 4640 - Validated Instructional Methods and Practicum: Mathematics (4)

Note:

Endorsement programs are also offered through the graduate program as electives.

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 801-626-6309 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 and General Education 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 - Exploring Teaching (3)

One course from the following

- CHF 1500 SS - Human Development (3)
- PSY 3140 - Psychology of Adolescence (3)

One course from the following

- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (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/Athletic Coaching

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 (minor required)	Biology
Business Education	Earth Science
Music Education	Physical Science
Social Science	

IV. Professional Education Courses Required (24 hours)

Secondary Teacher Education Core

- EDUC 3200S DV - Foundations of Diversity: Culturally, Linguistically Responsive Teaching (Secondary) **(3)**
- EDUC 3260S DV - The Exceptional Student (Secondary) **(3)**
- EDUC 3900 - Preparing, Teaching, and Assessing Instruction **(3)**
- EDUC 3930 - Reading and Writing Across the Secondary Curriculum **(3)**

Secondary Teacher Education Student Teaching

- EDUC 4940 - Student Teaching in Secondary Education **(8)**
- EDUC 4950 - Integrated Secondary Student Teaching Seminar **(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.

Special Education Licensure Mild/Moderate Endorsement

The Department of Teacher Education offers course work leading to a Special Education license with a Mild/Moderate Endorsement. This license allows the holder to teach students with mild-to-moderate disabilities from kindergarten through twelfth grade. The Special Education license may be earned concurrently with the Early Childhood or Elementary Education Major or a Secondary Education Teaching Major. Special Education courses taken in the early childhood and elementary education subject area specializations may count toward the licensure. Check at the Teacher Education Advisement Center for a Special Education course schedule.

Grade Requirements: A GPA of 3.00 or better in required courses in addition to an overall GPA of 3.00 or higher.

Credit Hour Requirements: 35 credit hours required.

Admission Requirements

- Students must be admitted to the Teacher Education Program or to the MEd program, or have a current teaching license.
- Teachers holding a current teaching license who are only seeking the Special Education licensure must make application through the Department of Teacher Education Advisement Center (ED 230) and complete a separate admissions procedure.

- Meet Computer and Information Literacy general education requirement.

Course Requirements

Courses Required (31 or 35 credit hours)

- EDUC 4510 - Foundations in Special Education Practice and Law **(3)**
- EDUC 4520 - Collaboration, Consultation, and IEP Development **(3)**
- EDUC 4530 - Principles and Applications of Special Education Assessment **(3)**
- EDUC 4540 - Managing Student Behavior **(3)**
- EDUC 4550 - Instructional Planning and Learning Environments for Special Education Students **(3)**
- EDUC 4580 - Learning Strategies and Transition for Special Education Students **(3)**
- EDUC 4581 - Pre-Student Teaching in Special Education: Assessment, Behavior Management, Instruction **(4)**
- EDUC 4650 - Validated Instructional Methods and Practicum: Reading **(4)**
- EDUC 4670 - Special Education Student Teaching **(4)**
- EDUC 4685 - Special Education Student Teaching Seminar and Synthesis **(1)**
- EDUC 4640 - Validated Instructional Methods and Practicum: Mathematics **(4)**

Endorsement programs are also offered through the graduate program as electives.

Dr. Ezekiel R. 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 basic 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 early semesters of study, learning to apply the basic 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 Advisement: 801-626-6128

Department Chairs

Dental Hygiene:

Ms. Stephanie Bossenberger 801-626-6451

Emergency Care and Rescue:

Mr. Jeff Grunow 801-626-6521

Health Sciences: Mr. Kraig Chugg

801-626-6505

Health Administrative Services:

Ms. Pat Shaw 801-626-7242

Medical Laboratory Sciences:

Mr. Scott Wright 801-626-6118

School of Nursing: Ms. Susan Thornock

801-626-6142

Radiologic Sciences: Dr. Robert Walker

801-626-7156

Respiratory Therapy: Dr. Paul Eberle

801-626-7071

Master of Health Administration Program

Health Administrative Services Department Chair:

Pat Shaw

Location: Marriott Allied Health Building, Rm 301

Telephone: 801-626-7242

Web Site: weber.edu/mha

The Master of Health Administration (MHA) program will prepare students for a career leading to executive leadership positions in the healthcare industry. It is specifically intended for individuals with leadership experience who want to further their careers. The MHA program is designed to enhance management, interpersonal, and organization skills

and abilities. The program also strives to instill students with a desire and skills that focus on self-development, critical thinking and life-long learning.

Master of Health Administration (MHA)

Minimum Admission Requirements

- A Bachelor's Degree*
- GPA of 2.7 on a 4.0 scale
- GMAT or GRE scores**
- At least two years of supervisory experience
- Practicing physicians may be admitted without the GMAT/GRE or supervisory requirement

* Students with degrees other than health administration or business administration may be required to take leveling courses in statistics, financial and managerial accounting, managerial economics, health policy and economics, and health ethics and law.

** Significant weight is given to GRE aptitude with a minimum of 144 quantitative and 153 verbal or a GMAT aptitude score of at least 500. However, indications of academic ability as expressed by undergraduate grade point average and professional experience will be of greater importance than specific undergraduate background and GRE or GMAT scores.

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 2.7 or higher.

Leveling Courses

- HIM 3200 - Epidemiology and Biostatistics (3) or equivalent
- MBA 6020 - Financial and Managerial Accounting (3)
- MBA 6040 - Managerial Economics (3)

Course Requirements for MHA

Required Courses (36 credit hours)

- MHA 6000 - Health Systems & the Healthcare Economy (3)
- MHA 6100 - Leading & Managing People in Health Care (3)
- MHA 6200 - Health Behavior and Managerial Epidemiology (3)
- MHA 6240 - Human Resources Management in Healthcare (3)
- MHA 6250 - Health Care Finance (3)
- MHA 6300 - Quality Improvement and Risk Management in Health Services Organizations (3)
- MHA 6320 - Health Policy and Economics (3)
- MHA 6350 - Quantitative Decision Making (3)
- MHA 6400 - Strategic Health Planning and Marketing (3)
- MHA 6440 - Health Ethics and Law (3)
- MHA 6450 - Managing Health Information (3)
- MHA 6500 - Field Work (3)

Electives (6 credit hours)

Select two of the following courses

MHA Courses

- MHA 6140 - Long-term Care Administration (3)
- MHA 6160 - Medical Group Management (3)
- MHA 6180 - Health Care Entrepreneurship (3)
- MHA 6310 - Managed Care vs. Managed Health (3)
- MHA 6360 - Comparative International Health Systems (3)
- MHA 6380 - Patient Services Staff Management (3)
- MHA 6830 - Directed Study (1-3)
(3 credit hours required)

MBA Courses

- MBA 6110 - Tools for the Ethical Manager (3)
- MBA 6150 - Operations/Supply Chain Management (3)
- MBA 6170 - Corporate Communications (3)
- MBA 6540 - Negotiations (3)

No more than nine (9) total hours, including leveling courses, may be taken from the MBA program.

Health Services Administration Graduate Certificate

Program Prerequisite: Applicants must possess a bachelor's degree from a regionally accredited institution and be accepted into the certificate program. Completion of courses in statistics, accounting and economics are required for enrollment in certificate courses. Students are expected to be competent in use and manipulation of spreadsheet, word-processing and presentation software.

Grade Requirements: To receive a certification the student must complete all courses in the certificate program with a grade of "C" or higher, and maintain an overall program GPA of 2.7 or higher.

Credit Hour Requirements: 15 credit hours as specified below.

Course Requirements for Graduate Certificate

Required Courses (15 credit hours)

- MHA 6000 - Health Systems & the Healthcare Economy (3)
- MHA 6200 - Health Behavior and Managerial Epidemiology (3)
- MHA 6300 - Quality Improvement and Risk Management in Health Services Organizations (3)
- MHA 6400 - Strategic Health Planning and Marketing (3)
- MHA 6500 - Field Work (3)

Master of Science in Nursing Program

Director: Joyce Barra, PhD, MS, RN

Location: Marriott Allied Health Building, Rm 435

Telephone: Monica Linford (801) 626-6137

Enrollment Director: (801) 626-7774, prompt 6

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. The Master's of Science in Nursing graduate, functioning in the advanced professional roles of nurse educator and nurse administrator, is prepared to provide guidance and leadership to the PN, RN, and BSN graduates throughout the processes associated with designing, managing, coordinating, and providing nursing care.

The MSN degree consists of 40 credit hours beyond the earned baccalaureate degree. This includes core courses (15 credits) and concentrations of nurse administrator or nurse educator (21 credits per concentration). In addition, students are required to complete 4 credits of project hours. The WSU graduate nursing program is developed with "hybrid" courses. This means the majority of coursework will be online with a few scheduled classroom experiences.

Certificate courses may not be concurrently applied towards the WSU MSN degree.

Master of Science in Nursing (MSN)

Grade Requirements: To earn the MSN degree, candidates must complete all MSN program courses with a grade of "B-" or higher and maintain an overall program GPA of 3.0 or higher

Credit Hour Requirements: A total of 40 credit hours is required.

Accreditation

The MSN Program is accredited by the National League for Nursing Accrediting Commission (NLNAC).

National League for Nursing Accrediting Commission
3343 Peachtree Road NE, Suite 850
Atlanta, GA 30326
P. 404.975.5000
F. 404.975.5020
www.nlnac.org

Admission Requirements

Enrollment Director (801) 626-7774, prompt 6

Criteria for admission to the WSU School of Nursing's Master of Science in Nursing 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) 626-7774, prompt 6.

Prior to beginning the admissions process applicants must be a current matriculated student 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 by 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 \$100 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.

Course Requirements for MSN

Required MSN Core Courses (15 credit hours)

- MSN 6100 - Research Methods (3)
- MSN 6120 - Research and Statistics (3)
- MSN 6141 - Advanced Nursing Theory (3)
- MSN 6160 - Evidence-Based Practice (3)
- MSN 6180 - Improving Patient Care and Nursing Practice through Information Systems (3)

Concentration Courses Required (21 credit hours)

Select one of the following concentrations

Educator Concentration

- MSN 6500 - Theoretical Foundations in Nursing Education (3)
- MSN 6520 - Curriculum Development for Nursing Educators (3)
- MSN 6540 - Measurement of Competence and Outcomes in Nursing Education (3)
- MSN 6560 - Socialization in the Role of Nursing Educator (3)
- MSN 6580 - Clinical Nursing Instruction in Higher Education and Community Settings (3)
- MSN 6600 - Nursing Instruction in Higher Education and Community Settings (3)
- MSN 6700 - Nurse Educator Residency (3)

Administrator Concentration

- MSN 6200 - Theoretical Foundations of Nursing Administration (3)
- MSN 6300 - Quality Improvement, Patient Safety and Risk Issues in Patient Care Delivery (3)
- MSN 6324 - Financial Issues in Nursing Administration (3)
- MSN 6340 - Compliance with Legal and Regulatory Systems in Patient Care Delivery (3)
- MSN 6360 - Scope and Practice of Nursing Administration (3)
- MSN 6380 - Retaining and Developing a Competent Workforce in Nursing (3)
- MSN 6400 - Nurse Administrator Residency (3)

MSN Project (4 credit hours)

- MSN 6800 - MSN Project Development and Implementation (1-4) (4 credit hours required)

Please see Admission Advisors.

Nursing Administration Graduate Certificate

Program Prerequisite: The Graduate Certificate in Nursing Administration is a stand-alone certificate: completion of a 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 15 credit hours is required.

Certificate courses may not be concurrently applied towards the WSU MSN degree.

Course Requirements for Graduate Certificate

Courses Required

- MSN 6200 - Theoretical Foundations of Nursing Administration (3)
- MSN 6324 - Financial Issues in Nursing Administration (3)
- MSN 6340 - Compliance with Legal and Regulatory Systems in Patient Care Delivery (3)
- MSN 6300 - Quality Improvement, Patient Safety and Risk Issues in Patient Care Delivery (3)
- MSN 6380 - Retaining and Developing a Competent Workforce in Nursing (3)

Nursing Education Graduate Certificate

Program Prerequisite: The Graduate Certificate in Nursing Education is a stand-alone certificate: completion of a 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 15 credit hours is required.

Certificate courses may not be concurrently applied towards the WSU MSN degree.

Course Requirements for Graduate Certificate

Courses Required

- MSN 6500 - Theoretical Foundations in Nursing Education (3)
- MSN 6520 - Curriculum Development for Nursing Educators (3)

- MSN 6540 - Measurement of Competence and Outcomes in Nursing Education (3)
- MSN 6580 - Clinical Nursing Instruction in Higher Education and Community Settings (3)
- MSN 6600 - Nursing Instruction in Higher Education and Community Settings (3)

Master of Science in Radiologic Sciences Program

Department Chair: Robert Walker, PhD, RT(R)(MR)(CT) (QM), FASRT

Location: Marriott Health Building, Room 363

Telephone Contact: 801-626-6088

DCHP Admission Office: (801) 626-6136

Master of Science in Radiologic Sciences (MSRS)

Grade Requirements: All required courses must be completed with a grade of "B" or higher.

Credit Hour Requirements: A total of 36 credit hours is required.

The maximum time for completion of the degree, including thesis, will be two years; if the maximum time is exceeded, the student must petition to the program for an extension.

Admission Requirements

Admission to the program requires a bachelor's degree, certification and Health Care experience.

Criteria to be considered for acceptance into the program include:

- Undergraduate GPA
- Overall GPA
- Professional experience
- Research experience
- Letters of recommendation

Further, 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 550 (paper-based), or 213 (computer-based). The score may not be more than two years old.

Student Advisement

A program advisor will be appointed by the department chair from the graduate faculty in the program. All MSRS candidates must consult the program advisor at least once a semester. The Radiological Sciences Department Chair will serve as chair of the advisement committee, which will comprise all MSRS faculty.

Continued program evaluation and improvement, especially in the first three years, will assure a high quality program that meets student needs. Also, student needs and success will be monitored continuously throughout the program.

Course Requirements for MSRS

Required Courses (36 credit hours)

- MSRS 6100 - Research Methods (3) or
- MSN 6100 - Research Methods (3)
- MSRS 6120 - Research and Statistics (3) or
- MSN 6120 - Research and Statistics (3)
- MSRS 6200 - Health Behavior and Managerial Epidemiology (3) or
- MHA 6200 - Health Behavior and Managerial Epidemiology (3)
- MSRS 6450 - Managing Health Information (3) or
- MHA 6450 - Managing Health Information (3)
- MSRS 6130 - Functional Hemodynamics (3)
- MSRS 6140 - Clinical Laboratory Correlation (3)
- MSRS 6443 - Clinical Pathways (3)
- MSRS 6463 - Problem Patient Management (3)
- MSRS 6473 - Vascular Non-Invasive Imaging Procedures (3)
- MSRS 6863 - Vascular Invasive Imaging Procedures (3)
- MSRS 6900 - Capstone: Clinical Fellowship & Portfolio (3)
- MSRS 6999 - Master's Thesis in Radiologic Sciences (3) *

**The degree candidate must complete 3 hours of thesis work MSRS 6999 - Master's Thesis in Radiologic Sciences (3). The master's thesis will be a complete body of work, either accepted for publication in a peer-reviewed journal in the field or deemed publishable by the student's committee.*

Department of Dental Hygiene

Department Chair: Stephanie Bossenberger, RDH, M.S.

Location: Allied Health, Room 475

Telephone Contact: Melody Neely 801-626-6130

Professors: Stephanie Bossenberger, Frances McConaughy;
Associate Professor: Shelly Costley; **Assistant Professor:** Susan Alexander; **Instructor:** Jeffrey Perry

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.

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's degree. Additionally, 35 hours of prerequisites are necessary. Students must also complete nine additional hours to meet WSU requirements for the Associate of Science Degree. Total credit hour requirements equal 88 hours.

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: 1-800-350-7042 (in Utah) out-of-state 1-801-626-7136 or 626-6128. The Dr. Ezekiel R. Dumke College of Health Professions Advisement Office will mail out 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 required for a degree in Dental Hygiene. The science 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 Dental Hygiene Program.

- ZOOL 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)
- CHEM 1010 PS - Introductory Chemistry (3)
- MICR 1113 LS - Introductory Microbiology (3)

The Biomedical Core (HTHS 1110 and HTHS 1111) 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 EN - Introductory College Writing (3)
- ENGL 2010 EN - Intermediate College Writing (3)
- PSY 1010 SS - Introductory Psychology (3)
- SOC 1010 SS/DV - Introduction to Sociology (3)
- COMM 1020 HU - Principles of Public Speaking (3)
- NUTR 1020 LS - Science and Application of Human Nutrition (3)

Application Process

Applicants to the program must complete a specific application form to be considered for admission into the dental hygiene program. This application package can be

obtained from the Advisement Office in the Dr. Ezekiel R. Dumke College of Health Professions (1-800-350-7042 in Utah). The application package will call for current transcripts and verification of previous health-related work experience. The application deadline for Fall Semester enrollment is February 1st of each year. A \$25.00 application fee must be paid at the time the application is submitted.

General Education

Refer to Degree and General Education 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 (1)
- DENT 2205 - Head/Neck and Dental Anatomy (2)
- DENT 2206 - Clinical Dental Hygiene/Radiology (4)
- DENT 2207 - Dental Hygiene I (3)
- DENT 2208 - Radiology (2)
- DENT 2211 - Oral Pathology (3)
- DENT 2215 - Periodontology (2)
- DENT 2216 - Clinical Dental Hygiene II (3)
- DENT 2217 - Dental Hygiene II (3)
- DENT 2219 - Dental Materials (1)
- DENT 2235 - Dental Medicine I (2)
- DENT 2250 DV - Professional Ethics (1)
- DENT 3301 - Community Dental Health Service Learning Lab (1)
- DENT 3305 - Dental Medicine II (3)
- DENT 3336 - Clinical Dental Hygiene III (4)
- DENT 3337 - Dental Hygiene III (3)
- DENT 3346 - Clinical Dental Hygiene IV (4)
- DENT 3347 - Dental Hygiene IV (2)

Dental Science Electives

- DENT 2800 - Individual Research (1-3)
- DENT 2830 - Directed Readings, Projects and Research (1-3)
- DENT 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
- DENT 3130 - Independent Study (1-3)
- DENT 4405 - Dental Hygiene Clinical Teaching Practice (4)
- DENT 4410 - Dental Hygiene Needs of the Geriatric Client (2)
- DENT 4530 - Principles and Application of Evidence - based Dental Hygiene Practice (2)
- DENT 4780 - Baccalaureate Thesis (3)
- DENT 4800 - Individual Research (1-3)
- DENT 4810 - Summer Elective Clinic (4)
- DENT 4830 - Directed Readings, Projects and Research (1-3)
- DENT 4890 - Advanced Community or Clinical Work Experience (2)
- DENT 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- DENT 4990 - Seminar (1-2)

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).

Advisement

Bachelor of Science Dental Hygiene majors must complete a contract with the Dental Hygiene Department Chair.

Admission Requirements

An Advanced Dental Hygiene major application to the 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 and General Education 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.

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 - Principles and Application of Evidence - based Dental Hygiene Practice (2)
- DENT 4780 - Baccalaureate Thesis (3) *
- DENT 4890 - Advanced Community or Clinical Work Experience (2)

* 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 bringing the total of upper division hours to 40 credit hours.

Department of Emergency Care and Rescue (EMT and Paramedic)

Department Chair: Jeffrey Grunow, MSN, NREMT-P

Location: Marriott Allied Health Building, Room 409

Telephone Contact: Robbyn Dunn 801-626-6521

Associate Professor: Jeff Grunow, MSN, NREMT-P;

Assistant Professor: Rebekah Dickinson, MPAS, PA-C;

Instructor: Cynthia Belnap, BSN, FNS **Medical Advisor:** Jon Apfelbaum, M.D.

A paramedic is a person who renders advanced life support 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 state Emergency Medical Services agency.

The institutional certificate and two-year applied science degree program in Paramedic Studies are based on a 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 classes.

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 EMT-Basic 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 EMT-Intermediate 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.

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 final decisions on the issuance of professional licensure or certification.

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 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.

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-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.
Applications received between May 15 and August 15 will be approved on a "space available basis."
5. Current Utah or appropriate state EMT certification

General Education

Refer to Degree and General Education 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 - Emergency Medical Technician - Basic (2)
- PAR 1001 - Emergency Medical Technician - Basic Lab (4)
- PAR 2000 - Introduction to Paramedic Practice (4)
- PAR 2010 - Medical Emergencies (6)
- PAR 2020 - Traumatic Emergencies (3)
- PAR 2030 - Special Considerations in Paramedic Practice (3)
- PAR 2040 - Paramedic Clinical Lab I (4)
- PAR 2100 - Advanced Paramedic Practice (4)
- PAR 2110 - Paramedic Clinical II (3)
- PAR 2120 - Paramedic Internship (9)

Students participating in the distance education "Skills Camps" will also complete the following electives:

- PAR 1011 - Emergency Medical Technician - Intermediate Introduction Lab (2)
- PAR 1021 - Emergency Medical Technician - Intermediate Lab (2)
- PAR 1031 - Advanced Cardiac Life Support (ACLS) (1)

Biomedical core courses required (or acceptable equivalent)

- HTHS 1101 - Medical Terminology (2)

Must be taken in sequence

- HTHS 1110 LS - Biomedical Core (4)
- HTHS 1111 - Biomedical Core (continued) (4)

Acceptable Equivalent to completing the anatomy and physiology requirement

- ZOOL 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)

Support Courses Required (15 credit hours)

- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- HLTH 3400 - Substance Abuse Prevention (3)
- HTHS 2230 - Introductory Pathophysiology (3)
- PSY 1010 SS - Introductory Psychology (3)
- SOC 1020 SS/DV - Social Problems (3)

EMT-Paramedic Institutional Certificate

Program Prerequisite: Applications for an institutional certificate in EMT-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 in EMT-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.

Admission Requirements

Students are eligible to apply for admission to the Institutional Certificate 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 15 will be approved on a "space available basis."
5. Current Utah or appropriate state EMT certification

Courses Required for the Institutional Certificate in EMT-Paramedic

Prerequisite Courses

- HTHS 1101 - Medical Terminology **(2)** *
- HTHS 1110 LS - Biomedical Core **(4)** * and
- HTHS 1111 - Biomedical Core (continued) **(4)** *
- or**
- ZOOL 2100 - Human Anatomy **(4)** and
- ZOOL 2200 - Human Physiology **(4)**
- ENGL 1010 EN - Introductory College Writing **(3)** *
- MATH 0990 ND - First Course in Algebra **(3)** or equivalent

* 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 - Emergency Medical Technician - Basic **(2)**
- PAR 1001 - Emergency Medical Technician - Basic Lab **(4)**
- PAR 2000 - Introduction to Paramedic Practice **(4)**
- PAR 2010 - Medical Emergencies **(6)**
- PAR 2020 - Traumatic Emergencies **(3)**
- PAR 2030 - Special Considerations in Paramedic Practice **(3)**
- PAR 2040 - Paramedic Clinical Lab I **(4)**
- PAR 2100 - Advanced Paramedic Practice **(4)**
- PAR 2110 - Paramedic Clinical II **(3)**
- PAR 2120 - Paramedic Internship **(9)**

Students participating in the distance education "Skills Camps" will also complete the following electives:

- PAR 1011 - Emergency Medical Technician - Intermediate Introduction Lab **(2)**

- PAR 1021 - Emergency Medical Technician - Intermediate Lab **(2)**
- PAR 1031 - Advanced Cardiac Life Support (ACLS) **(1)**

Emergency Medical Technician EMT Basic and Intermediate Certification

Basic

Basic life support, patient assessment and treatment modalities comprise this EMT-Basic curriculum. US Department of Transportation (DOT) and Utah State Department of Health standards for certification are met. State certification is optional with an additional fee. See health.utah.gov/ems.

Required Course (no prerequisites are required)

- PAR 1000 - Emergency Medical Technician - Basic **(2)** and
- PAR 1001 - Emergency Medical Technician - Basic Lab **(4)**

Intermediate (Advanced EMT)

Utah State Department of Health and Department of Transportation Standards for intermediate 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.

- PAR 1010 - Emergency Medical Technician - Intermediate Introduction **(2)**
- PAR 1011 - Emergency Medical Technician - Intermediate Introduction Lab **(2)**
- PAR 1020 - Emergency Medical Technician - Intermediate **(2)**
- PAR 1021 - Emergency Medical Technician - Intermediate Lab **(2)**

Department of Health Sciences

Department Chair: Kraig Chugg

Location: Marriott Allied Health Building, Rm 109

Telephone Contact: Brandy Heiner 801-626-6505

Professor: Jim Hutchins; **Associate Professor:** Carol Naylor; **Assistant Professors:** Kraig Chugg, Curtis DeFriez, Kathryn Newton; **Instructor:** Louise Tate

The Associate of Science in Health Sciences (ASHS) prepares students for entrance into a wide variety of health professions currently housed in the Dumke College of Health Professions (DCHP) such as Dental Hygiene, Nursing, Radiologic Technology, Respiratory Therapy, Clinical Laboratory Sciences, Health Information Systems and Health Administrative Services. It also serves as a preparatory associate's degree for other Weber State University Bachelor of Science majors including: Anthropology, Gerontology, Health Education, Human Performance, Recreation, Social Work, Technical Sales and many Bachelor of Integrated Studies (BIS) programs.

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 and Interdisciplinary Programs section of this catalog.)

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 courses.

Credit Hour Requirements: A total of 60 credit hours is required for graduation; 20 of these are required Health Sciences courses and 40 are required general education courses.

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 and General Education Requirements for Associate of Science requirements. The following courses required for the AS Degree in Health Sciences will also fulfill general education requirements: CHEM 1010*, COMM 1020 or COMM 2110, HTHS 1110, MICR 1113, NUTR 1020, PSY 1010, SOC 1010.

Consult with Academic Advising or the Dr. Ezekiel R. Dumke College of Health Professions Admissions Advisement office regarding general education guidelines.

Major Course Requirements for AS Degree

Health Sciences Courses Required (14 credit hours)

- HTHS 1101 - Medical Terminology (2)
- HTHS 1110 LS - Biomedical Core (4) and
- HTHS 1111 - Biomedical Core (continued) (4)
- or*
- ZOOL 2100 - Human Anatomy (4) and
- ZOOL 2200 - Human Physiology (4)
- or*
- HTHS 1105 - Technology-Enhanced Anatomy & Physiology (4) and
- HTHS 1106 - Technology-Enhanced Anatomy & Physiology (continued) (4)
- HTHS 2230 - Introductory Pathophysiology (3)
- HTHS 2231 - Introductory Pathophysiology Laboratory (1)

Health Sciences Support Courses (6 credit hours)

Select an additional 6 credit hours from the following Health Sciences courses:

- HTHS 1103 - Introduction To Health Careers and Care in a Diverse Society (3)
- HTHS 1108 - Biocalculations for Health Professions (5)
- HTHS 1120 - Case Studies in Health Sciences (3)
- HTHS 1130 - Common Medicines (3)
- HTHS 2240 - Introduction to Pharmacology (3) or
- HTHS 3240 - Introduction to Pharmacology (3)
- HTHS 2830 - Health Sciences Directed Readings (1-3)
- HTHS 2904 TD - Information Resources in the Health Professions (1)
- HTHS 2990 - Health Sciences Seminar (1)
- NEUR 2050 - Introduction to Neuroscience (3)

Required Support Courses (18 credit hours)

- CHEM 1010 PS - Introductory Chemistry (3) or
- Other General Education Chemistry course *
- COMM 1020 HU - Principles of Public Speaking (3) or
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- MICR 1113 LS - Introductory Microbiology (3)
- NUTR 1020 LS - Science and Application of Human Nutrition (3)
- PSY 1010 SS - Introductory Psychology (3)
- SOC 1010 SS/DV - Introduction to Sociology (3)

** Students interested in Nursing will want to choose CHEM 1050 or CHEM 1110 which will add an additional 2 credit hours.*

Department of Health Administrative Services

Department Chair: Pat Shaw

Location: Marriott Allied Health Building, Rm 301

Telephone Contact: Shari Love 801-626-7242

Professor: Kenneth Johnson; **Associate Professors:**

Patricia Shaw, David Wyant; **Assistant Professors:**

Richard Dahlkemper, Heather Merkley; **Instructor:** Darcy Carter

Enrollment Director: Cory Moss

The Health Administrative Services Program (HAS) provides an opportunity for health practitioners, students in the health disciplines, and others to prepare themselves for healthcare management, healthcare information, and health promotion roles in both traditional and nontraditional health care settings. In addition, many students use the program to prepare themselves for graduate studies in health administration and other related disciplines. The program is uniquely structured to help practicing health professionals build upon their two year professional degree or credential while at the same time accommodating the more traditional four-year student. The curriculum is organized so that students may tailor their studies in any one of five emphases: Health Services Administration, Health Information Management (HIM), Health Promotion, Long-Term Care Administration, 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, and Healthcare Coding and

Classification, which leads to an Institutional Certificate. An Institutional Certificate is also offered in Health Information Management. The HAS program was developed to better prepare health practitioners and others to take advantage of the challenges and opportunities facing them as members of the nation's health care team.

Study Emphases

- **Health Services 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. The HSA 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.
- **Health Promotion:** The major purpose of the health promotion program is to professionally prepare students for employment in programs that promote health and prevent disease. Coursework emphasizes the development of skills required of the entry-level health educator: assessing needs, planning effective programs, implementing programs, evaluating effectiveness of programs, coordinating services, acting as a resource person, and communicating needs and concerns. Successful program completion may lead to employment in the community (health agencies, public health departments, community action projects), health care system (hospitals, clinics, student health clinics, long-term care, rehabilitation) or in the work place (business, industry, consulting).
- **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.
- **Long-Term Care Administration:** Prepares students to function as administrators in nursing homes and other long-term care facilities. The curriculum is designed to provide students with a

foundation in management principles and human relations, introduce them to the long term care field, and give them operational experience in nursing home management. To function as an administrator in long-term care, one must be licensed. For licensure, most states require the completion of a bachelor's degree in health administration or a related area, an extensive administrative internship, and the successful passing of an examination offered by the National Board of Examiners for Nursing Home Administrators.

- **Health Information Technology:** 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; and supervising employees. The 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 of Registered Health Information Technician.
- **Healthcare Coding and Classification** The program develops the ability of students to use the International Classification of Diseases, version 9 (ICD-9-CM) 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. You will also use and apply both coding schemes in the systems of reimbursement for healthcare services.

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.

Health Information Technology (AAS)

Program Prerequisite: HTHS 1101 - Medical Terminology and HTHS 1110 LS - Biomedical Core 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.

Advisement

Health Information Technology students should meet with a faculty advisor for course and program advisement. Call 801-626-7242 for more information or to schedule an appointment.

Admission Requirements

Each student must complete a program application after successful completion (grade of C or better) of the program pre-requisites.

General Education

Refer to Degree and General Education Requirements for Associate of Applied Science requirements.

Major Course Requirements for AAS Degree

Program Prerequisites (6 credit hours)

- HTHS 1101 - Medical Terminology (2)
- HTHS 1110 LS - Biomedical Core (4)

Health Information Courses Required (30 credit hours)

- HIM 2000 - Introduction to Health Information Systems and Settings (3)
- HIM 2250 - Health Care Privacy and Security (3)
- HIM 2300 - Diagnosis Coding (3)
- HIM 2320 - Ambulatory and Physician Office Coding (3)
- HIM 2330 - Classification Systems Topics and Reimbursement Issues (2)
- HIM 2410 - ICD-10-PCS Coding (2)
- HIM 2500 - Healthcare Database Management & Security (3)
- HIM 2861 - (2nd Year) Professional Practice Experiences (2)
- HIM 2862 - (2nd Year) Professional Practice Experiences (2)
- HIM 2863 - Professional Practice Experience in Coding (1)

- HIM 3000 - Computer Applications in Health Care (3)
- HIM 3300 - Introduction to Quality Improvement in Health Care (3)

Support Courses Required (17.5-21 credit hours)

- HTHS 1111 - Biomedical Core (continued) (4)
- HTHS 2230 - Introductory Pathophysiology (3)
- HTHS 2240 - Introduction to Pharmacology (3)
- HAS 3000 - The Health Care System (3)
- NTM 1700 TE - Introduction to Microcomputer Applications (3)
- **or**
- NTM 1701 TA - Introduction to Word Processing (1) and
- NTM 1702 TB - Operating Systems and Digital Presentations (1) and
- NTM 1703 TC - Introduction to Spreadsheets (1)
- **or**
- NTM 1501 TA - Word Processing Competency Exam (.5) and
- NTM 1502 TB - Operating Systems and Digital Presentations Competency Exams (.5) and
- NTM 1503 TC - Spreadsheets Competency Exam (.5)
- MATH 1030 QL - Contemporary Mathematics (3) or
- HIM 3200 - Epidemiology and Biostatistics (3) or
- HTHS 1108 - Biocalculations for Health Professions (5)

Health Information Management Institutional Certificate

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 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 (a minimum of 10 semester credit hours must be completed in residence at Weber State University).

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 Institutional Certificate

Courses Required (30 credit hours)

- HIM 5000 - Clinical Foundations in HIM (3)
- HIM 5010 - Health Data Management (3)
- HIM 5020 - Diagnosis and Procedure Coding (3)
- HIM 5030 - Clinical Data Management for Quality Care & Revenue Cycle Integrity (3)
- HIM 5040 - Privacy, Security and Confidentiality in Health Care (3)
- HIM 5050 - Health Information Systems & Technology (3)
- HIM 5080 - Health Information Management Issues (3)
- HIM 5090 - HIM Internship (3)
- HAS 3240 - Human Resource Development in Health Care (3)
- HAS 3750 - Health Care Financial Administration (3)

Healthcare Coding & Classification Institutional Certificate

Grade Requirements: To receive a Healthcare Coding & Classification Certificate 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.

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 9 (ICD-9-CM) 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. Use and application of both coding schemes in the systems of reimbursement for healthcare services is also developed.

Completion of all courses earns the student a Healthcare Coding & Classification Certificate and prepares them to sit for the American Health Information Management Association's Certified Coding Associate (CCA) certification examination.

Course Requirements for Institutional Certificate

Program Prerequisites (6 credit hours)

- HTHS 1101 - Medical Terminology (2)
- HTHS 1110 LS - Biomedical Core (4)

Courses Required (21 credit hours)

- HTHS 1111 - Biomedical Core (continued) (4)
- HTHS 2230 - Introductory Pathophysiology (3)
- HTHS 2240 - Introduction to Pharmacology (3)
- HIM 2300 - Diagnosis Coding (3)
- HIM 2320 - Ambulatory and Physician Office Coding (3)
- HIM 2330 - Classification Systems Topics and Reimbursement Issues (2)
- HIM 2410 - ICD-10-PCS Coding (2)
- HIM 2863 - Professional Practice Experience in Coding (1)

Health Administrative Services (BS)

Program Prerequisite: Health Information Management Emphasis requires previous completion of AAS in Health Information Technology or equivalent. Health Services Administration, Long-Term Care Administration and Health Promotion emphases have a set of course prerequisites which are expected to be completed prior to declaration of those majors. See the list of prerequisites in the course requirements discussed for each emphasis below.

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 2.50.

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). Please see requirements under emphases as discussed below.

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.

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 2.5 is required.

General Education

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.

Major Course Requirements for BS Degree

See department for recommended sequence of major courses.

Health Services Administration Emphasis

Prerequisite Courses Required

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 Health Care System (3)
- HTHS 1101 - Medical Terminology (2)
- HTHS 1110 LS - Biomedical Core (4) and
- HTHS 1111 - Biomedical Core (continued) (4)
- or**
- ZOOL 1020 LS - Human Biology (3)
- ACTG 2010 - Survey of Accounting I (3)
- ECON 2010 SS - Principles of Microeconomics (3)
- ENGL 2010 EN - Intermediate College Writing (3)
- Quantitative Literacy and Computer & Information Literacy (see General Education Requirements)

Required Courses (41-42 credit hours)

- HAS 3020 - Health Care Marketing (3)
- HAS 3150 - Community Health Agencies and Services (3)
- HAS 3230 - Health Communication (3)
- HAS 3240 - Human Resource Development in Health Care (3)
- HAS 3260 - Health Care Administrative and Supervisory Theory (3)
- HAS 3750 - Health Care Financial Administration (3)
- HAS 4320 - Health Care Economics and Policy (3)
- HAS 4400 - Legal and Ethical Aspects of Health Administration (3)
- HAS 4740 - Senior Seminar (1)
- HAS 4860 - Practicum/Internship (2-6)
- or
- HIM 3500 - Biomedical Research Support (2) and
- HIM 4990 - Baccalaureate Thesis and Presentation (3)
- HIM 2330 - Classification Systems Topics and Reimbursement Issues (2)
- HIM 3000 - Computer Applications in Health Care (3)
- HIM 3200 - Epidemiology and Biostatistics (3)
- HIM 3300 - Introduction to Quality Improvement in Health Care (3)

Elective Courses (6 credit hours required)

- HAS 3190 DV - Cultural Diversity in Patient Education (3)
- HAS 4410 - Clinical Instructional Design and Evaluation (3)
- HAS 4420 - Clinical Instructional Skills (3)
- HAS 4520 - Long-Term Care Administration (2)
- HAS 4525 - Health Facility Operations (1)
- HAS 4620 - International Health and Health Care (3)
- HAS 4800 - Individual Study (1-3)
- HAS 4990 - Seminar (1)
- HTHS 2230 - Introductory Pathophysiology (3)

Health Information Management Emphasis, Health Administrative Services (BS)

Program Prerequisite: Health Information Management Emphasis requires previous completion of AAS in Health Information Technology or equivalent. Health Services Administration, Long-Term Care Administration and Health Promotion emphases have a set of course prerequisites which are expected to be completed prior to declaration of those majors. See the list of prerequisites in the course requirements discussed for each emphasis below.

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 2.50.

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). Please see requirements under emphases as discussed below.

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.

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 2.5 is required.

General Education

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.

Major Course Requirements for BS Degree

Health Information Management Emphasis

Prerequisite: Previous completion of Health Information Technology AAS program or equivalent curriculum.

Courses Required (29-30 credit hours)

- HIM 3200 - Epidemiology and Biostatistics (3)
- HIM 3400 - Health Care Networks and Databases (3)
- HIM 3450 - Health Care Systems Analysis and Design (3)
- HIM 4100 - Health Information Services Management (3)

- HAS 3230 - Health Communication (3)
- HAS 3240 - Human Resource Development in Health Care (3)
- HAS 3260 - Health Care Administrative and Supervisory Theory (3)
- HAS 3750 - Health Care Financial Administration (3)
- HAS 4860 - Practicum/Internship (2-6) (4 credit hours required) or
- HIM 4990 - Baccalaureate Thesis and Presentation (3)

Support Courses Required (7 credit hours)

- IST 2010 TE - Business Computer Skills (1)
- IST 3110 - Information Technology for Business (3)
- ACTG 2010 - Survey of Accounting I (3)

Health Promotion Emphasis, Health Administrative Services (BS)

Program Prerequisite: Health Information Management Emphasis requires previous completion of AAS in Health Information Technology or equivalent. Health Services Administration, Long-Term Care Administration and Health Promotion emphases have a set of course prerequisites which are expected to be completed prior to declaration of those majors. See the list of prerequisites in the course requirements discussed for each emphasis below.

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 2.50.

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). Please see requirements under emphases as discussed below.

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.

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 2.5 is required.

General Education

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.

Major Course Requirements for BS Degree

Health Promotion Emphasis

Graduates of the program are eligible to sit for the examination for certification as a Certified Health Education Specialist (CHES) with a minimum of 25 semester hours in Health Courses.

Health courses are described in the Jerry and Vickie Moyes College of Education.

Prerequisite Course Required (6-11 credit hours)

- HLTH 1030 SS - Healthy Lifestyles (3)
- HTHS 1110 LS - Biomedical Core (4) and
- HTHS 1111 - Biomedical Core (continued) (4)
- or*
- ZOOL 1020 LS - Human Biology (3)

Courses Required (32 credit hours)

- HLTH 3000 - Foundations of Health Promotion (3)
- HLTH 3200 - Methods in Health Education (3) *
- HLTH 4013 - Health Promotion Research and Assessment (3)
- HLTH 4150 - Needs Assessment & Planning Health Promotion Programs (4)
- HLTH 4860 - Field Experience (2-6) (3 credit hours required)
- HLTH 4990 - Senior Seminar (1)
- HAS 3000 - The Health Care System (3)
- HAS 3150 - Community Health Agencies and Services (3) or
- HLTH 3150 - Community Health Agencies and Services (3)
- HAS 3190 DV - Cultural Diversity in Patient Education (3) or
- HLTH 3420 DV - Multicultural Health and Nutrition (3)
- HAS 3230 - Health Communication (3)
- HIM 3200 - Epidemiology and Biostatistics (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 (3)
- HLTH 2700 - Consumer Health (3)
- HLTH 3100 - Applications of Technology in Health Promotion (3)
- HLTH 3160 - Health Behavior and Special Populations (3)
- HAS 3020 - Health Care Marketing (3)
- HAS 3260 - Health Care Administrative and Supervisory Theory (3)
- HAS 4320 - Health Care Economics and Policy (3)

Elective Courses (15 credit hours)

- AT 3600 - Ergonomics for Health and Safety (2)
- HLTH 1110 - Stress Management (3)
- HLTH 1300 - First Aid: Responding to Emergencies (2)
- HLTH 2300 - Emergency Response (3)
- HLTH 3050 - School Health Program (3)
- HLTH 3320 - Health and Nutrition in the Older Adult (3)
- HLTH 3400 - Substance Abuse Prevention (3)
- HLTH 3500 - Human Sexuality (3)
- HLTH 4220 - Women's Health Issues (3)

- HLTH 4250 - Contemporary Health Issues of Adolescents (2)
- HLTH 4800 - Individual Projects (1-3)
- HLTH 4860 - Field Experience (2-6) (3 credit hours required)
- HLTH 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4) (1 credit hour required)
- HLTH 1020 LS - Science and Application of Human Nutrition (3) or
- NUTR 1020 LS - Science and Application of Human Nutrition (3)
- HAS 3240 - Human Resource Development in Health Care (3)
- HAS 4400 - Legal and Ethical Aspects of Health Administration (3)
- HAS 4410 - Clinical Instructional Design and Evaluation (3) *
- HAS 4420 - Clinical Instructional Skills (3)
- HTHS 1101 - Medical Terminology (2)
- HTHS 2230 - Introductory Pathophysiology (3)
- GERT 3000 - Death and Dying (3)
- NUTR 2320 - Food Values, Diet Design and Health (3)
- NUTR 4420 - Nutrition and Fitness (3)
- PEP 2300 - Health/Fitness Evaluation and Exercise Prescription (3)

*HAS 4410 may be substituted for HLTH 3200.

Long-Term Care Administration Emphasis, Health Administrative Services (BS)

Program Prerequisite: Health Information Management Emphasis requires previous completion of AAS in Health Information Technology or equivalent. Health Services Administration, Long-Term Care Administration and Health Promotion emphases have a set of course prerequisites which are expected to be completed prior to declaration of those majors. See the list of prerequisites in the course requirements discussed for each emphasis below.

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 2.50.

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). Please see requirements under emphases as discussed below.

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.

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 2.5 is required.

General Education

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.

Major Course Requirements for BS Degree

Long-Term Care Administration Emphasis

Prerequisite Courses Required

The following prerequisite courses must be completed prior to enrollment in required courses of the LTC program.

- HAS 3000 - The Health Care System (3)
 - HTHS 1101 - Medical Terminology (2)
 - HTHS 1110 LS - Biomedical Core (4) and
 - HTHS 1111 - Biomedical Core (continued) (4)
- or**
- ZOOL 1020 LS - Human Biology (3)
 - ACTG 2010 - Survey of Accounting I (3)
 - ECON 2010 SS - Principles of Microeconomics (3)
 - ENGL 2010 EN - Intermediate College Writing (3)
 - Quantitative Literacy and Computer & Information Literacy (see General Education Core Requirements)

Core Courses Required (44-45 credit hours)

- HAS 3020 - Health Care Marketing (3)
- HAS 3150 - Community Health Agencies and Services (3)
- HAS 3230 - Health Communication (3)
- HAS 3240 - Human Resource Development in Health Care (3)
- HAS 3260 - Health Care Administrative and Supervisory Theory (3)
- HAS 3750 - Health Care Financial Administration (3)
- HAS 4320 - Health Care Economics and Policy (3)
- HAS 4400 - Legal and Ethical Aspects of Health Administration (3)
- HAS 4520 - Long-Term Care Administration (2)
- HAS 4525 - Health Facility Operations (1)
- HAS 4740 - Senior Seminar (1)
- HAS 4860 - Practicum/Internship (2-6) (6 credit hours required)
- or
- HIM 3500 - Biomedical Research Support (2) and
- HIM 4990 - Baccalaureate Thesis and Presentation (3)
- HIM 2300 - Diagnosis Coding (3)
- HIM 3000 - Computer Applications in Health Care (3)
- HIM 3200 - Epidemiology and Biostatistics (3)
- HIM 3300 - Introduction to Quality Improvement in Health Care (3)

Elective Courses (6 credit hours)

- HAS 3190 DV - Cultural Diversity in Patient Education (3)
- HAS 4410 - Clinical Instructional Design and Evaluation (3)
- HAS 4420 - Clinical Instructional Skills (3)

- HAS 4620 - International Health and Health Care (3)
- HAS 4800 - Individual Study (1-3)
- HAS 4990 - Seminar (1)
- HTHS 2230 - Introductory Pathophysiology (3)
- GERT 2220 - Introduction to Social Gerontology (3)
- GERT 3000 - Death and Dying (3)
- GERT 3120 - Aging: Adaptation and Behavior (3)

Health Administrative Services Minor

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.

Course Requirements for Health Services Administration Emphasis

Required Courses (18 credit hours)

- HAS 3000 - The Health Care System (3)
- HAS 3020 - Health Care Marketing (3)
- HAS 3230 - Health Communication (3)
- HAS 3240 - Human Resource Development in Health Care (3)
- HAS 3260 - Health Care Administrative and Supervisory Theory (3)
- HAS 4400 - Legal and Ethical Aspects of Health Administration (3)

Elective Courses (5 credit hours required)

- HAS 3150 - Community Health Agencies and Services (3)
- HAS 3190 DV - Cultural Diversity in Patient Education (3)
- HAS 3750 - Health Care Financial Administration (3)
- HAS 4320 - Health Care Economics and Policy (3)
- HAS 4620 - International Health and Health Care (3)
- HAS 4740 - Senior Seminar (1)
- HAS 4800 - Individual Study (1-3)
- HAS 4990 - Seminar (1)
- HIM 3000 - Computer Applications in Health Care (3)
- HIM 3200 - Epidemiology and Biostatistics (3)
- HIM 3300 - Introduction to Quality Improvement in Health Care (3)

Health Information Management Emphasis, Health Administrative Services Minor

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.

Course Requirements for Health Information Management Emphasis

Students in this minor must be majoring with a bachelor's degree in Information Systems and Technologies or Computer Science.

Required Courses (16 credit hours)

- HIM 2000 - Introduction to Health Information Systems and Settings (3)
- HIM 2330 - Classification Systems Topics and Reimbursement Issues (2)
- HIM 2500 - Healthcare Database Management & Security (3)
- HIM 3000 - Computer Applications in Health Care (3)
- HIM 3500 - Biomedical Research Support (2)
- HIM 4100 - Health Information Services Management (3)

Health Promotion Emphasis, Health Administrative Services Minor

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.

Course Requirements for Health Promotion Emphasis

Required Courses (16 credit hours)

- HAS 3000 - The Health Care System (3)
- HAS 3150 - Community Health Agencies and Services (3) or
- HLTH 3150 - Community Health Agencies and Services (3)
- HLTH 3000 - Foundations of Health Promotion (3)
- HLTH 3200 - Methods in Health Education (3) *
- HLTH 4150 - Needs Assessment & Planning Health Promotion Programs (4)

Elective Courses (6 credit hours minimum)

- HLTH 1020 LS - Science and Application of Human Nutrition (3)z
- HLTH 1110 - Stress Management (3)
- HLTH 1300 - First Aid: Responding to Emergencies (2)
- HLTH 2700 - Consumer Health (3)
- HLTH 3320 - Health and Nutrition in the Older Adult (3)
- HLTH 3400 - Substance Abuse Prevention (3)
- HLTH 3420 DV - Multicultural Health and Nutrition (3)
- HLTH 3500 - Human Sexuality (3)
- HLTH 4013 - Health Promotion Research and Assessment (3)
- HLTH 4220 - Women's Health Issues (3)
- HLTH 4250 - Contemporary Health Issues of Adolescents (2)
- HLTH 4800 - Individual Projects (1-3)

- HLTH 4860 - Field Experience (2-6)
- HLTH 4890 - Cooperative Work Experience (1-6)
- HAS 3020 - Health Care Marketing (3)
- HAS 3190 DV - Cultural Diversity in Patient Education (3)
- HAS 3230 - Health Communication (3)
- HAS 3240 - Human Resource Development in Health Care (3)
- HAS 3260 - Health Care Administrative and Supervisory Theory (3)
- HAS 4320 - Health Care Economics and Policy (3)
- HAS 4400 - Legal and Ethical Aspects of Health Administration (3)
- HAS 4410 - Clinical Instructional Design and Evaluation (3) *
- HAS 4420 - Clinical Instructional Skills (3)
- HAS 4620 - International Health and Health Care (3)
- HIM 3200 - Epidemiology and Biostatistics (3)

* HAS 4410 may be substituted for HLTH 3200.

Long-Term Care Administration Emphasis, Health Administrative Services Minor

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.

Course Requirements for Long-Term Care Administration Emphasis

Required Courses (12 credit hours)

- HAS 3000 - The Health Care System (3)
- HAS 3020 - Health Care Marketing (3)
- HAS 3260 - Health Care Administrative and Supervisory Theory (3)
- HAS 4520 - Long-Term Care Administration (2)
- HAS 4525 - Health Facility Operations (1)

Elective Courses (6 credit hours required)

- HAS 3150 - Community Health Agencies and Services (3)
- HAS 3190 DV - Cultural Diversity in Patient Education (3)
- HAS 3230 - Health Communication (3)
- HAS 3240 - Human Resource Development in Health Care (3)
- HAS 4320 - Health Care Economics and Policy (3)
- HAS 4400 - Legal and Ethical Aspects of Health Administration (3)
- HAS 4620 - International Health and Health Care (3)
- HAS 4740 - Senior Seminar (1)
- HAS 4990 - Seminar (1)
- HIM 3000 - Computer Applications in Health Care (3)
- HIM 3200 - Epidemiology and Biostatistics (3)
- HIM 3300 - Introduction to Quality Improvement in Health Care (3)
- GERT 2220 - Introduction to Social Gerontology (3)
- GERT 3000 - Death and Dying (3)
- GERT 3120 - Aging: Adaptation and Behavior (3)

Health Administrative Services Departmental Honors

Please contact the Health Administrative Services Department for advisement and permission prior to enrolling in Honors courses.

To earn Departmental Honors in either HAS or HIM, a student must:

- Complete the BS requirements;
- Earn a cumulative GPA of 3.5, and a department GPA of 3.7;
- Complete either an internship with a final grade of A, or a senior thesis with a final grade of A;
- Make a professional presentation:
 - Select work from a required class to develop into a presentation in HAS 4740 or
 - Present at the annual Undergraduate Research Symposium or
 - Make a poster presentation at the Spring Honors Banquet.
- Actively participate in a professional organization. You can choose from ACHE, AHIMA, HFMA, or MGMA Check with the Honors Advisor to ensure your participation counts.

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

Department of Medical Laboratory Sciences

Department Chair: Scott Wright

Program Director: Kara Hansen-Suchy

Online Program Coordinator: Julie Kakazu

Medical Advisor: Val B. Johnson, M.D.

Location: Marriott Allied Health Building, Rm 208

Telephone Contact, Department Secretary: Chris Housley 801-626-6118

Professors: Yasmien Simonian, Scott Wright; **Associate Professor:** Kara Hansen-Suchy; **Assistant Professors:** Travis Price, Janet Oja; **Instructor:** Ryan Rowe

Professional Staff: Kent Criddle, Laboratory Manager; Cindi Kranek, Online Academic Advisor

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>.

Medical laboratory scientists, sometimes referred to as medical technologists or medical laboratory technicians, are vital members of the health care team who play a central role in the detection, diagnosis and treatment of disease. To accomplish this, medical laboratory scientists must have a thorough understanding of a wide range of subjects including hematology, clinical chemistry, immunohematology (transfusion medicine), clinical microbiology, and immunology. Laboratory scientists appreciate investigative work and problem solving and are counted on to provide physicians with information critical to the successful diagnosis and treatment of patients. Medical laboratory

scientists and technicians are employed by hospitals, clinics, research facilities, universities, and in lab-related commercial industry.

The MLS AAS and BS Programs can be completed either on campus or through online course offerings. To be eligible to take online MLS courses, students must be employed in a clinical laboratory in order to fulfill the laboratory requirements.

Students interested in the AAS MLS Program offered on campus, are first required to complete a set of support courses in chemistry, anatomy, physiology, and microbiology. In addition, the students will take two MLS introductory courses, one in laboratory practices and one in hematology. Once these are completed, which generally takes two to three semesters, the students are eligible to apply to the MLS AAS Program. If accepted, the students will take courses in clinical chemistry, clinical microbiology, and immunohematology. Each of these competency based courses and accompanying laboratory sections, are unique in that they are designed to simulate the medical laboratory setting and workflow without the need of an extended post graduate internship. Upon completion of these MLS courses, on-campus students will then spend two weeks in a medical laboratory facility. Graduates are then eligible to sit for the national ASCP Board of Certification examination as a Medical Laboratory Technician (MLT).

Students interested in the MLS AAS Program that is offered online, must be employed in a clinical laboratory. Students will receive the didactic (lecture) portion of each course online, while completing specific laboratory competencies in the clinical laboratory where they work, under the supervision of qualified clinical laboratory mentors. Please refer to the employer support information on the MLS Department web site: <http://www.weber.edu/mls> (online DEGREES/PROGRAMS). Applicants are first required to complete a set of support courses in chemistry, anatomy, physiology and microbiology. If accepted into the MLS AAS Program, students will then take courses in introductory laboratory practices, hematology, clinical chemistry, clinical microbiology, and immunohematology. Graduates are then eligible to take the national ASCP Board of Certification examination as a Medical Laboratory Technician (MLT).

Once students have completed the MLS AAS Program or are CLT/MLT certified, they become eligible to apply to the MLS BS Program. The degree can be completed either on-campus or online. Online applicants must be employed in a clinical laboratory as an MLT. If students complete their MLS AAS degree on campus at WSU, they must work as an MLT for three years prior to becoming eligible to apply for the online MLS programs. The curriculum includes advanced courses in laboratory practices, hematology, clinical chemistry, clinical microbiology and molecular diagnostics and immunohematology, along with a series of laboratory management and research courses. Several of the online MLS courses necessitate students working with a qualified medical laboratory mentor at their workplace to complete the laboratory requirements. Graduates are eligible to take the national ASCP Board of Certification examination as a Medical Laboratory Scientist (MLS).

Medical Laboratory Sciences (AAS)

Program Prerequisite: Completion of the support courses listed under the Admission Requirements.

Grade Requirements: A grade of "C+" or better in all MLS courses, and a grade of "C-" or better in all support courses. A "C" is required in HTHS 1110 in order to continue to HTHS 1111. Applicants must have a minimum cumulative GPA of 2.00.

Credit Hour Requirements: A total of 67-68 credit hours is required for graduation, 33-34 of these are required MLS courses, 22 are required support courses, and 12 are required general education courses.

Advisement

Students interested in the MLS program are required to meet with a MLS faculty advisor, preferably before beginning any MLS support courses or general education requirements. After initial advisement, students are encouraged to meet with a MLS advisor each semester prior to registration. To schedule an advising appointment, call the MLS secretary at 801-626-6118.

Admission Requirements

On-campus students:

1. Meet with a MLS faculty advisor.
2. Complete 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. Submit application and a non-refundable \$25 fee to DCHP Admissions Advisement office (Marriott Allied Health Building, Room 108) by April 1. Applications are available in the MLS Department office (Marriott Allied Health Building, Room 208). For more information, call the MLS secretary at 801-626-6118.
4. Complete a federal background check and drug screen by the end of fall semester after acceptance into the program.

Online students:

1. Must be currently employed by an accredited (JACHO/CAP/COLA/CLIA) laboratory that can provide a multidisciplinary laboratory experience.
2. Contact the MLS online academic advisor, Cindi Kranek, at 801-626-8546 or cindikranek@weber.edu for advising.
3. Have employer read and sign Statement of Support form, available at <http://www.weber.edu/mls/degrees/online/AASapplication.html>.
4. Apply to WSU for general admissions. Applications are available online at <http://www.weber.edu/admissions>.
5. Send all official transcripts from other institutions to the WSU admissions office.
6. Complete a MLS AAS online application, available at <http://www.weber.edu/mls/degrees/online/AASapplication.html>. 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.

All supporting documents listed above must be received by application due dates of February 1 for fall semester or September 1 for spring semester.

For more information about the online application requirements and process, go to <http://www.weber.edu/mls/degrees/online/AAS.html>, and contact Cindi Kranek at 801-626-8546 or cindikranek@weber.edu.

General Education

Refer to Degree and General Education 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, CHEM 1210, HTHS 1110, 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).

Major Course Requirements for AAS Degree

MLS Courses Required (33-34 credit hours)

- MLS 1001 - Online Orientation for AAS Degree (1)
Online students only
- MLS 1113 - Introduction to Medical Laboratory Practices (4)
- MLS 1123 - Principles of Hematology and Hemostasis (5)
- MLS 2211 - Principles of Clinical Chemistry I (5)
- MLS 2212 - Principles of Clinical Microbiology I (4)
- MLS 2213 - Principles of Clinical Chemistry II (5)
- MLS 2214 - Principles of Clinical Microbiology II (4)
- MLS 2215 - Principles of Immunohematology (4)
- MLS 2256 - Supervised Clinical Experience I (1)
- MLS 2257 - Supervised Clinical Experience II (1)

Support Courses Required (24-31 credit hours)

- CHEM 1110 PS - Elementary Chemistry (5)
or
- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 1120 - Elementary Organic Bio-Chemistry (5) *or*
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- HTHS 1110 LS - Biomedical Core (4) * and
- HTHS 1111 - Biomedical Core (continued) (4) *
- MATH 1010 - Intermediate Algebra (4) *or*
- MLS 2003 - Applied Laboratory Mathematics and Laboratory Statistics (3)
- MICR 1113 LS - Introductory Microbiology (3) *or*
- MICR 2054 LS - Principles of Microbiology (4)

* *Equivalencies to Biomedical Core (HTHS 1110 and HTHS 1111):*

- ZOOL 2200 - Human Physiology (4) and
- ZOOL 2100 - Human Anatomy (4)
or
- PHYS 1010 PS - Elementary Physics (3)

Pre-Medical, Pre-Dental, Pre-Vet, and Pre-Professional, Medical Laboratory Sciences

Since the MLS Programs offer a curriculum with a direct application to applied medical science, it offers an attractive alternative approach to traditional pre-professional degree tracks. The AAS and BS Programs have a designated Track II curriculum pattern with specific course integration with required pre-professional courses. See Travis Price, the MLS pre-professional faculty advisor, for more specific information. Call the MLS secretary at 801-626-6118 to schedule an advising appointment.

Medical Laboratory Sciences (BS)

Program Prerequisite: Completion of MLS AAS Degree requirements. Students transferring from another college or university must have a MLS/MLT AAS Degree and/or 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. Minimum cumulative GPA of 2.00.

Credit Hour Requirements: A minimum of 120 credit hours is required for graduation.

Advisement

All medical laboratory science students are required to meet with a faculty advisor prior to application. Thereafter, advisement each semester is recommended. To schedule an advising appointment, call the MLS secretary at 801-626-6118.

Admission Requirements

On-campus students:

1. Must have completed WSU MLS AAS Program. Transfer students must have a MLS/MLT AAS Degree and/or CLT/MLT certification.
2. Meet with a MLS faculty advisor.
3. Submit application and a non-refundable \$25 fee to DCHP Admissions Advisement office (Marriott Allied Health Building, Room 108) by April 1. Applications are available in the MLS office (Marriott Allied Health Building, Room 208). For more information, call the MLS secretary at 801-626-6118.

- Complete a federal background check and drug screen by the end of fall semester after being accepted into the program. If students have completed a background check and drug screen when accepted into the WSU MLS AAS Program, this does not need to be repeated.

Online students:

- Must be currently employed by an accredited (JACHO/CAP/COLA/CLIA) laboratory that can provide a multidisciplinary laboratory experience.
- Must have a MLS/MLT AAS Degree and/or CLT/MLT certification. (Note: acceptable certification; MLT(ASCP), MT(AMT), or MT(AAB).)
- Contact the MLS online coordinator, Julie Kakazu, at 801-626- 6120 or juliekakazu@weber.edu for advising.
- Have employer read and sign Statement of Support form, available at <http://www.weber.edu/mls/degrees/online/BSapplication.html>.
- Apply to WSU for general admissions. Applications are available online at <http://www.weber.edu/admissions>.
- Send all official transcripts from other institutions to the WSU admissions office.
- Complete a MLS BS online application, available at <http://www.weber.edu/mls/degrees/online/BSapplication.html>. Submit a completed Statement of Support along with the application. A \$95 non-refundable departmental application fee is also required.
- Complete a federal background check and drug screen, if required by employer.

All supporting documents listed above must be received by application due dates of February 1 for fall semester or September 1 for spring semester.

For more information about the online application requirements and process, go to <http://www.weber.edu/mls/degrees/online/BS.html>, and contact Julie Kakazu, at 801-626-6120 or juliekakazu@weber.edu.

General Education Requirements

Refer to Degree and General Education 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 1110, CHEM 1210, HTHS 1110, MICR 1113, MICR 2054, PHYS 1010. Remaining general education requirements can be fulfilled by taking the required credit hours in the following areas:

6 credit hours Composition
 3 credit hours Quantitative Literacy
 3 credit hours American Institutions
 9 credit hours Creative Arts & Humanities
 2-4 credit hours Computer Literacy
 6 credit hours Social Sciences
 3 credit hours Diversity

Some requirements may be met by ACT, CLEP, and/or AP scores as designated by the University (contact the Admissions Office for more information).

Major Course Requirements for BS Degree

Core Medical Lab Courses Required (33 credit hours)

- MLS 1113 - Introduction to Medical Laboratory Practices **(4)**
- MLS 1123 - Principles of Hematology and Hemostasis **(5)**
- MLS 2211 - Principles of Clinical Chemistry I **(5)**
- MLS 2212 - Principles of Clinical Microbiology I **(4)**
- MLS 2213 - Principles of Clinical Chemistry II **(5)**
- MLS 2214 - Principles of Clinical Microbiology II **(4)**
- MLS 2215 - Principles of Immunohematology **(4)**
- MLS 2256 - Supervised Clinical Experience I **(1)**
- MLS 2257 - Supervised Clinical Experience II **(1)**

Transfer students must have completed a MLS/MLT program and be MLT certified to enter the BS program.

Courses Required for Junior and Senior Curriculum

Select one of the following tracks:

Track I (Laboratory professional)

- MLS 3301 - Online Orientation for BS Degree **(1)** *Online students only*
- MLS 3302 - Advanced Medical Laboratory Practices I **(4)**
- MLS 3311 - Advanced Immunohematology **(3)**
- MLS 3313 - Advanced Hematology and Hemostasis **(4)**
- MLS 3314 - Advanced Clinical Chemistry **(3)**
- MLS 3316 - Advanced Clinical Microbiology and Molecular Diagnostics **(4)**
- MLS 4409 - Clinical Correlation **(1)**
- MLS 4411 - MLS Simulated Laboratory I **(4)**
- MLS 4412 - MLS Simulated Laboratory II **(4)**
- MLS 4414 - Laboratory Teaching and Supervision I **(2)**
- MLS 4417 - Laboratory Teaching and Supervision II **(1)**
- MLS 4453 - Supervised Clinical Experience I **(1)**
- MLS 4454 - Supervised Clinical Experience II **(1)**
- MLS 4801 - Research Projects in Medical Laboratory Sciences I **(1)**
- MLS 4802 - Research Projects in Medical Laboratory Sciences II **(1)**
- CHEM 1210 PS - Principles of Chemistry I **(5)** * and
- CHEM 1220 - Principles of Chemistry II **(5)** * or
- CHEM 1110 PS - Elementary Chemistry **(5)** *
- CHEM 2310 - Organic Chemistry I **(4)** * and
- CHEM 2315 - Organic Chemistry I Lab **(1)** *
- or
- CHEM 1120 - Elementary Organic Bio-Chemistry **(5)** *
- HTHS 1110 LS - Biomedical Core **(4)** or
- ZOOL 2200 - Human Physiology **(4)**
- HTHS 1111 - Biomedical Core (continued) **(4)** or
- ZOOL 2100 - Human Anatomy **(4)** or
- PHYS 1010 PS - Elementary Physics **(3)**
- MICR 2054 LS - Principles of Microbiology **(4)** or
- MICR 1113 LS - Introductory Microbiology **(3)**
- MICR 3254 - Immunology **(4)**
- or
- HTHS 3328 - Pathophysiology of Cells and Tissues **(2)** and

- HTHS 3329 - Pathophysiology of Organs and Systems (2)
- MICR 3305 - Medical Microbiology (5) or
- MICR 3603 - Advanced Microbiology for the Health Professions (3) or
- HIM 3200 - Epidemiology and Biostatistics (3)

* Students seeking an AAS or a BS degree are required to complete a minimum of two semesters of Chemistry to include an Organic or Biochemistry course.

Track II (Pre-professional)

- MLS 3302 - Advanced Medical Laboratory Practices I (4)
- MLS 3311 - Advanced Immunohematology (3)
- MLS 3313 - Advanced Hematology and Hemostasis (4)
- MLS 3314 - Advanced Clinical Chemistry (3)
- MLS 3316 - Advanced Clinical Microbiology and Molecular Diagnostics (4)
- MLS 4409 - Clinical Correlation (1)
- MLS 4453 - Supervised Clinical Experience I (1)
- MLS 4454 - Supervised Clinical Experience II (1)
- MLS 4801 - Research Projects in Medical Laboratory Sciences I (1)
- MLS 4802 - Research Projects in Medical Laboratory Sciences II (1)
- CHEM 1210 PS - Principles of Chemistry I (5)
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- or
- CHEM 3070 - Biochemistry I (4)
- MICR 2054 LS - Principles of Microbiology (4) or
- MICR 1113 LS - Introductory Microbiology (3)
- MICR 3254 - Immunology (4)
- or
- HTHS 3328 - Pathophysiology of Cells and Tissues (2) and
- HTHS 3329 - Pathophysiology of Organs and Systems (2)
- MICR 3305 - Medical Microbiology (5) or
- MICR 3603 - Advanced Microbiology for the Health Professions (3) or
- HIM 3200 - Epidemiology and Biostatistics (3)
- PHYS 2010 PS - College Physics I (5)
- PHYS 2020 - College Physics II (5)
- ZOOL 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)
- ZOOL 3300 - Genetics (4)

Equivalencies to Biomedical Core (HTHS 1110 and HTHS 1111)

- ZOOL 2200 - Human Physiology (4) and
- ZOOL 2100 - Human Anatomy (4) or
- PHYS 1010 PS - Elementary Physics (3)

Medical Laboratory Sciences Departmental Honors

Please contact the Medical Laboratory Sciences Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Declare intent to obtain Department Honors in Medical Laboratory Sciences (MLS).

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Upon entering the MLS BS program, determine an Honors project. This may be research related, a community project, or a scholarly paper, presentation or publication. Select courses within the MLS BS curriculum which relate to or enhance the Honors project. With instructor permission, take courses identified and include an honors component with each course. During the final semester, complete the requirement of MLS 4800 Departmental Honors, which includes completion of an Honors project. A minimum of 15 credit hours of upper division MLS courses with the honors component must be complete to receive MLS departmental honors.

Medical Laboratory Sciences Clinical Laboratory Assistant (CLA) Certificate of Completion

The Clinical Laboratory Assistant (CLA) certificate is designed for medical assistants, phlebotomists, certified nursing practitioners and similar health care workers, and provides applied core clinical laboratory skills required primarily for testing performed in physician office labs and other decentralized testing sites. Program competencies include phlebotomy and accurate performance of basic laboratory testing for waived and moderately complex testing protocols, to be performed under the direct supervision of laboratory directors and/or supervisors. Students who complete WSU's certificate of completion are designated as CLA level assistant IV by local industry.

For campus students, the CLA certificate is granted after successful completion of two courses: MLS 1113, Intro to Medical Laboratory Practices and MLS 1123, Principles of Clinical Hematology and Hemostasis.

Online students must complete MLS 1000, Core Clinical Laboratory Skills, and be employed in a clinical laboratory setting. If students wish to continue to further their education, by taking MLS 1003 in addition to MLS 1000, they can waive MLS 1113 when they enroll in the MLS AAS Program at WSU. Contact the MLS online academic advisor, Cindi Kranek, at 801-626-8546 or cindikranek@weber.edu for advising.

School of Nursing

Interim Department Chair: Susan Thornock, EdD (c), MS, RN

Location: Marriott Allied Health Building, Rm 437

Telephone Contact: Aiko Flowers (801) 626-6134

MSN Director: Joyce Barra, PhD, MS, RN

Location: Marriott Allied Health Building, Rm 435

Program Secretary: Monica Linford (801) 626-6137

RN to BSN Director: Joyce Barra, PhD, MS, RN

RN to BSN Assistant Director: Tamara Chase, MSN, RN, CNE

Program Secretary: Tiffany Bennett (801) 626-6122

Statewide Associate Degree Clinical Director:

Kathleen Culliton, MSN, APRN

Statewide Associate Degree Didactic Director: Karen

Burton, MS, RN, CNE

Telephone Contact: Marguerite Simmons (801) 626-7416, prompt 7 (Ogden Campus)

Enrollment Director: Robert Holt, MS

Telephone Contact: (801) 626-7774, prompt 6

WSU/USU Cooperative Program (Logan, Utah)

Campus Coordinator: Jonny Kelly, MNA, RN

Program Secretary: Courtney Lower (435) 797-1515

WSU/DATC Contractual Program (Kaysville, Utah)

Campus Coordinator: Kathryn Dreyer, MSN, RN

Program Contact: Becky Rigby (801) 593-2341

WSU/MATC Contractual Program (Lehi, Utah)

Campus Coordinator: TJ Carter, MSN, RN

Program Contact: Tenille Holyoak (801) 753-4162

WSU/OWATC Contractual Program (Ogden, Utah)

Campus Coordinator: Mary Lou Morales, MSN, RN

Program Contact: Robbie Hicken (801) 627-8351

WSU/SNOW College Contractual Program (Richfield, Utah)

Campus Coordinator: Amber Epling, MSN, RN

Telephone: (435) 893-2232

FACULTY - Professor: Debra Huber, PhD, MS, APRN;

Associate Professors: Tamara Chase, MSN, RN, CNE;

Kathy Culliton, MSN, APRN; London Draper Lowe, MSN,

RN; Linda Forest, MS, RN; Valerie Gooder, PhD, MS, RN;

Deborah Judd, MSN, APRN; Julie Killebrew, MS, RN;

Diane Leggett, PhD, MS, RN; Pam Rice, MSN, RN; Kathleen

Sitzman, PhD, MSN, RN; Susan Thornock, EdD (c), MS,

RN; **Assistant Professors:** Suzanne Ballingham, MSN,

APRN; Joyce Barra, PhD, MS, RN; Karen Burton, MSN, RN,

CNE; Cynthia Candland, MSN, RN; Sally Cantwell, MS, RN;

Jill Daly, MSN, RN; Kathryn Dreyer, MSN, CNM; Sharon

Dingman, MS, RN; Amber Epling, MSN, RN; Debra Haas,

MS, RN; Alexandra Hanson, MSN, RN; Jeanette Harris,

MSN, RN; Linda Hofmann, MS, RN; Rieneke Holman, MS,

RN; Jonny Kelly, MNA, RN; Nancy Kuncl, MSN, APRN;

Melissa Neville-Swensen, DNP, RN; Jody Reese, MSN, RN;

Collette Renstrom, DNP, APRN; Louise Salmond, MSN, RN;

Brandon Sandall, MSN, RN; Kristiann Williams, DNP, APRN;

Carol Welninski, DNP, RN; **Instructors:** Heather Clark,

MSN, RN; Patricia Turner, MSN, RN; Melissa Young, MSN,

RN

Program History

Founded in 1953, nursing at Weber State University offers students career progression from Practical Nursing to Associate of Science (PN to RN) or Associate of Applied Science Degree Nursing (AAS), 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.

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 PN or RN license. The Utah Board of Nursing makes final decisions on issuance of professional licensure.

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 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.

Accreditation

The School of Nursing programs (AAS/AS, BSN, and MSN) are accredited by the National League for Nursing Accrediting Commission (NLNAC).

National League for Nursing Accrediting Commission
3343 Peachtree Road NE, Suite 850
Atlanta, GA 30326
P. 404.975.5000
F. 404.975.5020
www.nlnac.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 Health 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 Program 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 Applied Science Degree (PN-to-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. Applications may be obtained from the 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 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 Program 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>.

Associate of Science Degree (PN-to-RN)

DCHP Admission Office (801) 626-6136

Applicants must first apply for admission to Weber State University. Applicants must also apply for admission to the RN Completion (PN to RN) Program. Admission times and deadlines vary according to campus location. For applications and deadline information, please contact the School of Nursing Admission Counselor, Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions. A \$25 application fee must be paid at the time the application is submitted. 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 available at <http://weber.edu/nursing>. Applicants to this program must have an LPN license or be eligible for testing for the NCLEX-PN exam.

Bachelor of Science Degree (RN-to-BSN)

DCHP Admission Office (801) 626-6136

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 from the Dr. Ezekiel R. Dumke College of Health Professions Admissions Advisement Office in the Marriott Allied Health Building (MAH) 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 Program Admissions and Advancement Committee. Applicants are notified of committee decision by mail. Admission requirements are outlined on the admission application available 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.

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 61 credit hours is required for the AAS (this does not include Practical Nursing Program nursing courses). Twenty residency hours are also required.

Clinical Ratio is 1:3 (one clinical credit hour means there are three clock hours of clinical)

Advisement

Contact the DCHP Advisement Admission 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.

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. Applications may be obtained from the 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 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 Program 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>.

Major Course Requirements for PN-to-RN (RN Completion) AAS Option

Nursing Courses Required (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 3 **(3)**
- NRSG 2550 - Patient Centered Nursing Care Clinical 3 **(3)**
- NRSG 3100 - Pharmacology for Nurses 2 **(3)**

Fourth Semester

- NRSG 3200 - Complex Patient Centered Nursing Care 1 **(3)**
- NRSG 2300 - Patient Centered Nursing Care 1 **(3)**
- NRSG 2350 - Patient Centered Nursing Care Clinical 1 **(3)**

Prerequisite/Support Courses Required

(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

- Graduate of an NLNAC Accredited Practical Nursing Program or equivalent program (a challenge examination may be required for those graduating from an equivalent program)
- Licensed as a Licensed Practical Nurse (LPN) or Utah PN-NCLEX eligible with passing LPN Boards during semester three.
- CHEM 1050 PS - Introduction to General, Organic & Biochemistry **(5)** or
- CHEM 1110 PS - Elementary Chemistry **(5)**
- WSU Math QL Requirement
- NUTR 1020 LS - Science and Application of Human Nutrition **(3)**
- **And**
- HTHS 1110 LS - Biomedical Core **(4)**
- HTHS 1111 - Biomedical Core (continued) **(4)**
- **OR**
- ZOOL 2100 - Human Anatomy **(4)**
- ZOOL 2200 - Human Physiology **(4)**

ADDITIONAL EDUCATION PREREQUISITES

- MICR 1113 LS - Introductory Microbiology **(3)**
- ENGL 2010 EN - Intermediate College Writing **(3)**
- PSY 1010 SS - Introductory Psychology **(3)**
- HTHS 2230 - Introductory Pathophysiology **(3)**

Third Semester

- ENGL 2010 EN - Intermediate College Writing **(3)**

Fourth Semester

- HU or CA Humanities or Creative Arts **(3)**

Nursing, Weber State/ Utah State University Cooperative - Logan Campus (AAS)

Telephone Contact: Courtney Lower (435) 797-1515

Grade Requirements: A grade of "B-" in all Nursing courses in addition to a grade of "C" in each support course.

Credit Hour Requirements: A minimum of 69 credit hours is required for the AAS. A minimum of 84 credit hours is required for the AS. Twenty residency hours are also required.

Clinical Ratio is 1:3 (one clinical credit hour means there are three clock hours of clinical for each week of the semester)

Advisement

Contact the DCHP Admission Office at (801) 626-6136 for admission advisement.

Admission Requirements

Students apply for admission by contacting the School of Nursing Admission Counselor, Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions, Weber State University, Ogden, Utah, 84408-3907 (801) 626-6136. Deadline for applying is 1 February. An application fee must be paid at the time the application is submitted. Applications are reviewed by the School of Nursing Admissions and Advancement Committee. Applicants are notified of committee decision by mail.

General Education

General education courses required are referenced in the course requirements that follow. Please also refer to the university general education requirements and check with the campus manager.

Major Course Requirements for AAS Degree

Nursing Courses Required (must be taken in sequence)

First Semester

- NRSG 2100 - Pharmacology for Nurses 1 (3)
- NRSG 2200 - Nursing Foundations (3)
- NRSG 2250 - Nursing Foundations Clinical (3)

Second Semester

- NRSG 2300 - Patient Centered Nursing Care 1 (3)
- NRSG 2350 - Patient Centered Nursing Care Clinical 1 (3)
- NRSG 2400 - Patient Centered Nursing Care 2 (3)

Third Semester

- NRSG 2500 - Patient Centered Nursing Care 3 (3)
- NRSG 2550 - Patient Centered Nursing Care Clinical 3 (3)
- NRSG 3100 - Pharmacology for Nurses 2 (3)

Fourth Semester

- NRSG 3200 - Complex Patient Centered Nursing Care 1 (3)
- NRSG 3300 - Entry Into Nursing Professional Practice (3)
- NRSG 3350 - Entry Into Nursing Professional Practice Preceptorship (3)

Prerequisite/Support Courses Required

(must be taken in sequence listed or earlier--USU course ID's listed in [brackets])

Prerequisite and support courses must be completed and passed with a "C" or better prior to progression to the next semester.

- CHEM 1050 PS - Introduction to General, Organic & Biochemistry (5) or
 - CHEM 1110 PS - Elementary Chemistry (5) [CHEM 1110 (4)]
 - WSU Math QL Requirement [MATH 1030, 1040 or 1050]
 - NUTR 1020 LS - Science and Application of Human Nutrition (3)
- And**
- HTHS 1110 LS - Biomedical Core (4)
 - HTHS 1111 - Biomedical Core (continued) (4)
- OR**
- ZOOL 2100 - Human Anatomy (4) [BIOL 2320 (4)]
 - ZOOL 2200 - Human Physiology (4) [BIOL 2420 (4)]

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: A minimum of 79 credit hours is required for the AS. Twenty residency hours are also required.

Clinical Ratio is 1:3 (one clinical credit hour means there are three clock hours of clinical)

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.

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 Health 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 Program 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>.

Major Course Requirements for AS Degree

Nursing Courses Required (must be taken in sequence)

First Semester

- NRSNG 2100 - Pharmacology for Nurses 1 (3)
- NRSNG 2200 - Nursing Foundations (3)
- NRSNG 2250 - Nursing Foundations Clinical (3)

Second Semester

- NRSNG 2300 - Patient Centered Nursing Care 1 (3)
- NRSNG 2350 - Patient Centered Nursing Care Clinical 1 (3)
- NRSNG 2400 - Patient Centered Nursing Care 2 (3)

Third Semester

- NRSNG 2500 - Patient Centered Nursing Care 3 (3)
- NRSNG 2550 - Patient Centered Nursing Care Clinical 3 (3)
- NRSNG 3100 - Pharmacology for Nurses 2 (3)

Fourth Semester

- NRSNG 3200 - Complex Patient Centered Nursing Care 1 (3)
- NRSNG 3300 - Entry Into Nursing Professional Practice (3)
- NRSNG 3350 - Entry Into Nursing Professional Practice Preceptorship (3)

Prerequisite/Support Courses Required

(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.

- CHEM 1050 PS - Introduction to General, Organic & Biochemistry (5) or
 - CHEM 1110 PS - Elementary Chemistry (5)
 - WSU Math QL Requirement
 - NUTR 1020 LS - Science and Application of Human Nutrition (3)
- And**
- HTHS 1110 LS - Biomedical Core (4)
 - HTHS 1111 - Biomedical Core (continued) (4)
- OR**
- ZOOL 2100 - Human Anatomy (4)
 - ZOOL 2200 - Human Physiology (4)

Additional General Education and Support Courses

- ENGL 2010 EN - Intermediate College Writing (3)
- MICR 1113 LS - Introductory Microbiology (3)
- PSY 1010 SS - Introductory Psychology (3)
- HTHS 2230 - Introductory Pathophysiology (3)
- American Institution Gen Ed Course (3)
- *Humanities Gen Ed Course (3)
- *Gen Ed SS Social Science (3)

Sample Plan of Study for General Education and Support Courses

First Semester

- MICR 1113 LS - Introductory Microbiology (3)

Second Semester

- ENGL 1010 EN - Introductory College Writing (3) or equivalent
- PSY 1010 SS - Introductory Psychology (3)

These courses must be completed before Third Semester

- HTHS 2230 - Introductory Pathophysiology (3)
- American Institution Gen Ed Course (3)
- *Humanities Gen Ed Course (3)
- *Gen Ed SS Social Science (3)

Third Semester

- ENGL 2010 EN - Intermediate College Writing (3)

Fourth Semester

- *Gen Ed HU or CA Humanities or Creative Arts (3)
- Gen Ed CIL Computer Information Literacy (4)
- *Gen Ed CA Creative Arts (3)

**University diversity requirement for AS Degree can be met by taking an approved course. See Diversity Requirement*

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: A minimum of 61 credit hours is required for the AS (this does not include Practical Nursing Program nursing courses). Twenty residency hours are also required.

Clinical Ratio is 1:3 (one clinical credit hour means there are three clock hours of clinical)

Advisement

Contact the DCHP Admission 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.

DCHP Admission Office (801) 626-6136

Applicants must first apply for admission to Weber State University. Applicants must also apply for admission to the RN Completion (PN to RN) Program. Admission times and deadlines vary according to campus location. For applications and deadline information, please contact the School of Nursing Admission Counselor, Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions. A \$25 application fee must be paid at the time the application is submitted. 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 available at <http://weber.edu/nursing>. Applicants to this program must have an LPN license or be eligible for testing for the NCLEX-PN exam.

Major Course Requirements for PN-to-RN (RN Completion) AS Option

Nursing Courses Required (must be taken in sequence)

PN to RN students start in the 3rd semester of the associate degree program.

Third Semester

- NRSNG 2500 - Patient Centered Nursing Care 3 (3)
- NRSNG 2550 - Patient Centered Nursing Care Clinical 3 (3)
- NRSNG 3100 - Pharmacology for Nurses 2 (3)

Fourth Semester

- NRSNG 3200 - Complex Patient Centered Nursing Care 1 (3)
- NRSNG 3300 - Entry Into Nursing Professional Practice (3)
- NRSNG 3350 - Entry Into Nursing Professional Practice Preceptorship (3)

Prerequisite/Support Courses Required

(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

- Graduate of an NLNAC Accredited Practical Nursing Program or equivalent program (a challenge examination may be required for those graduating from an equivalent program)
 - Licensed as a Licensed Practical Nurse (LPN) or Utah PN-NCLEX eligible with passing LPN Boards during semester three.
 - CHEM 1050 PS - Introduction to General, Organic & Biochemistry (5) or
 - CHEM 1110 PS - Elementary Chemistry (5)
 - WSU Math QL Requirement
 - NUTR 1020 LS - Science and Application of Human Nutrition (3)
- And**
- HTHS 1110 LS - Biomedical Core (4)
 - HTHS 1111 - Biomedical Core (continued) (4)
- OR**
- ZOOL 2100 - Human Anatomy (4)
 - ZOOL 2200 - Human Physiology (4)

ADDITIONAL PREREQUISITES

- MICR 1113 LS - Introductory Microbiology (3)
- ENGL 2010 EN - Intermediate College Writing (3)
- PSY 1010 SS - Introductory Psychology (3)
- HTHS 2230 - Introductory Pathophysiology (3)
- American Institution Gen Ed Course (3)
- Humanities Gen Ed Course (3)
- Gen Ed SS Social Science (3)

Third Semester

- ENGL 2010 EN - Intermediate College Writing (3)

Fourth Semester

- Gen Ed HU or CA Humanities or Creative Arts (3)
- Gen Ed CIL Computer Information Literacy (2-4)
- Gen Ed CA Creative Arts (3)

Nursing, Weber State/ Utah State University Cooperative - Logan Campus (AS)

Telephone Contact: Courtney Lower (435) 797-1515

Grade Requirements: A grade of "B-" in all Nursing courses in addition to a grade of "C" in each support course.

Credit Hour Requirements: A minimum of 69 credit hours is required for the AAS. A minimum of 84 credit hours is required for the AS. Twenty residency hours are also required.

Clinical Ratio is 1:3 (one clinical credit hour means there are three clock hours of clinical for each week of the semester)

Advisement

Contact the DCHP Admission Office at (801) 626-6136 for admission advisement.

Admission Requirements

Students apply for admission by contacting the School of Nursing Admission Counselor, Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions, Weber State University, Ogden, Utah, 84408-3907 (801) 626-6136. Deadline for applying is 1 February. An application fee must be paid at the time the application is submitted. Applications are reviewed by the School of Nursing Admissions and Advancement Committee. Applicants are notified of committee decision by mail.

General Education

General education courses required are referenced in the course requirements that follow. Please also refer to the university general education requirements and check with the campus manager.

Major Course Requirements for AS Degree

Nursing Courses Required (must be taken in sequence)

First Semester

- NRSNG 2100 - Pharmacology for Nurses 1 (3)
- NRSNG 2200 - Nursing Foundations (3)
- NRSNG 2250 - Nursing Foundations Clinical (3)

Second Semester

- NRSG 2300 - Patient Centered Nursing Care 1 (3)
- NRSG 2350 - Patient Centered Nursing Care Clinical 1 (3)
- NRSG 2400 - Patient Centered Nursing Care 2 (3)

Third Semester

- NRSG 2500 - Patient Centered Nursing Care 3 (3)
- NRSG 2550 - Patient Centered Nursing Care Clinical 3 (3)
- NRSG 3100 - Pharmacology for Nurses 2 (3)

Fourth Semester

- NRSG 3200 - Complex Patient Centered Nursing Care 1 (3)
- NRSG 3300 - Entry Into Nursing Professional Practice (3)
- NRSG 3350 - Entry Into Nursing Professional Practice Preceptorship (3)

Prerequisite/Support Courses Required

(must be taken in sequence listed or earlier--USU course ID's listed in [brackets])

Prerequisite and support courses must be completed and passed with a "C" or better prior to progression to the next semester.

- CHEM 1050 PS - Introduction to General, Organic & Biochemistry (5) or
 - CHEM 1110 PS - Elementary Chemistry (5) [CHEM 1110 (4)]
 - WSU Math QL Requirement [MATH 1030, MATH 1040 or MATH 1050]
 - NUTR 1020 LS - Science and Application of Human Nutrition (3)
- And**
- HTHS 1110 LS - Biomedical Core (4)
 - HTHS 1111 - Biomedical Core (continued) (4)
- OR**
- ZOOL 2100 - Human Anatomy (4) [BIOL 2320 (4)]
 - ZOOL 2200 - Human Physiology (4) [BIOL 2420 (4)]

Additional General Education and Support Courses

- ENGL 2010 EN - Intermediate College Writing (3)
- PSY 1010 SS - Introductory Psychology (3) [PSY 1010 (3)]
- HTHS 2230 - Introductory Pathophysiology (3) [BIOL 2500 (3)]
- American Institution Gen Ed Course (3)
- Humanities Gen Ed Course (3)
- Gen Ed SS Social Science (3)

Sample Plan of Study for General Education and Support Courses**First Semester**

- MICR 1113 LS - Introductory Microbiology (3) [BIOL 2520 (3)]

Second Semester

- ENGL 1010 EN - Introductory College Writing (3) or equivalent
- PSY 1010 SS - Introductory Psychology (3) [PSY 1010 (3)]

These courses must be completed before Third Semester

- HTHS 2230 - Introductory Pathophysiology (3) [BIOL 2520 (3)]
- American Institution Gen Ed Course (3)
- Humanities Gen Ed Course (3)
- Gen Ed SS Social Science (3)

Third Semester

- ENGL 2010 EN - Intermediate College Writing (3)

Fourth Semester

- Gen Ed HU or CA Humanities or Creative Arts (3)
- Gen Ed CIL Computer Information Literacy (4)
- Gen Ed CA Creative Arts (3)

Nursing, RN-to-BSN (BS)

Admission Requirements: Graduate of an NLNAC Accredited Associate Nursing 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.

Advisement

Contact the DCHP Admission 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 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 from the Dr. Ezekiel R. Dumke College of Health Professions Admissions Advisement Office in the Marriott Allied Health Building (MAH) 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 Program Admissions and Advancement Committee. Applicants are notified of committee decision by mail. Admission requirements are outlined on the admission application available at <http://weber.edu/nursing>.

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements.

Prerequisites

Students must have completed the following classes or their equivalent.

- CHEM 1110 PS - Elementary Chemistry (5) or
- CHEM 1050 PS - Introduction to General, Organic & Biochemistry (5)
- *Human Anatomy and Human Physiology (8 cr) OR
- HTHS 1110 LS - Biomedical Core (4) and
- HTHS 1111 - Biomedical Core (continued) (4)
- NUTR 1020 LS - Science and Application of Human Nutrition (3)
- MICR 1113 LS - Introductory Microbiology (3)
- Pathophysiology (3 cr)
- PSY 1010 SS - Introductory Psychology (3)
- ENGL 2010 EN - Intermediate College Writing (3)
- WSU Quantitative Literacy Requirements (Math 1030, 1040, 1050, 1080)

* HTHS LS1110 and 1111 (or previous 111, 112, and 113 is an acceptable equivalent)

Major Course Requirements for BS Degree (RN to BSN)

Nursing Courses Required (25 credit hours)

- NRSNG 4050 - Nursing Assessment Across the Life Span (3) *

Complete the following classes:

- NRSNG 4100 - Complex Patient Centered Nursing Care 2 (3)
- NRSNG 4200 - Scholarship for Evidence-Based Practice (3)
- NRSNG 4300 - Healthcare Policy and Decision Making (3)
- NRSNG 4400 - Population Health in Nursing (4)
- NRSNG 4500 - Nursing Management and Leadership (3)
- NRSNG 4600 - Communication, Collaboration, and Information Management in Healthcare (3)

Select six (6) credit hours from the following courses:

- NRSNG 4050 - Nursing Assessment Across the Life Span (3)
- NRSNG 4060 - Oncology Nursing (3)
- NRSNG 4070 - Threats and Crises: Nursing Response (3)
- NRSNG 4080 - Nursing: High Risk Adult (3)
- NRSNG 4090 - Nursing: High Risk Family (3)

Upper Division Elective (3 credit hours)

Complete 3 hours of upper division credits from any department.

Nursing Departmental Honors

Nursing students may seek departmental honors while in the Baccalaureate program. Please contact the School of Nursing for advisement and permission prior to enrolling in Honors courses.

Requirements for Nursing Departmental Honors:

1. Maintain cumulative GPA of 3.3 or higher.

2. Obtain a final grade of "A" or "A-" in all courses which the student is completing an honors component.
3. Meet with the School of Nursing Honors Advisor upon first entering the BSN program (during the first week of classes).
4. Complete 12 hours of honors credit in designated BSN nursing courses, as well as completion of a senior project in NRSNG 4840 "Honors Seminar in Nursing" (3 credits) for 15 credits total. Course work should advance and/or complement the end project.
5. Final semester of BSN program, register for NRSNG 4840, "Honors Seminar in Nursing". The focus of this course is to complete the final project. All students will present their projects to a community audience in some manner as a requirement for NRSNG 4840. Most students will prepare a poster presentation or a short oral presentation for the Honors Banquet.
6. Maintain honors expectations in academic, professional, and student conduct. See WSU School of Nursing Student Handbook.

Department of Radiologic Sciences

Department Chair: Robert Walker, PhD, RT(R)(MR)(CT)(QM), FASRT

Location: Marriott Health Building, Room 363

Telephone Contact: Lori Frederiksen 801-626-6057

Toll Free Telephone: 1-800-848-7770, Option 1

Continuing Education Manager: Cindy Esterholdt 801-626-6619

Admissions/Counseling: Shauna Pitt

801-626-7136 **Master of Science Radiologic Sciences**

Graduate Enrollment Director: Lonnie Lujan 801-626-6088

Professors: Wynn Harrison, Diane Kawamura, Robert Walker; **Associate Professors:** Terri Jurkiewicz, Diane Newham; **Assistant Professors:** Rex Christensen, Tanya Nolan; **Instructor:** Casey Neville; **Adjunct Faculty:** Angie Ackerman, Shane Clampitt, Michael Devenport, Mark Fackrell, Morgan Hadlock, Julie Hawk, Ryan Hecox, Christopher Marston, Tiera Rigby

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.

Please refer to the Master of Science in Radiologic Sciences (MSRS)

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 Department 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 Department 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:

- Advanced Radiologic Sciences
- Cardiovascular-Interventional Technology (CIT)
- Computed Tomography (CT)
- Magnetic Resonance Imaging (MRI)
- CT/MRI Combined
- Quality Management
- Women's Imaging
- Radiologist Assistant (RA)

Radiography (AAS)

Radiography is a program offered under Department 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 60 credit hours of didactic and clinical education courses.

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 and General Education 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 1110 (4) and HTHS 1111 (4)

Major Course Requirements for AAS Degree

Courses Required (60 credit hours)

- RADT 1022 - Introduction to Radiologic Technology (2)
- RADT 1303 - Principles of Radiographic Exposure I (3)
- RADT 1502 - Radiographic Anatomy and Positioning I (2)
- RADT 1512 - Radiographic Anatomy and Positioning II (3)
- RADT 1522 - Radiographic Anatomy and Positioning III (2)
- RADT 1532 - Radiographic Anatomy and Positioning IV (3)
- RADT 1601 - Laboratory Experience (2)
- RADT 1621 - Laboratory Experience (2)
- RADT 1641 - Laboratory Experience (1)
- RADT 1661 - Laboratory Experience (1)
- RADT 2043 - Patient Care and Assessment I (2)
- RADT 2272 - Basic Sectional Anatomy (2)
- RADT 2403 - Principles of Radiographic Exposure II (2)
- RADT 2861 - Clinical Education (3)
- RADT 2862 - Clinical Education (3)
- RADT 2863 - Clinical Education (3)
- RADT 2864 - Clinical Education (3)
- RADT 2865 - Clinical Education (2)
- RADT 2866 - Final Competency Evaluation (2)
- RADT 2913 - Comprehensive Review (2)
- RADT 3003 DV - Psycho-Social Medicine (3)
- RADT 3043 - Medical Ethics and Law (3)

- RADT 3403 - Radiobiology & Health Physics (3)
- RADT 3443 - Quality Assurance in Radiology (3)
- RADT 3463 - Computerized Imaging (3)

Elective Courses

Additional course work is necessary to prepare students for ARRT certification. Contact the Department of Radiologic Sciences for a course sequence that includes applicable electives. This will add 19 additional credit hours. The electives will be from the following list. Each course listed may be repeated for credit.

- RADT 2803 - Independent Research (1-3)
- RADT 2833 - Directed Readings and Research (1-3)
- RADT 2921 - Workshop, Conferences and Telecourses (1-3)
- RADT 2942 - Career Planning and New Technology (2)
- RADT 2992 - Seminar (1-2)

Diagnostic Medical Sonography (BS)

Program Prerequisite: Must be an ARRT registered technologist or acceptable equivalent as determined by the Department 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.

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.

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 and General Education Requirements for Bachelor of Science requirements.

Major Course Requirements for BS Degree

DMS Courses Required (6 credit hours)

- DMS 4110 - Sonography Principles & Instrumentation (3)
- DMS 4120 - Quality Assurance (3)

Radiography Courses Required (24 credit hours)

- RADT 3003 DV - Psycho-Social Medicine (3)
- RADT 3043 - Medical Ethics and Law (3)
- RADT 3123 - Sectional Anatomy (3)
- RADT 3143 - Imaging Pathophysiology (3)
- RADT 3243 - Patient Care and Assessment II (3)
- RADT 3253 - Patient Care and Assessment III (3)
- RADT 4933 - Research Methods (3)
- RADT 4943 - Baccalaureate Thesis (3)

Support Course Electives (6 credit hours)

Select 6 credit hours from the following

- DMS 4410 - Vascular Sonography I (2) *
- DMS 4510 - Breast Sonography (1)
- DMS 4801 - Individualized Research (1-3)
- DMS 4841 - Breast Clinical (3)
- DMS 4921 - Workshops, Conferences and Telecourses (1-3)
- RADT 3000 or 4000 courses other than those listed above

**for Cardiac and Medical Emphases Only*

Emphasis Requirements

Complete the courses for one of the following three emphasis areas: *Cardiac Emphasis (20 credit hours)*, *Medical Emphasis (20 credit hours)*, or *Vascular Emphasis (16 credit hours)*.

Cardiac Emphasis

- DMS 4210 - Cardiac Sonography I (3)
- DMS 4220 - Cardiac Sonography II (3)
- DMS 4230 - Cardiac Sonography III (3)
- DMS 4610 - Cardiac Laboratory (1)
- DMS 4811 - Cardiac Clinical I (3)
- DMS 4812 - Cardiac Clinical II (3)
- DMS 4813 - Cardiac Clinical III (3)
- DMS 4911 - Cardiac Comprehensive Review (1)

Medical Emphasis

- DMS 4310 - Abdominal Sonography (3)
- DMS 4320 - Superficial Structure Sonography (1)
- DMS 4330 - Gynecologic Sonography (1)
- DMS 4340 - Obstetric Sonography (3)
- DMS 4620 - Medical Laboratory (1)
- DMS 4821 - Medical Clinical I (3)
- DMS 4822 - Medical Clinical II (3)
- DMS 4823 - Medical Clinical III (3)
- DMS 4912 - Medical Comprehensive Review (2)

Vascular Emphasis

- DMS 4410 - Vascular Sonography I (2)
- DMS 4420 - Vascular Sonography II (3)
- DMS 4630 - Vascular Laboratory (1)
- DMS 4831 - Vascular Clinical I (3)
- DMS 4832 - Vascular Clinical II (3)
- DMS 4833 - Vascular Clinical III (3)
- DMS 4913 - Vascular Comprehensive Review (1)

Nuclear Medicine (BS)

Program Prerequisite: Must be an ARRT registered technologist or acceptable equivalent as determined by the Department 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 29 credit hours in didactic courses and clinical education are required. The support courses or the equivalent must be completed to obtain the degree.

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.

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 and General Education Requirements for Bachelor of Science requirements.

Major Course Requirements for BS Degree

Nuclear Medicine Courses Required (29 credit hours)

- NUCM 4103 - Radiopharmaceuticals and Dosages (3)
- NUCM 4203 - Scanning and Imaging Procedures I (3)
- NUCM 4213 - Scanning and Imaging Procedures II (3)
- NUCM 4223 - Nuclear Cardiology (3)
- NUCM 4303 - Radionuclide Physics & Instrumentation (3)
- NUCM 4333 - Quality Assurance (3)
- NUCM 4861 - Clinical Education (3)

- NUCM 4862 - Clinical Education (3)
- NUCM 4863 - Clinical Education (3)
- NUCM 4912 - Comprehensive Review (2)

Radiography Courses Required (33 credit hours)

- RADT 3043 - Medical Ethics and Law (3)
- RADT 3123 - Sectional Anatomy (3)
- RADT 3143 - Imaging Pathophysiology (3)
- RADT 3243 - Patient Care and Assessment II (3)
- RADT 3263 - Diagnostic Services Pharmacology (3)
- RADT 3403 - Radiobiology & Health Physics (3)
- RADT 3423 - Federal Regulations (3)
- RADT 3563 - Managing Clinical Information (3)
- RADT 4303 - Cardiology (3)
- RADT 4933 - Research Methods (3)
- RADT 4943 - Baccalaureate Thesis (3)

Elective

- NUCM 4991 - Seminar (1)

Recommended Course to Fulfill Diversity

- RADT 3003 DV - Psycho-Social Medicine (3)

Radiation Therapy (BS)

Program Prerequisite: Must be an ARRT registered technologist or acceptable equivalent as determined by the Department 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 27 credit hours in didactic courses and 9 credit hours in clinical education are required. The support courses or the equivalent must be completed to obtain the degree.

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.

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 and General Education Requirements for Bachelor of Science requirements.

Major Course Requirements for BS Degree

Radiation Therapy Courses Required (36 credit hours)

- RATH 4330 - Radiation Therapy Physics (3)
- RATH 4342 - Introduction to Treatment Planning (3)
- RATH 4410 - Radiation Oncology I (3)
- RATH 4412 - Radiation Oncology II (3)
- RATH 4414 - Radiation Oncology III (3)
- RATH 4444 - Advanced Treatment Planning/Brachytherapy (3)
- RATH 4446 - Quality Assurance (3)
- RATH 4448 - New Technology in Radiation Therapy (3)
- RATH 4861 - Clinical Education I (3)
- RATH 4862 - Clinical Education II (3)
- RATH 4863 - Clinical Education III (3)
- RATH 4913 - Comprehensive Review (3)

Radiography Courses Required (18 credit hours)

- RADT 3043 - Medical Ethics and Law (3)
- RADT 3243 - Patient Care and Assessment II (3)
- RADT 3403 - Radiobiology & Health Physics (3)
- RADT 3563 - Managing Clinical Information (3)
- RADT 4933 - Research Methods (3)
- RADT 4943 - Baccalaureate Thesis (3)

Recommended Course to Fulfill Diversity

- RADT 3003 DV - Psycho-Social Medicine (3)

Elective Courses

- RADT 3143 - Imaging Pathophysiology (3)
- RADT 3263 - Diagnostic Services Pharmacology (3)
- RADT 3423 - Federal Regulations (3)
- RADT 4992 - Seminar (1-2)

Radiologic Sciences, Advanced (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. The following emphases or programs are available:

1. Advanced Radiography
2. Magnetic Resonance Imaging and/or Computed Tomography (MRI and CT)
3. Cardiovascular-Interventional Technology (CIT)
4. Women's Imaging
5. Radiologist Assistant (RA)*

*The Radiology Assistant program requires the consent of a supervising physician, 5 years experience as an ARRT registered technologist (RT) and that the General Education requirements at Weber State University be met.

Program Prerequisite: Must be an ARRT registered technologist or acceptable equivalent as determined by the Department 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. A minor is not required for the Radiology Assistant (RA) program.

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 is required for graduation; 30-48 of these must be within the major emphasis.

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.

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 and General Education Requirements for Bachelor of Science requirements.

Major Course Requirements for BS Degree

Radiography Courses Required (6 credit hours)

- RADT 4933 - Research Methods (3)
- RADT 4943 - Baccalaureate Thesis (3)

Specific Requirement:

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 (3) and approved by a faculty advisor.

Emphasis Requirements

Complete one of the following emphases:

Advanced Radiologic Sciences Emphasis

Required Courses (12 credit hours)

- RADT 3003 DV - Psycho-Social Medicine (3)
- RADT 3043 - Medical Ethics and Law (3)

- RADT 3423 - Federal Regulations (3)
- RADT 4203 - Patient Education in Radiology (3)

Electives (select 25-33 credit hours)

Elective courses must have approval of a faculty advisor.

- RADT 3123 - Sectional Anatomy (3)
- RADT 3143 - Imaging Pathophysiology (3)
- RADT 3243 - Patient Care and Assessment II (3)
- RADT 3253 - Patient Care and Assessment III (3)
- RADT 3263 - Diagnostic Services Pharmacology (3)
- RADT 3403 - Radiobiology & Health Physics (3)
- RADT 3443 - Quality Assurance in Radiology (3)
- RADT 3463 - Computerized Imaging (3)
- RADT 3563 - Managing Clinical Information (3)
- RADT 3863 - Clinical Internship (2-6)
- RADT 4213 - Supervision and Staff Development (3)
- RADT 4223 - Promotional Strategies (3)
- RADT 4233 - Fiscal Analysis in Radiology (3)
- RADT 4243 - Quality Management in Radiology (3)
- RADT 4253 - Risk Management (3)
- RADT 4303 - Cardiology (3)
- RADT 4403 - Imaging Pathology (3)
- RADT 4413 - Forensic Radiology (3)
- RADT 4433 - PACS Administration (3)
- RADT 4443 - Imaging Informatics (3)
- RADT 4543 - Bone Densitometry (3)
- RADT 4573 - The Female Patient and Medical Imaging (3)
- RADT 4803 - Individual Research (1-3)
- RADT 4833 - Directed Readings and Research (3)
- RADT 4863 - Clinical Internship (2-4)
- RADT 4922 - Workshop, Conferences and Telecourses (2)
- RADT 4942 - Current Issues and Trends (2)
- RADT 4992 - Seminar (1-2)

Magnetic Resonance Imaging (MRI) and/or Computed Tomography (CT) Emphasis

Support Courses for CT and MRI (29-33 credit hours)

- RADT 3043 - Medical Ethics and Law (3)
- RADT 3123 - Sectional Anatomy (3)
- RADT 3143 - Imaging Pathophysiology (3)
- RADT 3253 - Patient Care and Assessment III (3)
- RADT 3403 - Radiobiology & Health Physics (3)
- RADT 3563 - Managing Clinical Information (3)
- RADT 3863 - Clinical Internship (2-6)
(3 credit hours required)
- RADT 4203 - Patient Education in Radiology (3)
- RADT 4303 - Cardiology (3)
- RADT 4863 - Clinical Internship (2-4) (3 credit hours required)

Recommended Course to Fulfill Diversity

- RADT 3003 DV - Psycho-Social Medicine (3)

Magnetic Resonance Imaging (MRI) Required Courses (14 credit hours)

- RADT 4603 - Magnetic Resonance Imaging Physics and Instrumentation (3)
- RADT 4623 - Advanced MRI Procedures and Safety (3)
- RADT 4633 - Magnetic Resonance Imaging of the Central Nervous System (3)
- RADT 4643 - Magnetic Resonance of the Torso and Limbs (3)
- RADT 4912 - Comprehensive Review/MRI (2)

Computed Tomography (CT) Required Courses (11 credit hours)

- RADT 4613 - Computed Tomography of the Torso and Limbs **(3)**
- RADT 4653 - Computed Tomography of the Central Nervous System **(3)**
- RADT 4663 - Computed Tomography Physics and Instrumentations **(3)**
- RADT 4911 - Comprehensive Review/CT **(2)**

Elective

- RADT 4803 - Individual Research **(1-3)**

Cardiovascular-Interventional Technology (CIT) Emphasis**Required Courses (9 credit hours)**

- RADT 4313 - Visceral, Pelvic and Extremity Angiography **(3)**
- RADT 4333 - Head and Neck Angiography **(3)**
- RADT 4343 - Thoracic and Venous Procedures **(3)**

Support Courses for CIT (32 credit hours)

- RADT 3043 - Medical Ethics and Law **(3)**
- RADT 3123 - Sectional Anatomy **(3)**
- RADT 3143 - Imaging Pathophysiology **(3)**
- RADT 3253 - Patient Care and Assessment III **(3)**
- RADT 3263 - Diagnostic Services Pharmacology **(3)**
- RADT 3563 - Managing Clinical Information **(3)**
- RADT 3863 - Clinical Internship **(2-6)**
- RADT 4203 - Patient Education in Radiology **(3)**
- RADT 4303 - Cardiology **(3)**
- RADT 4863 - Clinical Internship **(2-4)**
- RADT 4913 - Comprehensive Review/CIT **(2)**

Recommended Course to Fulfill Diversity

- RADT 3003 DV - Psycho-Social Medicine **(3)**

Women's Imaging Emphasis**Required Courses (23 credit hours)**

- RADT 3863 - Clinical Internship **(2-6)** (3 credit hours required)
- RADT 4543 - Bone Densitometry **(3)**
- RADT 4553 - Breast Anatomy, Physiology and Pathology **(3)**
- RADT 4563 - Mammographic Positioning/Imaging Techniques **(3)**
- RADT 4572 - Patient Education and Clinical Examination **(2)**
- RADT 4583 - Mammographic Equipment and Quality Assurance **(3)**
- RADT 4862 - Clinical Internship **(2)**
- DMS 4510 - Breast Sonography **(1)**
- DMS 4841 - Breast Clinical **(3)**

Support Courses (15 credit hours)

- RADT 3003 DV - Psycho-Social Medicine **(3)**
- RADT 3043 - Medical Ethics and Law **(3)**
- RADT 3423 - Federal Regulations **(3)**
- RADT 4573 - The Female Patient and Medical Imaging **(3)**
- DMS 4110 - Sonography Principles & Instrumentation **(3)**

Electives

- RADT 3563 - Managing Clinical Information **(3)**
- RADT 4833 - Directed Readings and Research **(3)**
- RADT 4914 - Comprehensive Review/M **(2)**
- RADT 4992 - Seminar **(1-2)** (2 credit hours required)

Radiologist Assistant Emphasis

Students interested in the Radiologist Assistant (RA) Program should contact the Department of Radiologic Sciences.

A minor emphasis is not required.

Prerequisites: Applicants must be an ARRT registered technologist, have a minimum of five years experience as a registered technologist in radiography, meet the Degree and General Education Requirements at Weber State University, and have the consent of a radiologist.

Required Courses (45 credit hours)

- RADT 5403 - Evaluation of the Osseous System **(3)**
- RADT 5413 - Evaluation of the Chest **(3)**
- RADT 5423 - Evaluation of the Abdomen and G I System **(3)**
- RADT 5433 - Evaluation of the Genitourinary System **(3)**
- RADT 5443 - Clinical Pathways **(3)**
- RADT 5453 - Evaluation/CNS and Facial Structures **(3)**
- RADT 5463 - Problem Patient Management **(3)**
- RADT 5473 - Invasive Imaging Procedures **(3)**
- RADT 5861 - Clinical Preceptorship **(3)**
- RADT 5862 - Clinical Preceptorship **(3)**
- RADT 5863 - Clinical Preceptorship **(3)**
- RADT 5864 - Clinical Preceptorship **(3)**
- RADT 5865 - Clinical Preceptorship **(3)**
- RADT 5867 - Competency Assessment/Residency **(3)**
- RADT 5868 - Final Competency Assessment **(3)**

Support Courses (33 credit hours)

- RADT 3003 DV - Psycho-Social Medicine **(3)**
- RADT 3043 - Medical Ethics and Law **(3)**
- RADT 3123 - Sectional Anatomy **(3)**
- RADT 3143 - Imaging Pathophysiology **(3)**
- RADT 3253 - Patient Care and Assessment III **(3)**
- RADT 3263 - Diagnostic Services Pharmacology **(3)**
- RADT 3403 - Radiobiology & Health Physics **(3)**
- RADT 3423 - Federal Regulations **(3)**
- RADT 4203 - Patient Education in Radiology **(3)**
- RADT 4303 - Cardiology **(3)**
- RADT 4833 - Directed Readings and Research **(3)**

Radiologic Sciences, Advanced, 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.

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.

Radiologic Sciences Departmental Honors

Please contact the Radiologic Sciences Department for advisement and permission prior to enrolling in Honors courses.

Requirements for Radiologic Sciences Departmental Honors:

1. Maintain a cumulative GPA of 3.5
2. Complete 3 credit hours of University General Honors courses. (It is suggested students take upper division HNRS 3900: Colloquia)
3. Complete 12 upper division credit hours within the major with an Honors Component. At the beginning of each course, students should complete a "Component Contract" with the appropriate professor regarding the work expected for Honors credit. These forms are located in the Honors Center and must be returned no later than the end of the third week of classes.
4. Earn an "A" in Baccalaureate Thesis. Student research should exhibit writing proficiency, reflect originality, demonstrate critical thinking skills, and accurately interpret results. The final paper must be submitted for publication within a peer-reviewed journal.
5. Perform at least 30 hours of community service outside of clinical requirements.

Department of Respiratory Therapy

Department Chair: Paul Eberle, PhD, RRT

Medical Director: Christopher Anderson, M.D.

Location: Marriott Allied Health Building, Rm 309

Telephone Contact: Alisa Kimball, 801-626-7071

Associate Professor: Paul Eberle; **Assistant Professors:** Janelle Gardiner, Mich Oki, Lisa Trujillo

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), 1248 Harwood Road, Bedford, Texas 76021-4244.

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.

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 EN - Introductory College Writing (3)
- COMM 1020 HU - Principles of Public Speaking (3) or
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- PSY 1010 SS - Introductory Psychology (3) or
- PSY 2000 SS - Interpersonal Relationships (3)
- HTHS 2230 - Introductory Pathophysiology (3)
- REST 1560 - Multi-Skilled Health Care Worker (1) or CNA, military medic, or EMT course **either**
- HTHS 1110 LS - Biomedical Core (4) and
- HTHS 1111 - Biomedical Core (continued) (4) or introductory level courses in the three basic sciences:
- CHEM 1010 PS - Introductory Chemistry (3)
- MICR 1113 LS - Introductory Microbiology (3)
- ZOOL 2200 - Human Physiology (4)

General Education

Refer to Degree and General Education 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 1110/HTHS 1111 **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.

Major Course Requirements for AAS Degree

Respiratory Therapy Courses Required (38 credit hours)

- REST 1540 - Survey of Respiratory Therapy (1)
- REST 1560 - Multi-Skilled Health Care Worker (1)
- REST 2140 - Introduction to Basic Therapeutic Modalities Lab (3)
- REST 2160 - Equipment Management Lab (3)
- REST 2210 - Elementary Cardiopulmonary Anatomy and Physiology (3)
- REST 2230 - Cardiopulmonary Pathophysiology (2)
- REST 2250 - Basic Patient Assessment (2)
- REST 2270 - Application of Cardiopulmonary Diagnostics (4)
- REST 2300 - Basic Modalities in Respiratory Care I (3)

- REST 2310 - Basic Modalities in Respiratory Care II (3)
- REST 2320 - Essentials of Mechanical Ventilation (2)
- REST 2330 - Entry Level Respiratory Therapy Review (1)
- REST 2520 - Principles of Pharmacology (2)
- REST 2700 - Clinical Applications (4)
- REST 2710 - Specialty Clinical Experiences (1)
- REST 2720 - Clinical Applications (3)

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 is required for graduation (includes AAS degree requirements); 67 of these are REST credits. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 29 of these are required REST credits. Departmental standards are applied to independent projects and directed readings.

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 and General Education 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 1110/HTHS 1111 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 (29 credit hours minimum)

- REST 3210 - Advanced Cardiopulmonary Anatomy and Physiology (2)
- REST 3220 - Advanced Cardiopulmonary Pathophysiology (2)
- REST 3230 - Advanced Cardiopulmonary Technology (2)
- REST 3260 - Neonatal/Pediatric Respiratory Care (2)
- REST 3270 - Adult Critical Care (2)
- REST 3280 - Patient Care Continuum/Quality Management (3)
- REST 3760 - Clinical Applications of Neonatal/Pediatric Respiratory Care (4)
- REST 3770 - Clinical Applications of Adult Critical Care (4)
- REST 3780 - Clinical Applications (2)
- REST 3900 - Clinical Simulation Seminar (3)
- REST 4610 - Advanced Patient Assessment (1-2)
- REST 4620 - Health Promotion (1-2)
- REST 4630 - Continuous Quality Improvement (1-2) or
- HIM 3300 - Introduction to Quality Improvement in Health Care (3)

Upper Division Electives (9 credit hours minimum)

In addition to the 29 REST credit hours required above, a minimum of 9 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 (1)
- REST 3501 - Anatomy and Physiology of Sleep (3)
- REST 3502 - Introduction to Sleep Disorders (2)
- REST 3503 - Instrumentation and Computers in Polysomnography (2)
- REST 3505 - Therapeutics of Managing Sleep Apnea (2)
- REST 4800 - Independent Projects (1-6)
- REST 4830 - Directed Readings (1-3)
- REST 4850 - Study Abroad (1-6)
- REST 4990 - Senior Seminar (2)
- HAS 3000 - The Health Care System (3)
- HAS 3230 - Health Communication (3)
- HAS 3260 - Health Care Administrative and Supervisory Theory (3)
- HAS 4400 - Legal and Ethical Aspects of Health Administration (3)

Respiratory Therapy (BIS)

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.

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.

College of Science

Dr. David Matty, 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, Geosciences, 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.

Location: Science Lab, Room 611

Telephone Contact: Lisa Ostermiller 801-626-6159

Department Chairs/Directors

Botany: Dr. Barbara Wachocki	801-626-6174
Chemistry: Dr. Laine Berghout	801-626-6952
Developmental Mathematics Program: Ms. Kathryn Van Wagoner	801-626-7478
Geosciences: Dr. Richard Ford	801-626-7139
Mathematics: Dr. Paul Talaga	801-626-6095
Microbiology: Dr. Michele Culumber	801-626-6949
Physics: Dr. Colin Inglefield	801-626-6163
Zoology: Dr. Samuel I. Zeveloff	801-626-6165

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 emphasis 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

Location: Lind Lecture Hall 231

Telephone: 801-626-6160

Web Site: weber.edu/sciencecenter

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. In addition, the Center coordinates 6000 level professional development courses (offered in collaboration with the Jerry and Vickie Moyes College of Education) to teachers. MED 6100S through MED 6500S are especially appropriate for enhancing content, understanding, and pedagogy for teachers of grades K-6. MED 6500S through MED 6900S are designed for teachers of grades 7-12. Teachers may also register for certain 5000 level courses through the content departments.

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 Courses.

Science Education courses are listed following Master of Education (MED) under Courses.

Chemical Technology Center

Director: Dr. Edward B. Walker
Location: Science Lab Building, 503M
Telephone: 801-626-7444, Fax: 801-626-7445,
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.

Museum of Natural Science

Location: Lind Lecture Hall 104
Telephone: 801-626-6653

The Museum of Natural Science is an educational facility available to students in elementary and secondary schools, college students, and members of the community. Teachers wishing instructional materials and/or activities concerning the Museum's exhibits should contact the Director of the Museum of Natural Science, 801-626-6653. The Museum is open to the public from 8 a.m. to 5 p.m. Monday through Friday, except on holidays. Student group visits are encouraged in the afternoon.

Layton P. Ott Planetarium

Director: Dr. Stacy Palen, SL 209
Web Site: weber.edu/planetarium

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 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.

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.

Emphasis	Advisor	Room	Telephone
Pre-Chiropractic	Dr. Barbara Trask	SL 407	801-626-7755
Pre-Dentistry	Dr. Matthew Domek	SL 307M	801-626-6950
Pre-Medical	Dr. Barbara Trask	SL 407	801-626-7755
Pre-Optometry	Dr. Barbara Trask	SL 407	801-626-7755
Pre-Pharmacy	Dr. Don Davies	SL 608	801-626-6224

Pre-Physical & Occupational Therapy	Ms. Sherrie Jensen	SW 102L	801-626-7425
Pre-Physician Assistant	Dr. Karen Nakaoka	SL 306M	801-626-7509
Pre-Podiatry	Dr. Barbara Trask	SL 407	801-626-7755
Pre-Veterinary Medicine	Dr. Ron A. Meyers	SL 409	801-626-6170

Biotechnician (AS)

Location: Science Lab, SL402
Telephone: 801-626-6165

Grade Requirements: Cumulative GPA of 2.00 or higher.

Credit Hour Requirements: Total of 62 credit hours is required - 38 of these are required within the program.

Advisement

Students should meet with the program advisor; call the Department of Zoology secretary (801-626-6165) for information.

General Education

Refer to Degree and General Education Requirements for Associate of Science requirements. These should include ECON 1740, HIST 1700, or POLS 1100. The following courses required for the Biotechnician program will satisfy the quantitative core and the life and physical sciences portion of the general education requirements: MATH 1050, CHEM 1210, PHYS 1010, and MICR 2054.

Students should complete the AS program in two years and take the laboratory intensive courses for the Biotechnician Institutional Certificate in their third year.

Major Course Requirements for AS Degree

Courses Required (37 credit hours)

- MICR 2054 LS - Principles of Microbiology (4)
- MICR 3053 - Microbiological Procedures (3)
- BTNY 2104 - Plant Form and Function (4) or
- BTNY 2114 - Evolutionary Survey of Plants (4)
- ZOOL 1110 - Principles of Zoology I (4)
- ZOOL 1120 - Principles of Zoology II (4)
- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- PHYS 1010 PS - Elementary Physics (3)
- BTNY 2600 - Laboratory Safety (1) or
- MICR 2600 - Laboratory Safety (1)
- MATH 1050 QL - College Algebra (4)

Biotechnician Institutional Certificate

Location: Science Lab, SL402
Telephone: 801-626-6165

Grade Requirements: Cumulative GPA of 2.00 or higher.

Credit Hour Requirements: 30 credit hours in addition to the requirements for the Biotechnician (AS).

Advisement

Students should meet with the program advisor; call the Department of Zoology secretary (801-626-6165) for information.

Course Requirements for Institutional Certificate

Thirty (30) credit hours are to be taken in addition to those courses required for the Biotechnician (AS).

Required Courses (22 credit hours)

- BTNY 3204 - Plant Physiology (4)
- ZOOL 3300 - Genetics (4)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- MICR 4154 - Microbial Genetics (4) or
- ZOOL 4300 - Molecular Genetics (4)

Electives (select 8 credit hours)

- CHEM 3000 - Quantitative Analysis (4)
- CHEM 3050 - Instrumental Analysis (4)
- CHEM 3070 - Biochemistry I (4)
- MICR 3254 - Immunology (4)
- MICR 4252 - Cell Culture (2)
- MICR 4354 - Industrial Microbiology and Biotechnology (4)
- MICR 4554 - Virology (4)
- BTNY 3105 - Anatomy and Morphology of Vascular Plants (5)
- BTNY 3514 - Algology (4)
- ZOOL 3200 - Cell Biology (4)
- ZOOL 4120 - Histology (4)
- ZOOL 4220 - Endocrinology (4) or
- ZOOL 4210 - Advanced Human Physiology (4)
- ZOOL 4500 - Parasitology (4) or
- MICR 3305 - Medical Microbiology (5)

Pre-Chiropractic Program

For information see weber.edu/premedicalprofessionalprograms or call the Pre-Medical Professional Programs office 801-626-7755.

Students pursuing this program 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.

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.

Pre-Chiropractic Advisor: Dr. Barbara Trask

Location: SL 407

Telephone: 801-626-7755

Courses

Use pre-medical requirements and follow the catalog from the chiropractic school of your choosing.

Pre-Dentistry Program

For information see weber.edu/premedicalprofessionalprograms or call the Pre-Medical Professional Programs office 801-626-7755.

Students pursuing this program 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.

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.

Pre-Dentistry Advisor: Dr. Matthew Domek

Location: SL 307M

Telephone: 801-626-6950

Courses Required (57-61 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1) and
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- MATH 1050 QL - College Algebra (4)
- MATH 1060 - Trigonometry (3)
- MATH 1210 - Calculus I (4) and
- MATH 1220 - Calculus II (4)
- PHYS 2010 PS - College Physics I (5) or
- PHYS 2020 - College Physics II (5)
- ZOOL 1110 - Principles of Zoology I (4)
- ZOOL 1120 - Principles of Zoology II (4) (Zoology majors)
- ZOOL 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)

Recommended Electives (none required)

- ECON 1010 SS - Economics as a Social Science (3)
- MICR 2054 LS - Principles of Microbiology (4)
- MICR 3254 - Immunology (4)
- ZOOL 3200 - Cell Biology (4)
- ZOOL 3300 - Genetics (4)
- ZOOL 4050 - Comparative Vertebrate Anatomy (4)
- ZOOL 4120 - Histology (4)
- ZOOL 4210 - Advanced Human Physiology (4)
- ZOOL 4500 - Parasitology (4)

Pre-Medical Program, The Dr. Ezekiel R. Dumke Family

The goal of the pre-medical program is to prepare students for a national competitive examination (the MCAT) and for medical school admission and courses. The pre-medical program is compatible with a variety of majors. Pre-medical classes and/or emphases exist within several departments of the College of Science.

For information see weber.edu/premedicalprofessionalprograms or call the Pre-Medical Professional Programs office 801-626-7755.

Students pursuing this program 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.

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.

Pre-Medical Advisor: Dr. Barbara Trask

Location: SL 407

Telephone: 801-626-7755

Courses Required (65-71 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1) and
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- ENGL 1010 EN - Introductory College Writing (3) and
- ENGL 2010 EN - Intermediate College Writing (3)
- MATH 1050 QL - College Algebra (4) and
- MATH 1060 - Trigonometry (3) or
- MATH 1080 QL - Pre-calculus (5)
- MICR 2054 LS - Principles of Microbiology (4)
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5)
- ZOOL 1110 - Principles of Zoology I (4)
- ZOOL 1120 - Principles of Zoology II (4) (Zoology majors)
- ZOOL 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)
- ZOOL 3200 - Cell Biology (4)
- ZOOL 3300 - Genetics (4)

AP or CLEP credits in English or science courses are not acceptable to medical schools.

Additional Recommended Course Electives

Refer to the pre-medical emphases in the departments of Zoology, Chemistry and Microbiology, and consult with advisors.

- CHEM 3070 - Biochemistry I (4)
- MICR 3254 - Immunology (4)
- MICR 3305 - Medical Microbiology (5)
- MICR 4252 - Cell Culture (2)
- MICR 4554 - Virology (4)
- ZOOL 4050 - Comparative Vertebrate Anatomy (4)
- ZOOL 4100 - Vertebrate Embryology (4)
- ZOOL 4120 - Histology (4)
- ZOOL 4210 - Advanced Human Physiology (4)

Pre-Optometry Program

For information see weber.edu/premedicalprofessionalprograms or call the Pre-Medical Professional Programs office 801-626-7755.

Students pursuing this program 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.

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.

Pre-Optometry Advisor: Dr. Barbara Trask

Location: SL 407

Telephone: 801-626-7755

Courses Required (77-81 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1) and
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- ENGL 1010 EN - Introductory College Writing (3) and
- ENGL 2010 EN - Intermediate College Writing (3)
- MATH 1040 QL - Introduction to Statistics (3)
- MATH 1050 QL - College Algebra (4)
- MATH 1060 - Trigonometry (3)
- MATH 1020 - Fundamentals of Geometry (3) and
- MATH 1220 - Calculus II (4)
- MICR 2054 LS - Principles of Microbiology (4)
- PHYS 2010 PS - College Physics I (5) or
- PHYS 2020 - College Physics II (5)
- PSY 1010 SS - Introductory Psychology (3)
- ZOOL 1110 - Principles of Zoology I (4)
- ZOOL 1120 - Principles of Zoology II (4) (Zoology majors)
- ZOOL 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)
- ZOOL 3200 - Cell Biology (4)

Electives

Select courses as needed to finish requirements for graduation.

Pre-Pharmacy Program

For information see weber.edu/premedicalprofessionalprograms or call the Pre-Medical Professional Programs office 801-626-7755.

Students pursuing this program 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.

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.

Pre-Pharmacy Advisor: Dr. Don Davies

Location: SL 608

Telephone: 801-626-6224

Courses Required (62 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1) and
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- ENGL 1010 EN - Introductory College Writing (3) and
- ENGL 2010 EN - Intermediate College Writing (3)
- ENGL 2100 - Technical Writing (3)
- MATH 1050 QL - College Algebra (4)
- MATH 1060 - Trigonometry (3)
- MATH 1210 - Calculus I (4) and
- MATH 1220 - Calculus II (4)
- PHYS 2010 PS - College Physics I (5) or
- PHYS 2020 - College Physics II (5)
- ZOOL 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)

Electives

Electives should include general education graduation requirements.

More advanced classes in the sciences may be taken at the option of the student.

Pre-Physical Therapy Program

For information see weber.edu/premedicalprofessionalprograms or call the Pre-Medical Professional Programs office 801-626-7755.

Students pursuing this program should satisfy the pre-professional requirements while completing a bachelor's degree within the College of Science or in Athletic Therapy (BS). 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.

Pre-Physical Therapy Advisor: Ms. Sherrie Jensen

Location: SW 102L

Telephone: 801-626-7425

Courses Required (60-64 credit hours)

- CHEM 1110 PS - Elementary Chemistry (5) and
- CHEM 1120 - Elementary Organic Bio-Chemistry (5) or
- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- ENGL 1010 EN - Introductory College Writing (3)
- ENGL 3100 - Professional and Technical Writing (3)
- HLTH 1300 - First Aid: Responding to Emergencies (2)
- MATH 1040 QL - Introduction to Statistics (3) or
- PSY 3600 - Statistics in Psychology (3) or
- SOC 3600 - Social Statistics (3)
- MATH 1060 - Trigonometry (3)
- MATH 1210 - Calculus I (4)
- MICR 2054 LS - Principles of Microbiology (4)
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5)
- PSY 1010 SS - Introductory Psychology (3)
- PSY 3010 - Abnormal Psychology (3)
- ZOOL 1110 - Principles of Zoology I (4)
- ZOOL 1120 - Principles of Zoology II (4) (Zoology majors)
- ZOOL 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)

**(Zoology majors)*

Specific requirements vary from one program to another. Please check specific prerequisite course requirements for particular physical therapy degree programs.

Pre-Physician Assistant Program

For information see weber.edu/premedicalprofessionalprograms or call the Pre-Medical Professional Programs office 801-626-7755.

Students pursuing this program 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.

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.

Pre-Physician Assistant Advisor: Dr. Karen Nakaoka

Location: SL 306M

Telephone: 801-626-7509

Courses

Use pre-medical requirements and follow the catalog from the physician assistant school of your choosing.

Pre-Podiatry Program

For information see weber.edu/premedicalprofessionalprograms or call the Pre-Medical Professional Programs office 801-626-7755.

Students pursuing this program 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.

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.

Pre-Podiatry Advisor: Dr. Barbara Trask

Location: SL 407

Telephone: 801-626-7755

Courses

Use pre-medical requirements and follow the catalog from the podiatry school of your choosing.

Pre-Veterinary Medicine Program

For information see weber.edu/premedicalprofessionalprograms or call the Pre-Medical Professional Programs office 801-626-7755.

Students pursuing this program 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.

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.

Pre-Veterinary Advisor: Dr. Ron A Meyers

Location: SL 409

Telephone: 801-626-6170

Courses Required (79 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1) and
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- CHEM 3070 - Biochemistry I (4)
- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 2110 HU - Interpersonal & Small Group Communication (3)
- MATH 1040 QL - Introduction to Statistics (3) or

- PSY 3600 - Statistics in Psychology (3)
- MATH 1050 QL - College Algebra (4)
- MICR 2054 LS - Principles of Microbiology (4)
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5)
- ZOOL 1110 - Principles of Zoology I (4) and
- ZOOL 1120 - Principles of Zoology II (4)
- ZOOL 3200 - Cell Biology (4)
- ZOOL 3300 - Genetics (4)
- ZOOL 3450 - Ecology (4)
- ZOOL 3600 - Comparative Physiology (4) or
- ZOOL 4210 - Advanced Human Physiology (4)
- ZOOL 3720 - Evolution (3)
- ZOOL 4990 - Seminar (1)

Recommended Electives (none required)

- MATH 1210 - Calculus I (4) and
- MATH 1220 - Calculus II (4)
- MICR 3254 - Immunology (4)
- ZOOL 3600 - Comparative Physiology (4)
- ZOOL 4050 - Comparative Vertebrate Anatomy (4)
- ZOOL 4100 - Vertebrate Embryology (4)
- ZOOL 4120 - Histology (4)
- ZOOL 4500 - Parasitology (4)

Department of Botany

Department Chair: Barbara Wachocki

Location: Science Lab, Room SL402M

Telephone: Juliette Draney 801-626-6174

Professors: Eugene Bozniak, Stephen Clark, Ron Deckert, Suzanne Harley, Barbara Wachocki

While plants have intrigued and delighted people for thousands of years, they still remain undervalued and too little appreciated. We somehow manage to see a faint connection between plants and our basic needs of food, shelter, clothing, and energy, but only in a rather limited way. Remote connections are made, if any 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, viz 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, marine biology, environmental science, natural medicine, and teaching.

The Botany Department at Weber State University offers undergraduate training in all areas of botany. Individuals who choose to study botany fall into three broad groups. In order to serve each group effectively, the Botany Department offers a Botany Major with three tracks. Track A is designed to prepare students for careers in laboratory research or post-baccalaureate studies at graduate or professional schools. Track B is designed to prepare students for field-related careers such as ecology, environmental science, and natural resource management. Track C, with greater flexibility through more elective courses, is designed to meet the needs of students who wish to be more broadly trained because of general interests in Plant Biology or of those students who enter the program with an Associate of Science Degree.

Botany majors in all tracks develop a portfolio. The portfolio is a multidimensional collection of both student and faculty selected materials that are both developmental and representational in nature. Within the portfolio, students can document their acquisition of a variety of skills, including critical thinking, scientific reasoning, writing, speaking, and effective arguing. The portfolio is used for assessment purposes in addition to serving as an incentive to the student for developing good habits in assembling and organizing materials of relevance to themselves and others, such as personnel managers or graduate school selection committees. The department has also developed an undergraduate thesis program which provides a desirable capstone experience for many of the Botany majors.

The Botany Department cooperates in offering a Biology Composite Teaching Major; this program prepares individuals who are interested in teaching Biology at the secondary school level (described under the Department of Zoology in this catalog).

The Botany Department meets the needs of students interested in pursuing post-baccalaureate professional degrees and certificates at schools of natural medicine, botanical medicine, naturopathy, and Chinese medicine through Option 2 of the Track A Botany Major, Pre-Natural Medicine. The department also serves students who are interested in baccalaureate-level professional programs in Agriculture, Horticulture, Forestry, and Range Management. After completing a Pre-Agriculture, Pre-Horticulture, Pre-Forestry, or Pre-Range Management program at Weber State, a student must continue his or her education at another institution in order to obtain a baccalaureate degree in one of these fields. The catalog of the school to which the student plans to transfer should be consulted as a guide in registering for courses at Weber State.

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 on the fourth floor of the Science Lab Building and contains more than 24,000 preserved plant specimens 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. It also serves as the repository of the plants collected for the Institute of American Indian Botany.

Institute of American Indian Botany

The Institute is dedicated to the study of American Indian Botany and provides a place where all of those who have interest can learn, conduct research, teach, and preserve for generations yet to come, this segment of our great American heritage.

Biotechnician Training Program

The Department of Botany participates with the Departments of Microbiology and Zoology in the Associate of Science degree and 3rd year Certificate in Biotechnician training for the biotechnology industry. This program is described earlier in this College of Science section of the catalog.

Biology Composite Teaching Major

See the Department of Zoology in this catalog for program requirements.

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 and Interdisciplinary Programs section of the catalog.)

Pre-Agriculture and Pre-Horticulture

Two Years (No Degree)

Advisor: *Dr. Barbara Wachocki*

Location: *Science Lab, SL402M*

Telephone: *801-626-7223*

Follow the catalog of a university which offers a degree program in these fields for general requirements, etc.

Course Requirements for Two Year Program

Botany Courses Required (24 credit hours)

- BTNY 2104 - Plant Form and Function (4)
- BTNY 2114 - Evolutionary Survey of Plants (4)
- BTNY 2121 - Career Planning for Botanists (1)
- BTNY 2303 DV - Ethnobotany (3)
- BTNY 2413 - Introduction to Natural Resource Management (3)
- BTNY 2600 - Laboratory Safety (1)

Select two of the following:

- BTNY 3204 - Plant Physiology (4)
- BTNY 3214 - Soils (4)
- BTNY 3454 - Plant Ecology (4)
- BTNY 3624 - Taxonomy of Vascular Plants (4)

Required Support Courses (24-26 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- MATH 1050 QL - College Algebra (4) or
- MATH 1080 QL - Pre-calculus (5) or

- MATH 1210 - Calculus I (4) or
- MATH 1040 QL - Introduction to Statistics (3)

Select One Group:

- MICR 2054 LS - Principles of Microbiology (4) and
- MICR 3484 - Environmental Microbiology (4)
- **or**
- GEO 1115 - Physical Geology Lab (1) and
- GEO 1130 PS - Introduction to Meteorology (3) and
- GEO 2050 - Earth Materials (4)

Pre-Forestry and Pre-Range Management

Advisor: Dr. Barbara Wachocki

Location: Science Lab, SL402M

Telephone: 801-626-7223

Follow the catalog of a university which offers a degree program in these fields for general requirements, etc.

Course Requirements for Two Year Program

Botany Courses Required (24 credit hours)

- BTNY 2104 - Plant Form and Function (4)
- BTNY 2114 - Evolutionary Survey of Plants (4)
- BTNY 2121 - Career Planning for Botanists (1)
- BTNY 2303 DV - Ethnobotany (3)
- BTNY 2413 - Introduction to Natural Resource Management (3)
- BTNY 2600 - Laboratory Safety (1)

Select two of the following:

- BTNY 3214 - Soils (4)
- BTNY 3454 - Plant Ecology (4)
- BTNY 3624 - Taxonomy of Vascular Plants (4)

Required Support Courses (37-39 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- ECON 1100 SS - Environmental Issues and Economic Policy (3)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- GEO 1115 - Physical Geology Lab (1)
- GEO 1130 PS - Introduction to Meteorology (3)
- GEO 2050 - Earth Materials (4)
- MATH 1050 QL - College Algebra (4) or
- MATH 1080 QL - Pre-calculus (5) or
- MATH 1210 - Calculus I (4) or
- MATH 1040 QL - Introduction to Statistics (3)
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5)

Botany (BS)

Program Prerequisite: Not required.

Minor: A minor is required. Botany majors in Track A (Option 1 or Option 2) will meet the requirements for a minor in Chemistry.

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 and General Education Requirements.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; required within the major are 91-96 credit hours for Track A Option 1 (*minor included*), 109-113 credit hours for Track A Option 2 (*minor included*), 67-88 credit hours for Track B (*minor not included*) and 70-85 credit hours for Track C (*minor not included*). A total of 40 upper division credit hours is required (courses numbered 3000 and above); required within the major are 29-38 upper division credit hours for Track A Option 1, 28-33 upper division credit hours for Track A Option 2, 25-39 upper division credit hours for Track B and 28-37 upper division credit hours for Track C.

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 and General Education Requirements for Bachelor of Science requirements. The following courses required for the Botany major will also satisfy general education requirements:

Track A Option 1: BTNY 1403, BTNY 2303, CHEM 1210, MATH 1040 or MATH 1050 or MATH 1080, and PHYS 2010 or PHYS 2210.

Track A Option 2: BTNY 2303, CHEM 1210, COMM 1020, ECON 1740, ENGL 2010, MATH 1040 or MATH 1050, MICR 1153 or MICR 2054, PHYS 2010 or PHYS 2210, and PSY 1010.

Track B: BTNY 1403, BTNY 2303, CHEM 1050 or CHEM 1110 or CHEM 1210, GEO 1110 or GEOG 1000, MATH 1040 or MATH 1050, and PHYS 1010 or PHYS 2010 or PHYS 2210.

Track C: BTNY 1403, CHEM 1110 or CHEM 1210, MATH 1040 or MATH 1050 or MATH 1080, and PHYS 1010 or PHYS 2010 or PHYS 2210.

All Botany majors are required to develop a portfolio. The portfolio requirements are explained in detail when a student takes BTNY 2121. The final evaluation of the portfolio takes place in BTNY 4980.

Major Course Requirements for BS Degree

Track A (Laboratory Emphasis or Pre-Professional)

This program includes a minor in Chemistry

Botany Core Courses Required (22-23 credit hours)

- BTNY 1403 LS - Environment Appreciation (3-4) (3 credit hours required) or
- BTNY 3403 - Environment Appreciation (3) *
- BTNY 2104 - Plant Form and Function (4)
- BTNY 2114 - Evolutionary Survey of Plants (4)
- BTNY 2121 - Career Planning for Botanists (1)

- BTNY 2303 DV - Ethnobotany (3)
- BTNY 2600 - Laboratory Safety (1)
- BTNY 3303 - Plant Genetics (3) (*Option 1 or 2*) or
- ZOOL 3300 - Genetics (4) (*Option 2*)
- BTNY 4980 - Portfolio Summative Assessment (3)

* Students selecting Option 2 should take BTNY 3403.

Option 1 (Laboratory Emphasis or Graduate School Preparation)

Additional Botany Courses Required (9 credit hours)

- BTNY 3105 - Anatomy and Morphology of Vascular Plants (5)
- BTNY 3204 - Plant Physiology (4)

Elective Botany Courses (16 credit hours minimum)

- BTNY 2203 - Home and Garden Plants (3)
- BTNY 2413 - Introduction to Natural Resource Management (3)
- BTNY 3153 - Biology of the Plant Cell (3)
- BTNY 3214 - Soils (4)
- BTNY 3454 - Plant Ecology (4)
- BTNY 3473 - Plant Geography (3)
- BTNY 3504 - Mycology (4)
- BTNY 3514 - Algology (4)
- BTNY 3523 - Marine Biology (3)
- BTNY 3583 - Herbal Medicines (3)
- BTNY 3643 - Intermountain Flora (3)
- BTNY 3624 - Taxonomy of Vascular Plants (4)
- BTNY 4113 - Plant Evolution (3)
- BTNY 4252 - Cell Culture (2)
- BTNY 4750 - Topics in Botany (1-5)
- BTNY 4800 - Individual Research (2) or
- BTNY 4850 - Thesis Research (2)
- BTNY 4830 - Readings in Botany (2) or
- BTNY 4840 - Thesis Readings (2)
- BTNY 4890 - Cooperative Work Experience (1-6)
- BTNY 4950 - Advanced Field Botany (1-5)
- BTNY 4970 - Botany Thesis (2) or
- BTNY 4990 - Seminar in Botany (1)

Required Support Courses (44-49 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2320 - Organic Chemistry II (4)
- CHEM 3000 - Quantitative Analysis (4) or
- CHEM 3070 - Biochemistry I (4)
- MATH 1050 QL - College Algebra (4) and
- MATH 1060 - Trigonometry (3) or
- MATH 1080 QL - Pre-calculus (5) or
- MATH 1210 - Calculus I (4) or
- MATH 1040 QL - Introduction to Statistics (3)
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)

Select two of the following:

- GEO 1110 PS - Dynamic Earth: Physical Geology (3) or
- GEOG 1000 PS - Natural Environments of the Earth (3)
- MICR 2054 LS - Principles of Microbiology (4)
- ZOOL 1110 - Principles of Zoology I (4)
- ZOOL 1120 - Principles of Zoology II (4)

Calculus and Statistics are recommended.

Option 2 (Pre-Natural Medicine)

Additional Botany Courses Required (10-11 credit hours)

- BTNY 3624 - Taxonomy of Vascular Plants (4)
- BTNY 3153 - Biology of the Plant Cell (3) or
- ZOOL 3200 - Cell Biology (4)
- BTNY 3583 - Herbal Medicines (3)

Elective Botany Courses (8 credit hours minimum)

- BTNY 3214 - Soils (4)
- BTNY 3454 - Plant Ecology (4)
- BTNY 3473 - Plant Geography (3)
- BTNY 3504 - Mycology (4)
- BTNY 3514 - Algology (4)
- BTNY 3523 - Marine Biology (3)
- BTNY 3643 - Intermountain Flora (3)
- BTNY 4113 - Plant Evolution (3)
- BTNY 4252 - Cell Culture (2)
- BTNY 4750 - Topics in Botany (1-5)
(2 credit hours required)
- BTNY 4800 - Individual Research (2) or
- BTNY 4850 - Thesis Research (2)
- BTNY 4830 - Readings in Botany (2) or
- BTNY 4840 - Thesis Readings (2)
- BTNY 4890 - Cooperative Work Experience (1-6)
(5 credit hours required)
- BTNY 4950 - Advanced Field Botany (1-5)
(2 credit hours required)
- BTNY 4970 - Botany Thesis (2) or
- BTNY 4990 - Seminar in Botany (1)

Required Support Courses (69-71 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 3070 - Biochemistry I (4)
- COMM 1020 HU - Principles of Public Speaking (3)
- ECON 1740 AI - Economic History of the United States (3)
- ENGL 2010 EN - Intermediate College Writing (3)
prerequisite is ENGL 1010 Introductory College Writing (3) or equivalent
- MATH 1040 QL - Introduction to Statistics (3) or
- MATH 1050 QL - College Algebra (4)
- MATH 1060 - Trigonometry (3)
- MICR 1153 LS - Elementary Public Health (3) or
- MICR 2054 LS - Principles of Microbiology (4)
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)

- PSY 1010 SS - Introductory Psychology (3)
- ZOOL 1110 - Principles of Zoology I (4) and
- ZOOL 1120 - Principles of Zoology II (4)
- ZOOL 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)

Suggested upper division courses include:

- ZOOL 3720 - Evolution (3)
(this will complete a minor in Zoology)
- MICR 3203 - The Immune System in Health & Disease (3) or
- MICR 3254 - Immunology (4)
- PHIL 3350 - Medical Ethics (3)
- HIST 3350 - History and Philosophy of Science (3)
- BSAD 3000 - Small Business Management (3)
(for non-business majors)

Track B (Field Botany Emphasis)

Botany Core Courses Required (19 credit hours)

- BTNY 1403 LS - Environment Appreciation (3-4)
(3 credit hours required) or
- BTNY 3403 - Environment Appreciation (3)
- BTNY 2104 - Plant Form and Function (4)
- BTNY 2114 - Evolutionary Survey of Plants (4)
- BTNY 2121 - Career Planning for Botanists (1)
- BTNY 2303 DV - Ethnobotany (3)
- BTNY 2600 - Laboratory Safety (1)
- BTNY 4980 - Portfolio Summative Assessment (3)

Additional Botany Courses Required (17 credit hours)

- BTNY 2413 - Introduction to Natural Resource Management (3)
- BTNY 3214 - Soils (4)
- BTNY 3454 - Plant Ecology (4)
- BTNY 3624 - Taxonomy of Vascular Plants (4)
- BTNY 4950 - Advanced Field Botany (1-5)
(2 credit hours required)

Elective Botany Courses (11 credit hours minimum)

- BTNY 2203 - Home and Garden Plants (3)
- BTNY 3105 - Anatomy and Morphology of Vascular Plants (5)
- BTNY 3153 - Biology of the Plant Cell (3)
- BTNY 3204 - Plant Physiology (4)
- BTNY 3303 - Plant Genetics (3)
- BTNY 3473 - Plant Geography (3)
- BTNY 3504 - Mycology (4)
- BTNY 3514 - Algology (4)
- BTNY 3523 - Marine Biology (3)
- BTNY 3583 - Herbal Medicines (3)
- BTNY 3643 - Intermountain Flora (3)
- BTNY 4113 - Plant Evolution (3)
- BTNY 4252 - Cell Culture (2)
- BTNY 4750 - Topics in Botany (1-5)
(2 credit hours required)
- BTNY 4800 - Individual Research (2) or
- BTNY 4850 - Thesis Research (2)
- BTNY 4830 - Readings in Botany (2) or
- BTNY 4840 - Thesis Readings (2)
- BTNY 4890 - Cooperative Work Experience (1-6)
(5 credit hours required)
- BTNY 4990 - Seminar in Botany (1) or
- BTNY 4970 - Botany Thesis (2)

Required Support Courses (20-41 credit hours)

- CHEM 1050 PS - Introduction to General, Organic & Biochemistry (5) or
- CHEM 1110 PS - Elementary Chemistry (5) and
- CHEM 1120 - Elementary Organic Bio-Chemistry (5) or
- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5) and
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3) * or
- GEOG 1000 PS - Natural Environments of the Earth (3)
- MATH 1040 QL - Introduction to Statistics (3) or
- MATH 1050 QL - College Algebra (4)
- PHYS 1010 PS - Elementary Physics (3) or
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)

Select One Group:

- MICR 2054 LS - Principles of Microbiology (4) and
- MICR 3484 - Environmental Microbiology (4) or
- GEO 1115 - Physical Geology Lab (1) and
- GEO 1220 - Historical Geology (4) and
- GEO 2050 - Earth Materials (4) or
- GEO 1115 - Physical Geology Lab (1) * and
- GEO 3400 - Remote Sensing I (4) * and
- GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems (4) * or
- GEOG 3450 - Cartography (3) and
- GEOG 3460 - Advanced Cartography (3) or
- ZOOL 1110 - Principles of Zoology I (4) and
- ZOOL 1120 - Principles of Zoology II (4)

*Students in Track B who are interest in pursuing an institutional certificate in Geomatics rather than a minor in Geospatial Analysis are encouraged to meet with the Botany department chair and the Geomatics advisor.

Track C (General Botany Emphasis)

Botany Core Courses Required (16 credit hours)

- BTNY 1403 LS - Environment Appreciation (3-4)
(3 credit hours required) or
- BTNY 3403 - Environment Appreciation (3)
- BTNY 2104 - Plant Form and Function (4)
- BTNY 2114 - Evolutionary Survey of Plants (4)
- BTNY 2121 - Career Planning for Botanists (1)
- BTNY 2600 - Laboratory Safety (1)
- BTNY 4980 - Portfolio Summative Assessment (3)

Additional Botany Courses Required (11 credit hours)

- BTNY 3303 - Plant Genetics (3)
- BTNY 3454 - Plant Ecology (4)
- BTNY 3624 - Taxonomy of Vascular Plants (4)

Elective Botany Courses (20 credit hours minimum; 6 lower division credit hours maximum)

- BTNY 2203 - Home and Garden Plants (3)
- BTNY 2303 DV - Ethnobotany (3)
- BTNY 2413 - Introduction to Natural Resource Management (3)
- BTNY 3105 - Anatomy and Morphology of Vascular Plants (5)
- BTNY 3153 - Biology of the Plant Cell (3)
- BTNY 3204 - Plant Physiology (4)
- BTNY 3214 - Soils (4)
- BTNY 3473 - Plant Geography (3)
- BTNY 3504 - Mycology (4)
- BTNY 3514 - Algology (4)
- BTNY 3523 - Marine Biology (3)
- BTNY 3583 - Herbal Medicines (3)
- BTNY 3643 - Intermountain Flora (3)
- BTNY 4113 - Plant Evolution (3)
- BTNY 4252 - Cell Culture (2)
- BTNY 4750 - Topics in Botany (1-5) (2 credit hours required)
- BTNY 4800 - Individual Research (2) or
- BTNY 4850 - Thesis Research (2)
- BTNY 4830 - Readings in Botany (2) or
- BTNY 4840 - Thesis Readings (2)
- BTNY 4890 - Cooperative Work Experience (1-6) (5 credit hours required)
- BTNY 4950 - Advanced Field Botany (1-5)
- BTNY 4990 - Seminar in Botany (1) or
- BTNY 4970 - Botany Thesis (2)

Required Support Courses
(23-38 credit hours)

- CHEM 1110 PS - Elementary Chemistry (5) and
- CHEM 1120 - Elementary Organic Bio-Chemistry (5) or
- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5) and
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- MATH 1040 QL - Introduction to Statistics (3) or
- MATH 1050 QL - College Algebra (4) or
- MATH 1080 QL - Pre-calculus (5) or
- MATH 1210 - Calculus I (4)
- PHYS 1010 PS - Elementary Physics (3) or
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)

Select two of the following:

- GEO 1110 PS - Dynamic Earth: Physical Geology (3) or
- GEOG 1000 PS - Natural Environments of the Earth (3)
- MICR 2054 LS - Principles of Microbiology (4)
- ZOOL 1110 - Principles of Zoology I (4)
- ZOOL 1120 - Principles of Zoology II (4)

Botany (BIS)

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.

Course Requirements for Minor/BIS

Botany Courses Required (12 credit hours)

- BTNY 2104 - Plant Form and Function (4)
- BTNY 2114 - Evolutionary Survey of Plants (4)
- BTNY 2303 DV - Ethnobotany (3)
- BTNY 2600 - Laboratory Safety (1)

Botany Electives

Select at least two approved upper division Botany courses for a minimum of 7 credit hours.

Botany Minor

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.

Course Requirements for Minor/BIS

Botany Courses Required (12 credit hours)

- BTNY 2104 - Plant Form and Function (4)
- BTNY 2114 - Evolutionary Survey of Plants (4)
- BTNY 2303 DV - Ethnobotany (3)
- BTNY 2600 - Laboratory Safety (1)

Botany Electives

Select at least two approved upper division Botany courses for a minimum of 7 credit hours.

Botany Departmental Honors

Please contact the Botany Department for advisement and permission prior to enrolling in Honors courses.

Requirements for Botany Departmental Honors:

1. Minimum overall GPA of 3.7.
2. A completed portfolio with a grade of A in the capstone "Portfolio Summative Assessment" course.
3. The completion of a written thesis and a thesis presentation that has been evaluated by the thesis committee and faculty that not only receives a grade of A in the "Botany Thesis" course but is deemed outstanding. The Honors Director will sign off on a Botany thesis written for departmental honors.

Outstanding is defined as meeting the following characteristics, which qualitatively and quantitatively go far beyond that reached by an "A" student.

- a. *The research shows originality of thought and interpretation. This could be in the construction of the hypothesis, application of a technique, development of the project, etc.*
- b. *The thesis demonstrates an understanding of the pertinent literature by showing relationships between this work and other published research, contains meaningful suggestions for subsequent research by expanding the ideas of this research to*

provide new questions for further study, unifies the work with a broader biological context through suggesting inter-relationships with ideas outside of this area of study, etc.

- c. *The student has displayed initiative throughout the planning and execution of the project with regard to at least one of the following: obtaining financial support, arranging facilities or study site, collaborating outside of the dept/WSU, etc.*
 - d. *The research is of sufficient quality to be publishable in a peer-reviewed journal or suitable for presentation before a professional society.*
4. Invitation to make a poster presentation of the thesis at the Nye Cortez Honors Banquet.

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

Department of Chemistry

Department Chair: Laine Berghout

Location: Science Lab, Room 502M

Telephone Contact: Colleen Boam 801-626-6952

Professors: Laine Berghout, Charles Davidson, Todd M. Johnson, Andreas Lippert, Barry A. Lloyd, Michelle Paustenbaugh, Spencer Seager, Stephen Stoker, Edward Walker; **Associate Professor:** Don Davies; **Assistant Professor:** Timothy Herzog

The Department of Chemistry is approved and certified by the American Chemical Society (ACS). Two options are offered which lead to the Bachelor of Science degree in Chemistry. Option 1 meets all the requirements of the ACS and the graduate's names are submitted to the ACS and certified by the department. Option 2 provides a good foundation in chemistry that is suitable for Pre-Medical, Pre-Dental, Pre-Pharmacy, and other Pre-Medical Professional students 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.

Physical Science Composite Teaching Major

See the Department of Physics section in this catalog for program requirements.

Chemical Technician (AAS)

Grade Requirements: Minimum overall GPA of 2.00 or "C".

Credit Hour Requirements: A total of 63 credit hours is required for graduation; 35 of these are required within the program.

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 and General Education 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 (21 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5)
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2600 - Laboratory Safety (1)
- CHEM 2990 - Chemical Technician Seminar (1)
- CHEM 3000 - Quantitative Analysis (4)
- CHEM 3020 - Computer Applications in Chemistry (1)
- CHEM 3050 - Instrumental Analysis (4)

Support Course Required (4 credit hours)

- *minimum* MATH 1010 - Intermediate Algebra (4) or *equivalent*

Elective Courses (Select 10 credit hours; at least 4 credit hours must be 2000-level or higher)

- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- CHEM 2890 - Cooperative Work Experience (1-6)
- CHEM 3070 - Biochemistry I (4)
- CHEM 3080 - Biochemistry II (3)
- CHEM 3090 - Biochemical Techniques (1)
- CHEM 4540 - Spectrometric and Separation Methods (4)
- CHEM 4890 - Cooperative Work Experience (1-6)
- MICR 2054 LS - Principles of Microbiology (4)
- MICR 3053 - Microbiological Procedures (3)
- MICR 3254 - Immunology (4)
- MICR 4154 - Microbial Genetics (4)
- MICR 4252 - Cell Culture (2)
- BTNY 1403 LS - Environment Appreciation (3-4)
- BTNY 2104 - Plant Form and Function (4)
- BTNY 3153 - Biology of the Plant Cell (3)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- GEO 1115 - Physical Geology Lab (1)
- GEO 2050 - Earth Materials (4)
- PHYS 1010 PS - Elementary Physics (3)
- PHYS 2010 PS - College Physics I (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5)
- PHYS 2020 - College Physics II (5) or
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- ZOOL 2200 - Human Physiology (4)
- ZOOL 3200 - Cell Biology (4)
- ZOOL 3300 - Genetics (4)
- ZOOL 4300 - Molecular Genetics (4)
- CJ 1350 - Introduction to Forensic Science (3)
- CJ 4110 - Physical Methods in Forensic Science (4)

- CJ 4115 - Friction Ridge Analysis (4)
- CJ 4120 - Advanced Methods in Forensic Science (4)

Other courses may be used to fill these 10 hours of electives if approved by the Chemistry Department Chair.

Chemical Technician Institutional Certificate

Grade Requirements: Minimum overall GPA of 2.00 or "C".

Credit Hour Requirements: A total of 41 credit hours is required.

Course Requirements for Institutional Certificate

Courses Required (21 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2600 - Laboratory Safety (1)
- CHEM 2990 - Chemical Technician Seminar (1)
- CHEM 3000 - Quantitative Analysis (4)
- CHEM 3020 - Computer Applications in Chemistry (1)
- CHEM 3050 - Instrumental Analysis (4)

Support Courses Required (10 credit hours)

- ENGL 1010 EN - Introductory College Writing (3)
- One additional course in oral or written communications (3)
- *Minimum* MATH 1010 - Intermediate Algebra (4) or equivalent

Elective Courses (Select 10 credit hours; at least 4 credit hours must be 2000-level or higher)

- CHEM 2310 - Organic Chemistry I (4) and CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 2320 - Organic Chemistry II (4) and CHEM 2325 - Organic Chemistry II Lab (1)
- CHEM 2890 - Cooperative Work Experience (1-6)
- CHEM 3070 - Biochemistry I (4)
- CHEM 3080 - Biochemistry II (3)
- CHEM 3090 - Biochemical Techniques (1)
- CHEM 4540 - Spectrometric and Separation Methods (4)
- CHEM 4890 - Cooperative Work Experience (1-6)
- MICR 2054 LS - Principles of Microbiology (4)
- MICR 3053 - Microbiological Procedures (3)
- MICR 3254 - Immunology (4)
- MICR 4154 - Microbial Genetics (4)
- MICR 4252 - Cell Culture (2)
- BTNY 1403 LS - Environment Appreciation (3-4)
- BTNY 2104 - Plant Form and Function (4)
- BTNY 3153 - Biology of the Plant Cell (3)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- GEO 1115 - Physical Geology Lab (1)
- GEO 2050 - Earth Materials (4)
- PHYS 1010 PS - Elementary Physics (3)
- PHYS 2010 PS - College Physics I (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5)
- PHYS 2020 - College Physics II (5) or

- PHYS 2220 - Physics for Scientists and Engineers II (5)
- ZOOL 2200 - Human Physiology (4)
- ZOOL 3200 - Cell Biology (4)
- ZOOL 3300 - Genetics (4)
- ZOOL 4300 - Molecular Genetics (4)
- CJ 1350 - Introduction to Forensic Science (3)
- CJ 4110 - Physical Methods in Forensic Science (4)
- CJ 4115 - Friction Ridge Analysis (4)
- CJ 4120 - Advanced Methods in Forensic Science (4)

Other courses may be used to fill these 10 hours of electives if approved by the Chemistry Department Chair.

Chemistry (BS)

Program Prerequisite: Not required for Chemistry major. Chemistry Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Minor: Not required for Options I and II; required for Teaching Major.

Grade Requirements: Average GPA of 2.00 or better in Chemistry courses. Also refer to the general grade requirements for graduation on Degree and General Education Requirements.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; 75 of these are required within Option 1, 71 are required within Option 2, and 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) is required for all Chemistry majors to fulfill University graduation requirements; 37 of these are earned from required courses within Option 1 and 33 from required courses within Option 2.

Advisement

All Chemistry majors should meet with the Chemistry Department Chair 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 major. Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

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: CHEM 1210 and PHYS 2210.

Major Course Requirements for BS Degree

Chemistry Core Courses Required (25 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- CHEM 3000 - Quantitative Analysis (4)
- CHEM 3020 - Computer Applications in Chemistry (1)

Option 1 (ACS Certified)

Additional Chemistry Courses Required (32 credit hours)

- CHEM 3050 - Instrumental Analysis (4)
- CHEM 3070 - Biochemistry I (4)
- CHEM 3400 - Molecular Symmetry and Applied Math for Physical Chemistry (3)
- CHEM 3410 - Physical Chemistry I (4) and
- CHEM 3420 - Physical Chemistry II (4)
- CHEM 4540 - Spectrometric and Separation Methods (4)
- CHEM 4600 - Inorganic Chemistry (4) *
- CHEM 4700 - Special Topics in Chemistry (1-3) (2 credit hours required)
- CHEM 4800 - Research and Independent Study in Chemistry (1-3) (2 credit hours required) *
- CHEM 4990 - Senior Seminar (1)

*Variable credit course. Repeat as necessary to obtain the required number of credits.

Support Courses Required (18 credit hours)

- MATH 1210 - Calculus I (4) and
- MATH 1220 - Calculus II (4)
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)

CHEM 2600 - Laboratory Safety (1) is highly recommended.

Study of Foreign Language and/or computer science is highly recommended for students who plan to pursue graduate studies in chemistry.

Additional upper division math courses (MATH 2210, MATH 2270, MATH 2280, MATH 3410, MATH 3710, MATH 4110) are strongly recommended for students planning to attend graduate school and study physical chemistry or chemical engineering.

Option 2

Additional Chemistry Courses Required (20 credit hours)

- CHEM 3050 - Instrumental Analysis (4)
- CHEM 3400 - Molecular Symmetry and Applied Math for Physical Chemistry (3)
- CHEM 3410 - Physical Chemistry I (4)
- CHEM 3420 - Physical Chemistry II (4)

- CHEM 4700 - Special Topics in Chemistry (1-3) (2 credit hours required) *
- CHEM 4800 - Research and Independent Study in Chemistry (1-3) (2 credit hours required) *
- CHEM 4990 - Senior Seminar (1)

*Variable credit course. Repeat as necessary to obtain the required number of credits.

Chemistry Electives (select at least 8 credit hours)

- CHEM 3070 - Biochemistry I (4)
- CHEM 3080 - Biochemistry II (3)
- CHEM 3090 - Biochemical Techniques (1)
- CHEM 4540 - Spectrometric and Separation Methods (4)
- CHEM 4600 - Inorganic Chemistry (4)

Support Courses Required (18 credit hours)

- MATH 1210 - Calculus I (4) and
- MATH 1220 - Calculus II (4)
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)

CHEM 2600 - Laboratory Safety (1) is highly recommended. Additional courses should be chosen to support career plans.

Students should consult with the Chair of the Chemistry Department.

Chemistry Teaching (BS)

Program Prerequisite: Not required for Chemistry major. Chemistry Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Minor: Not required for Options I and II; required for Teaching Major.

Grade Requirements: Average GPA of 2.00 or better in Chemistry courses. Also refer to the general grade requirements for graduation on Degree and General Education Requirements.

Credit Hour Requirements: A total of 120 credit hours is required for graduation; 75 of these are required within Option 1, 71 are required within Option 2, and 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) is required for all Chemistry majors to fulfill University graduation requirements; 37 of these are earned from required courses within Option 1 and 33 from required courses within Option 2.

Advisement

All Chemistry majors should meet with the Chemistry Department Chair 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 major. Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

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: CHEM 1210 and PHYS 2210.

Major Course Requirements for BS Degree

Chemistry Core Courses Required (25 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- CHEM 3000 - Quantitative Analysis (4)
- CHEM 3020 - Computer Applications in Chemistry (1)

Teaching Major

Additional Chemistry Courses Required (8 credit hours)

- CHEM 2600 - Laboratory Safety (1)
- CHEM 3570 - Foundations of Science Education (3)
- CHEM 4570 - Secondary School Science Teaching Methods (3)
- CHEM 4800 - Research and Independent Study in Chemistry (1-3) (1 credit hour required)

Electives (select at least 7 credit hours)

- CHEM 3050 - Instrumental Analysis (4)
- CHEM 3070 - Biochemistry I (4)
- CHEM 3080 - Biochemistry II (3)
- CHEM 3410 - Physical Chemistry I (4) (note prereqs)
- CHEM 3420 - Physical Chemistry II (4)

Support Course Required (3 credit hours)

- HIST 3350 - History and Philosophy of Science (3)

Consult with an advisor early in the 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.

Chemistry (BIS)

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.

Course Requirements for BIS Emphasis

Chemistry Courses Required (10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5)
- CHEM 1220 - Principles of Chemistry II (5)

BIS Electives (8 credit hours)

Select additional chemistry coursework including at least 8 credit hours of upper division courses (numbered 3000 and above).

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 20 credit hours is required.

Course Requirements for Minor

Chemistry Courses Required (10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5)
- CHEM 1220 - Principles of Chemistry II (5)

Minor Electives (10 credit hours)

Select at least 10 credit hours of chemistry coursework numbered 2000 and above.

Chemistry Teaching Minor

Grade Requirements: Even though 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.

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 (5)
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and

- CHEM 2315 - Organic Chemistry I Lab (1)
 - CHEM 2320 - Organic Chemistry II (4) and
 - CHEM 2325 - Organic Chemistry II Lab (1)
- Approved chemistry elective, 3000 or above**

Support Course Required (3 credit hours)

- HIST 3350 - History and Philosophy of Science (3)

If a student is not obtaining a Teaching Major in Sciences, the following courses are also required:

- CHEM 2600 - Laboratory Safety (1)
- CHEM 3570 - Foundations of Science Education (3)
- CHEM 4570 - Secondary School Science Teaching Methods (3)

Chemistry Departmental Honors

Please contact the Chemistry Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Enroll in the General Honors Program and complete 9 hours of General Honors courses.

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Fulfill requirements for either Option 1 or Option 2 of the departmental major, of which at least 12 hours must be completed on an Honors basis.

A student may receive Chemistry Honors credit in the following courses:

- CHEM 1210 PS - Principles of Chemistry I (5)
- CHEM 1215 - Principles of Chemistry I Lab (1)
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- CHEM 3000 - Quantitative Analysis (4)
- CHEM 3050 - Instrumental Analysis (4)
- CHEM 3070 - Biochemistry I (4)
- CHEM 3080 - Biochemistry II (3)
- CHEM 3090 - Biochemical Techniques (1)
- CHEM 3410 - Physical Chemistry I (4)
- CHEM 3420 - Physical Chemistry II (4)
- CHEM 4540 - Spectrometric and Separation Methods (4)
- CHEM 4600 - Inorganic Chemistry (4)
- CHEM 4700 - Special Topics in Chemistry (1-3)
- CHEM 4710 - Chemical Preparations (1-3)
- CHEM 4800 - Research and Independent Study in Chemistry (1-3)
- CHEM 4990 - Senior Seminar (1)

Additional Information:

In addition, complete a Chemistry Honors Senior Project in CHEM 4800 for a minimum of 2 hours (credit received in CHEM 4800 may count as part of the required 12 hours).

A written agreement should be reached with the appropriate professor regarding the work expected for Honors credit. This written contract must include regularly scheduled sessions with the professor. In addition, students will be required to complete a project associated with the course. Projects for each chemistry course (other than CHEM 4800) will generally require about 10 hours of productive effort. For CHEM 4800, each credit hour will generally require

about 45 hours of productive effort as well as a formal written report. The following are suggestions for the type of project but other may be agreed upon by the student and the professor:

1. The Honors student will do extra reading or a literature search and write a paper.
2. The Honors student will perform additional laboratory experiments and write a paper.
3. The Honors student will perform a research project and write a report.
4. The Honors student will present an oral report to a class or other appropriate group.

Department of Geosciences

Department Chair: Richard Ford

Location: Science Lab Building, Room SL 202M

Telephone Contact: Suzi Nicholson 801-626-7139

Professors: Jeffrey Eaton, Richard Ford, Marek Matyjasik, James Wilson, Adolph Yonkee; **Associate Professor:** Michael Hernandez

The Geosciences are concerned with the Earth, its origin, composition, and evolution through time as well as studying the processes that affect the Earth and the life forms that have lived on it in the past. Many geoscience applications use computer technology (GIS and Remote Sensing) for mapping the Earth and modeling the processes that affect the planet. The department offers bachelor's degrees in Geology, Applied Environmental Geosciences, and Earth Science Teaching, and an option in the Physical Science Composite Teaching Major. A Geology Minor, Earth Science Teaching Minor, and a Geospatial Analysis Minor are available. An Institutional Certificate in Geomatics (Applied Computer Mapping) is also available.

Interdisciplinary Programs

The Geosciences 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 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 and Interdisciplinary Programs section of the catalog.)

Geomatics (Applied Mapping Sciences) Institutional Certificate

Advisor: Dr. Michael Hernandez 626-8186

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 six core courses in the Certificate Program.

Credit Hour Requirements: Minimum of 16 credit hours from the Department of Geosciences, and 6 credit hours from the Department of Computer Science and/or Department of Information Systems & Technologies.

Additional information pertaining to the Geospatial Analysis program and Remote Sensing and Geographic Information Systems Laboratory (RSGISL) may be found at: <http://departments.weber.edu/geosciences>.

Course Requirements for Institutional Certificate

Geosciences Courses Required (16 credit hours)

- GEO 3400 - Remote Sensing I (4)
- GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems (4)
- GEO 4220 - Technical and Applicational Issues in GIS (4)
- GEO 4400 - Remote Sensing II: Advanced Digital Image Processing (4)

Computer Science Courses Required (6 credit hours)

Select at least 6 hours from the following:

- CS 1023 - Selected Programming Language (4)
- CS 1410 - Object-Oriented Programming (4)
- IST 2110 - Software Development I (3)
- IST 3210 - Database Design and Implementation (4)
- IST 3720 - Software Development II (3)

Additional Information:

Other applicable computer programming or database courses may be considered at the discretion of the Certificate Program Director.

A selected sample of degree programs that will compliment the Geomatics Certificate include Applied Environmental Geosciences, Geology, Computer Science, Information Systems & Technologies, Geography, Archaeology, or a combination of three emphasis areas for a Bachelor of Integrated Studies (BIS) Degree. The Geomatics Certificate provides students with the essential skills necessary for today's geospatial applications.

Geology (BA)

Advisor: Dr. Jeffrey Eaton, 801-626-6225

Program Prerequisite: None

Minor: Required for Option A; Not required for Option B *

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; 69 to 71 of these are required within the major for Option A BS, and 75 to 77 of these are required in the major for Option B BS; 63-69 of these are required within the major for Option A BA, and 69-75 of these are required in the major for Option B BA. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

** 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

All Geology 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.

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 and General Education Requirements for either Bachelor of Science or Bachelor of Arts requirements. MATH 1050 or MATH 1080 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.

Language Courses Required to fulfill the BA (12 credit hours)

Select 6 semester-hours of a foreign language and

Select 6 hours from

- ENGL 2100 - Technical Writing (3)
- ENGL 3100 - Professional and Technical Writing (3)
- ENGL 3520 HU - Literature of the Natural World (3)
- Or additional foreign language

Major Course Requirements for BA Degree

Geosciences Courses Required (19 credit hours)

- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- GEO 1115 - Physical Geology Lab (1)
- GEO 1220 - Historical Geology (4)
- GEO 2050 - Earth Materials (4)
- GEO 3080 - Water Resources (3)
- GEO 3150 - Geomorphology (4)

Electives Courses (18 hours for Option A; 24 hours for Option B)

*Option A - Select an additional 18 hours from Geoscience courses numbered 3000 and above and/or up to 6 hours from other Earth/environmentally related classes approved by the Geosciences Department and complete a minor**

Option B - Select an additional 24 hours from Geoscience courses numbered 3000 and above and/or up to 6 hours from other Earth/environmentally related classes approved by the Geosciences Department

Support Courses Required (14-20 credit hours)

- BTNY 1203 LS - Plant Biology (3) or
- BTNY 1403 LS - Environment Appreciation (3-4)
- CHEM 1010 PS - Introductory Chemistry (3) or
- CHEM 1110 PS - Elementary Chemistry (5) or

- CHEM 1210 PS - Principles of Chemistry I (5) **
- PHYS 1010 PS - Elementary Physics (3) or
- PHYS 2010 PS - College Physics I (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) **
either
- MATH 1050 QL - College Algebra (4) and
- MATH 1060 - Trigonometry (3)
or
- MATH 1080 QL - Pre-calculus (5) **

* 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 areas should take additional Chemistry, Physics, and Math classes (please consult an advisor).

Applied Environmental Geosciences (BS)

Advisors: Dr. Marek Matyjasik, 801-626-7726
Dr. James R. Wilson, 801-626-6208

Program Prerequisite: None.

Minor: Not required.

Grade Requirements: A grade of "C-" or better in each course 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 is required for graduation; 84 to 87 of these are required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 31 to 34 of these are required within the major.

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.

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 and General Education 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.

Major Course Requirements for BS Degree

Geosciences Courses Required (38 credit hours)

- GEO 1060 PS - Environmental Geosciences (3)
- GEO 1065 - Environmental Geosciences Lab (1)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- GEO 1115 - Physical Geology Lab (1)
- GEO 1220 - Historical Geology (4)
- GEO 2050 - Earth Materials (4)
- GEO 3080 - Water Resources (3)
- GEO 3150 - Geomorphology (4)
- GEO 3550 - Sedimentology and Stratigraphy (4)
- GEO 4060 - Geoscience Field Methods (3)

Select two of the following

- GEO 3400 - Remote Sensing I (4)
- GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems (4)
- GEO 4220 - Technical and Application Issues in GIS (4)
- GEO 4400 - Remote Sensing II: Advanced Digital Image Processing (4)

Electives Required (12 credit hours)

Select 12 credit hours from the following

- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1130 PS - Introduction to Meteorology (3)
- GEO 3010 - Oceanography and Earth Systems (3)
- GEO 3060 - Structural Geology (4)
- GEO 3180 - Paleontology (4)
- GEO 3210 - Quaternary Environmental Change (3)
- GEO 3250 - Geology of Utah (3)
- GEO 3880 - Groundwater (4)
- GEO 4010 - Ancient Environments and Paleocology (3)
- GEO 4100 - Engineering Geology (3)
- GEO 4150 - Environmental Assessment (3)
- GEO 4300 - Igneous and Metamorphic Petrology (4)
- GEO 4510 - Geology Field Camp (4)
- GEO 4550 - Geochemistry (3)
- GEO 4630 - Global Tectonics (3)
- GEO 4750 - Special Topics in Geosciences (1-4)
- GEO 4800 - Independent Research (1-3) *
- GEO 4970 - Senior Thesis (2) *

or any of the following not taken as part of the core

- GEO 3400 - Remote Sensing I (4)
- GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems (4)
- GEO 4220 - Technical and Application Issues in GIS (4)
- GEO 4400 - Remote Sensing II: Advanced Digital Image Processing (4)

or one of the following courses

- BTNY 3214 - Soils (4)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 3000 - Quantitative Analysis (4)
- GEOG 4410 - Land Use Planning Techniques and Practices (3)
- GEOG 4420 - Advanced Planning Techniques (3)
- MICR 3484 - Environmental Microbiology (4)

* No more than 4 combined credit hours from GEO 4800 and GEO 4970 may be counted toward the major requirements.

Support Courses Required (34-37 credit hours)

- BTNY 1203 LS - Plant Biology (3) or
- BTNY 2104 - Plant Form and Function (4) or
- BTNY 2114 - Evolutionary Survey of Plants (4)
- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- ENGL 2100 - Technical Writing (3)
- MATH 1040 QL - Introduction to Statistics (3)
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5) *
- MATH 1050 QL - College Algebra (4)
- MATH 1060 - Trigonometry (3) or
- MATH 1080 QL - Pre-calculus (5) or
- MATH 1210 - Calculus I (4) **

*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 applications are encouraged to complete the Geomatics certificate program. Students planning a career or advanced degree in geotechnical applications are encouraged to take GEO 3060, GEO 3880, GEO 4100, and GEO 4150 as electives.

Earth Science Teaching (BS)

Advisor: Dr. Richard Ford, 801-626-6942

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.

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).

Admission Requirements

Declare your program of study (see Enrollment Services and Information). Earth Science Teaching majors must satisfy Teacher Education admission and licensure requirements. (See Teacher Education Department.)

General Education

Refer to Degree and General Education 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.

Major Course Requirements for BS Degree

Earth Science Courses Required (42 credit hours)

- GEO 1060 PS - Environmental Geosciences (3)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- GEO 1115 - Physical Geology Lab (1)
- GEO 1130 PS - Introduction to Meteorology (3)
- GEO 1220 - Historical Geology (4)
- GEO 2050 - Earth Materials (4)
- GEO 2600 - Laboratory Safety (1)
- GEO 3010 - Oceanography and Earth Systems (3)
- GEO 3150 - Geomorphology (4)
- GEO 3570 - Foundations of Science Education (3)
- GEO 4570 - Secondary School Science Teaching Methods (3)
- GEO 4800 - Independent Research (1-3) (only 1 credit hour required)
- PHYS 1040 PS - Elementary Astronomy (3)
- BTNY 1203 LS - Plant Biology (3)

Select one or more of the following for a minimum of 3 credit hours:

- GEO 3060 - Structural Geology (4)
- GEO 3080 - Water Resources (3)
- GEO 3180 - Paleontology (4)
- GEO 3210 - Quaternary Environmental Change (3)
- GEO 3250 - Geology of Utah (3)
- GEO 3550 - Sedimentology and Stratigraphy (4)
- GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems (4)
- GEO 4750 - Special Topics in Geosciences (1-4)
- GEO 4950 - Advanced Geoscience Fieldtrips (1-3)

Required Support Courses (28-30 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and

- PHYS 2220 - Physics for Scientists and Engineers II (5)
- HIST 3350 - History and Philosophy of Science (3) either
- MATH 1050 QL - College Algebra (4) and
- MATH 1060 - Trigonometry (3) or
- MATH 1080 QL - Pre-calculus (5)

Recommended Support Courses

Any additional upper division (numbered 3000 and above) Geoscience course

- BTNY 3214 - Soils (4)
- BTNY 3303 - Plant Genetics (3) *
- BTNY 3473 - Plant Geography (3)
- GEOG 1400 PS - The Science of Global Warming: Myths, Realities and Solutions (3)
- GEOG 3060 - World Environmental Issues (3)
- MATH 1040 QL - Introduction to Statistics (3)
- ZOOL 1010 LS - Animal Biology (3) *

*The Utah State Office of Education also requires Earth Science Teaching graduates to pass the Earth and Space Science 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)

Advisor: Dr. Jeffrey Eaton, 801-626-6225

Program Prerequisite: None

Minor: Required for Option A; Not required for Option B *

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; 69 to 71 of these are required within the major for Option A BS, and 75 to 77 of these are required in the major for Option B BS; 63-69 of these are required within the major for Option A BA, and 69-75 of these are required in the major for Option B BA. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

* 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

All Geology 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.

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 and General Education Requirements for either Bachelor of Science or Bachelor of Arts requirements. MATH 1050 or MATH 1080 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.

Major Course Requirements for BS Degree

Geosciences Courses Required (35 credit hours)

- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- GEO 1115 - Physical Geology Lab (1)
- GEO 1220 - Historical Geology (4)
- GEO 2050 - Earth Materials (4)
- GEO 3060 - Structural Geology (4)
- GEO 3150 - Geomorphology (4)
- GEO 3550 - Sedimentology and Stratigraphy (4)
- GEO 4060 - Geoscience Field Methods (3)
- GEO 4300 - Igneous and Metamorphic Petrology (4)
- GEO 4510 - Geology Field Camp (4)

Electives Courses (9 hours for Option A; 15 hours for Option B)

Option A - Select 9 hours from the following courses and complete a minor.

Option B - Select 15 hours from the following courses.

- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1060 PS - Environmental Geosciences (3)
- GEO 1065 - Environmental Geosciences Lab (1)
- GEO 3010 - Oceanography and Earth Systems (3)
- GEO 3080 - Water Resources (3)
- GEO 3180 - Paleontology (4)
- GEO 3210 - Quaternary Environmental Change (3)
- GEO 3250 - Geology of Utah (3)
- GEO 3400 - Remote Sensing I (4)
- GEO 3880 - Groundwater (4)
- GEO 4010 - Ancient Environments and Paleocology (3)
- GEO 4100 - Engineering Geology (3)
- GEO 4150 - Environmental Assessment (3)
- GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems (4)
- GEO 4220 - Technical and Application Issues in GIS (4)
- GEO 4400 - Remote Sensing II: Advanced Digital Image Processing (4)
- GEO 4550 - Geochemistry (3)
- GEO 4630 - Global Tectonics (3)
- GEO 4750 - Special Topics in Geosciences (1-4)
- GEO 4800 - Independent Research (1-3) *
- GEO 4970 - Senior Thesis (2) *

Or up to two of the following courses from related areas

- BTNY 3214 - Soils (4)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 3000 - Quantitative Analysis (4)
- GEOG 4410 - Land Use Planning Techniques and Practices (3)
- GEOG 4420 - Advanced Planning Techniques (3)
- MICR 3484 - Environmental Microbiology (4)

* No more than 4 combined credit hours from GEO 4800 and GEO 4970 may be counted toward the major requirements.

Support Courses Required (25-27 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) * and
- PHYS 2220 - Physics for Scientists and Engineers II (5) * either
- MATH 1050 QL - College Algebra (4) and
- MATH 1060 - Trigonometry (3) or
- MATH 1080 QL - Pre-calculus (5) or
- MATH 1210 - Calculus I (4) **

* 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 3420 (8), is recommended for students planning advanced study in geochemistry, mineralogy, or mineral deposits. Advanced course work in zoology or botany is recommended for students planning advanced work in paleontology, stratigraphy, or related fields.

Geology Minor

Advisor: Dr. Jeffrey Eaton 801-626-6225

Grade Requirements: A grade of "C-" or better in courses used toward the minor.

Credit Hour Requirements: Minimum of 19 credit hours in Geosciences courses.

Course Requirements for Minor

Geology Courses Required (12 credit hours)

- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- GEO 1115 - Physical Geology Lab (1)
- GEO 1220 - Historical Geology (4)
- GEO 2050 - Earth Materials (4)

Geosciences Electives (minimum 7 credit hours)

Select at least two classes from the following

- GEO 1030 PS - Earthquakes and Volcanoes (3)
- GEO 1060 PS - Environmental Geosciences (3)
- GEO 1065 - Environmental Geosciences Lab (1)
- GEO 3060 - Structural Geology (4)
- GEO 3080 - Water Resources (3)
- GEO 3150 - Geomorphology (4)
- GEO 3180 - Paleontology (4)
- GEO 3210 - Quaternary Environmental Change (3)
- GEO 3550 - Sedimentology and Stratigraphy (4)
- GEO 4010 - Ancient Environments and Paleocology (3)

Geospatial Analysis Minor

Advisor: Dr. Michael Hernandez 801-626-8186

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.

Course Requirements for Minor

Geosciences Courses Required
(20 credit hours)

- GEO 3400 - Remote Sensing I (4)
- GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems (4)
- GEO 4220 - Technical and Application Issues in GIS (4)
- GEO 4400 - Remote Sensing II: Advanced Digital Image Processing (4)
- GEOG 1000 PS - Natural Environments of the Earth (3) and
- GEO 1115 - Physical Geology Lab (1) or
- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- GEO 1115 - Physical Geology Lab (1) or
- GEO 1060 PS - Environmental Geosciences (3) and
- GEO 1065 - Environmental Geosciences Lab (1) or
- Any 4 hours of GEO courses numbered 3000 or above

If any required courses for the Geospatial Analysis Minor are also required in a student's major, then an elective of equivalent hours must be substituted.

Earth Science Teaching Minor

Advisor: Dr. Richard Ford 626-6942

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.

Students who select the Earth Science Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Course Requirements for Minor

Earth Science Courses Required (20 credit hours)

- GEO 1060 PS - Environmental Geosciences (3)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- GEO 1115 - Physical Geology Lab (1)
- GEO 1130 PS - Introduction to Meteorology (3)
- GEO 1220 - Historical Geology (4)
- GEO 3010 - Oceanography and Earth Systems (3) or
- GEO 3210 - Quaternary Environmental Change (3)
- PHYS 1040 PS - Elementary Astronomy (3)

If not taken as part of a student's major requirements, then the following courses are also required (up to 29 credit hours):

- GEO 3570 - Foundations of Science Education (3)
- GEO 4570 - Secondary School Science Teaching Methods (3)
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- HIST 3350 - History and Philosophy of Science (3)

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 year of chemistry and one year of physics are required to obtain Earth Science teaching certification in the state of Utah.

Geosciences Departmental Honors

Please contact the Geosciences Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Enroll in the General Honors Program and complete 8 hours of General Honors courses.

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Fulfill requirements for either the Earth Science Teaching Major, Applied Environmental Geosciences Major or Geology Major, of which at least 15 hours must be completed on an Honors basis. A student may receive Geology Honors credit in any course numbered 3000 and above with the exception of GEO 4890 and GEO 4950. In addition, complete a GEO 4970 - Senior Thesis for 2 credit hours.

Developmental Mathematics Program

Director: Kathryn Van Wagoner

Location: Building 4, Room 506A

Telephone Contact: Michelle Jarvis 801-626-7478

Associate Professor: John Thaeler; **Instructors:** Brenda Acor, Alice Allred, Loyal Baker, Mary Jo Hansen, David Imig, Debi McKee, Darrell Poore, Carrie Quesnell, Pamela Schilling, Mary Ellen Yonkee

The Developmental Mathematics Program prepares students to take the Quantitative Literacy courses offered by the Mathematics Department and the Philosophy Program. See the Core Requirements listed under the General Education Requirements of the WSU Degree and General Education Requirements of this catalog.

Placement in Mathematics Courses

Many students enrolling at Weber State are under-prepared for college level mathematics. All students requiring developmental course work must enroll in and not withdraw from their initial developmental course(s) within the first two semesters. These students are then required to enroll in developmental course(s) and make progress each subsequent semester (excluding summer) until all relevant minimum developmental requirements (including MATH 1010 if applicable) have been met for the students' declared degree program of study (AAS, AS, AA, or bachelor's degree). Otherwise, a hold will be placed on their registration, which can only be removed by the Student Success Center (see the Policy and Procedures Manual, PPM 6-02.III.D.1. Students are placed into developmental math courses using ACCUPLACER scores.

Students are placed into higher-level mathematics courses using either ACCUPLACER, ACT, or COMPASS scores. Note that the cut scores given below may be subject to change. (For the most recent cut scores, see the WSU Assessment and Placement Standards.

ACT Math Score ¹	ACCUPLACER ² Scores	COMPASS ³ Scores	Course Placement
Not Applicable	CLM 90 and above	Trig 75 and above	MATH 1210 (Required for some majors)
23 and above	CLM 50 and above <i>Note: CLM 70 or higher satisfies QL and a MATH 1050 prerequisite requirement for any course</i>	CA 50 - 100 Trig 45 - 74 AL 70 - 100 <i>Note: CA 65 or higher satisfies QL and a MATH 1050 prerequisite requirement for any course</i>	MATH 1030, MATH 1040, MATH 1050, MATH 1060 ³ or MATH 1080 or PHIL 2200 ⁴ (Requirement varies based on major)
22 and below, Must take ACCUPLACER placement exam	EA 55 - 64 CLM 0 - 49 AR 75 and above EA 0 - 54 AR 20 - 74	AL 58 - 69 CA 25 - 49 PA 70 - 100 AL 31 - 57 CA 0 - 24 PA 0 - 69 AL 0 - 30	MATH 1010 or PHIL 2200 ⁵ MATH 0990 MATH 0950

¹ ACT MATH scores are only valid for two years from the date of the exam

² ACCUPLACER scores are only valid for one year from the date of the exam

³ MATH 1060 does not satisfy the QL requirement

⁴ PHIL 2200 will satisfy the QL requirement *

Test Score Legend:

CLM - College Level Math EA - Elementary Algebra
CA - College Algebra AL - Algebra
AR - Arithmetic Trig - Trigonometry
PA - Pre-Algebra NA - Not Applicable

* Weber State University students who anticipate transferring to another institution within the Utah State higher education system should fulfill quantitative literacy (QL) with one of the approved Math QL courses rather

than PHIL 2200, "Deductive Logic." PHIL 2200 will not be accepted in transfer as a QL course by another Utah public institution of higher education.

Department of Mathematics

Department Chair: Paul Talaga

Location: Building 4, Room 518C

Telephone Contact: Debi Larson 801-626-6095

Professors: Afshin Ghoreishi, Kent Kidman, George Kvernadze, Timothy Steele, Paul Talaga; **Associate Professor:** James Peters; **Assistant Professors:** Mahmud Akelbek, Chloe Cai, Julian Chan, Mihail Cocos, Sandra Fital-Akelbek, Matthew Ondrus, Michael D. Wills; **Instructor Specialist:** Dixie Blackinton

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 three 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.

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.

Placement

Weber State University students will be placed into mathematics courses by the following procedure.

- A. To enroll in mathematics courses MATH 1030, MATH 1040, MATH 1050, MATH 1060, or MATH 1080 a student must have either:
 1. Received a Math ACT score of 23 or above, **within the past 24 months**
or
 2. Scored sufficiently high on a placement exam at the WSU testing center **within the past twelve months.**
or
 3. Completed the prerequisite course with a grade of "C" or higher **within the past 12 months.**

Students who score below 23 on the Math ACT will be placed into developmental courses, if applicable, based on the information outlined in the WSU Assessment & Placement Standards document. The purpose of this policy is to help students succeed academically by matching their skills and knowledge with the appropriate academic course(s) in math.

For specific information about the policy go to the online Policies and Procedures Manual PPM 6-2. Also refer to the Developmental Math Program.

- B. To enroll in Mathematics courses numbered 1210 through 2210, a student must have **within the past twelve months** either:
 2. Obtained the appropriate AP Calculus score described below:
 - b. Five on the BC test places the student in MATH 2210 or higher
 - c. Three or four on the BC test places the student in MATH 1220
 - d. Four or five on the AB test places the student in MATH 1220
 - e. Three on the AB test places the student in MATH 1210
or
 3. Scored sufficiently high on a placement exam at the WSU testing center.
or
 4. Completed the prerequisite course(s) with a grade of "C" or higher.

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.

Mathematics (BA)

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 is 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.

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.

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 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 and General Education 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.

Language Courses Required fulfill the BA (14 credit hours)

- 6 credit hour of foreign language *and the following language arts courses*
- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)

Major Course Requirements for Mathematics BS or BA Degree

Mathematics Courses Required (30 credit hours)

- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)
- MATH 2210 - Calculus III (4)
- MATH 2270 - Elementary Linear Algebra (3)
- MATH 2280 - Ordinary Differential Equations (3)
- MATH 4110 - Modern Algebra I (3)
- MATH 4120 - Modern Algebra II (3) or
- MATH 4320 - Topology (3)
- MATH 4210 - Introductory Real Analysis I (3) and
- MATH 4220 - Introductory Real Analysis II (3)

Mathematics Electives
(at least 12 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.

Support Courses Required
(10 credit hours)

- PHYS 2210 PS - Physics for Scientists and Engineers I (5)
- PHYS 2220 - Physics for Scientists and Engineers II (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)

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 is 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.

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.

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 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 and General Education 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.

Language Courses Required fulfill the BA (14 credit hours)

- 6 credit hour of foreign language *and the following language arts courses*
- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)

Major Course Requirements for Mathematics Teaching BS or BA Degree

Mathematics Courses Required (48 credit hours)

- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)
- MATH 3110 - Foundations of Algebra (3) or
- MATH 4110 - Modern Algebra I (3)
- MATH 2120 - Euclidean Geometry (3)
- MATH 2210 - Calculus III (4)
- MATH 2270 - Elementary Linear Algebra (3)
- MATH 2280 - Ordinary Differential Equations (3)
- MATH 3120 - Foundations of Euclidean and Non-Euclidean Geometry (3)
- MATH 3160 - Number Theory (3)
- MATH 3410 - Probability and Statistics I (3)
- MATH 4210 - Introductory Real Analysis I (3)
- MTHE 3010 - Methods and Technology for Teaching Secondary Mathematics (3)
- MTHE 4010 - Capstone Mathematics for High School Teachers (3)
- Two upper division MATH courses not otherwise required (6)

Support Courses Required (5-10 credit hours)

Complete either

- PHYS 2210 PS - Physics for Scientists and Engineers I (5)
or
- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)

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)

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 is 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.

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.

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 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 and General Education 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.

Language Courses Required fulfill the BA (14 credit hours)

- 6 credit hours of foreign language and the following language arts courses
- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (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.

Lower Division Mathematics Courses Required for All Tracks (19 credit hours)

- MATH 1200 - Mathematics Computer Laboratory (1)
- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)
- MATH 2210 - Calculus III (4)
- MATH 2270 - Elementary Linear Algebra (3)
- MATH 2280 - Ordinary Differential Equations (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 (3)
- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3710 - Boundary Value Problems (3) or
- MATH 3280 - Dynamical Systems (3)
- MATH 4610 - Numerical Analysis I (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 (16 credit hours)

- CS 1400 - Fundamentals of Programming (4)
- CS 1410 - Object-Oriented Programming (4)

- CS 2420 - Introduction to Data Structures and Algorithms (4)
- MATH 1630 - Discrete Mathematics Applied to Computing (4)

Required Upper Division Mathematics Courses (15 credit hours)

- MATH 3410 - Probability and Statistics I (3)
- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3610 - Graph Theory (3)
- MATH 4610 - Numerical Analysis I (3)
- MATH 4620 - Numerical Analysis II (3) or
- MATH 3620 - Enumeration (3)

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 (3)
- MATH 3410 - Probability and Statistics I (3)
- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3710 - Boundary Value Problems (3)
- MATH 3810 - Complex Variables (3)
- MATH 4610 - Numerical Analysis I (3)
- MATH 4710 - Partial Differential Equations (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 (3)
- MATH 3410 - Probability and Statistics I (3)
- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3710 - Boundary Value Problems (3)
- MATH 3810 - Complex Variables (3)
- MATH 4610 - Numerical Analysis I (3)
- MATH 4620 - Numerical Analysis II (3)
- MATH 4710 - Partial Differential Equations (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 (3)
- MATH 3420 - Probability and Statistics II (3)

And three of the following courses

- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3710 - Boundary Value Problems (3)
- MATH 4610 - Numerical Analysis I (3)
- MATH 4710 - Partial Differential Equations (3)

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 (3)
- ACTG 3120 - Intermediate Financial Accounting II (3)
- ECON 3030 - Managerial Economics (3)
- ECON 4010 - Intermediate Microeconomic Theory (3)
- ECON 4020 - Intermediate Macroeconomic Theory (3)
- ECON 4550 - Introduction to Econometrics (3)
- ECON 4560 - Mathematical Economics (3)
- FIN 3200 - Financial Management (3)
- FIN 3300 - Investments (3)
- FIN 4400 - Financial Problems - Corporate Finance (3)
- MGMT 3010 - Organizational Behavior and Management (3)
- MKTG 3010 - Marketing Concepts and Practices (3)
- QUAN 3610 - Business Statistics II (3)

6. Natural/Life Sciences Track

Required Upper Division Mathematics Courses (12 credit hours)

- MATH 3410 - Probability and Statistics I (3)
- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3710 - Boundary Value Problems (3) or
- MATH 3280 - Dynamical Systems (3)
- MATH 4610 - Numerical Analysis I (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.

Mathematics (BS)

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 is 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.

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.

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 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 and General Education 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.

Major Course Requirements for Mathematics BS or BA Degree

Mathematics Courses Required
(30 credit hours)

- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)
- MATH 2210 - Calculus III (4)
- MATH 2270 - Elementary Linear Algebra (3)
- MATH 2280 - Ordinary Differential Equations (3)
- MATH 4110 - Modern Algebra I (3)
- MATH 4120 - Modern Algebra II (3) or
- MATH 4320 - Topology (3)
- MATH 4210 - Introductory Real Analysis I (3) and
- MATH 4220 - Introductory Real Analysis II (3)

Mathematics Electives (at least 12 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.

Support Courses Required (10 credit hours)

- PHYS 2210 PS - Physics for Scientists and Engineers I (5)
- PHYS 2220 - Physics for Scientists and Engineers II (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)

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 is 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.

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.

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 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 and General Education 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.

Major Course Requirements for Mathematics Teaching BS or BA Degree

Mathematics Courses Required (48 credit hours)

- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)
- MATH 3110 - Foundations of Algebra (3) or
- MATH 4110 - Modern Algebra I (3)
- MATH 2120 - Euclidean Geometry (3)
- MATH 2210 - Calculus III (4)
- MATH 2270 - Elementary Linear Algebra (3)
- MATH 2280 - Ordinary Differential Equations (3)
- MATH 3120 - Foundations of Euclidean and Non-Euclidean Geometry (3)
- MATH 3160 - Number Theory (3)
- MATH 3410 - Probability and Statistics I (3)
- MATH 4210 - Introductory Real Analysis I (3)
- MTHE 3010 - Methods and Technology for Teaching Secondary Mathematics (3)
- MTHE 4010 - Capstone Mathematics for High School Teachers (3)
- Two upper division MATH courses not otherwise required (6)

Support Courses Required (5-10 credit hours)

Complete either

- PHYS 2210 PS - Physics for Scientists and Engineers I (5)
- or
- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)

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)

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 is 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.

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.

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 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 and General Education 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.

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.

Lower Division Mathematics Courses Required for All Tracks (19 credit hours)

- MATH 1200 - Mathematics Computer Laboratory (1)
- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)
- MATH 2210 - Calculus III (4)
- MATH 2270 - Elementary Linear Algebra (3)
- MATH 2280 - Ordinary Differential Equations (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 (3)
- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3710 - Boundary Value Problems (3) or
- MATH 3280 - Dynamical Systems (3)
- MATH 4610 - Numerical Analysis I (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 (16 credit hours)

- CS 1400 - Fundamentals of Programming (4)
- CS 1410 - Object-Oriented Programming (4)
- CS 2420 - Introduction to Data Structures and Algorithms (4)
- MATH 1630 - Discrete Mathematics Applied to Computing (4)

Required Upper Division Mathematics Courses (15 credit hours)

- MATH 3410 - Probability and Statistics I (3)
- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3610 - Graph Theory (3)
- MATH 4610 - Numerical Analysis I (3)
- MATH 4620 - Numerical Analysis II (3) or
- MATH 3620 - Enumeration (3)

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 (3)
- MATH 3410 - Probability and Statistics I (3)
- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3710 - Boundary Value Problems (3)
- MATH 3810 - Complex Variables (3)
- MATH 4610 - Numerical Analysis I (3)
- MATH 4710 - Partial Differential Equations (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 (3)
- MATH 3410 - Probability and Statistics I (3)
- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3710 - Boundary Value Problems (3)
- MATH 3810 - Complex Variables (3)
- MATH 4610 - Numerical Analysis I (3)
- MATH 4620 - Numerical Analysis II (3)
- MATH 4710 - Partial Differential Equations (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 (3)
- MATH 3420 - Probability and Statistics II (3)

And three of the following courses

- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3710 - Boundary Value Problems (3)
- MATH 4610 - Numerical Analysis I (3)
- MATH 4710 - Partial Differential Equations (3)

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 (3)
- ACTG 3120 - Intermediate Financial Accounting II (3)
- ECON 3030 - Managerial Economics (3)
- ECON 4010 - Intermediate Microeconomic Theory (3)
- ECON 4020 - Intermediate Macroeconomic Theory (3)
- ECON 4550 - Introduction to Econometrics (3)
- ECON 4560 - Mathematical Economics (3)
- FIN 3200 - Financial Management (3)
- FIN 3300 - Investments (3)
- FIN 4400 - Financial Problems - Corporate Finance (3)
- MGMT 3010 - Organizational Behavior and Management (3)
- MKTG 3010 - Marketing Concepts and Practices (3)
- QUAN 3610 - Business Statistics II (3)

6. Natural/Life Sciences Track

Required Upper Division Mathematics Courses (12 credit hours)

- MATH 3410 - Probability and Statistics I (3)
- MATH 3550 - Introduction to Mathematical Modeling (3)
- MATH 3710 - Boundary Value Problems (3) or
- MATH 3280 - Dynamical Systems (3)
- MATH 4610 - Numerical Analysis I (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.

Mathematics 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 20 credit hours for regular emphasis and 24 credit hours for Mathematics Teaching minor. At least one upper-division mathematics course for three credit hours must be completed at Weber State University.

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 (4)
- MATH 1220 - Calculus II (4)
- MATH 2270 - Elementary Linear Algebra (3)

Electives (9-10 credit hours)

Take three courses chosen from the following:

- MATH 2210 - Calculus III (4)
- MATH 2280 - Ordinary Differential Equations (3)
- any upper division mathematics courses (courses numbered 3000 and higher)

Mathematics 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 20 credit hours for regular emphasis and 24 credit hours for Mathematics Teaching minor. At least one upper-division mathematics course for three credit hours must be completed at Weber State University.

Students who select the Mathematics Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department).

Course Requirements for Mathematics Teaching Minor

Mathematics Courses Required (26 credit hours)

- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)
- MATH 2120 - Euclidean Geometry (3)
- MATH 2270 - Elementary Linear Algebra (3)
- MATH 3110 - Foundations of Algebra (3) or
- MATH 4110 - Modern Algebra I (3)
- MATH 3120 - Foundations of Euclidean and Non-Euclidean Geometry (3)
- MATH 3410 - Probability and Statistics I (3)
- MTHE 3010 - Methods and Technology for Teaching Secondary Mathematics (3)

Mathematics Departmental Honors

Please contact the Mathematics Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Be declared as a Mathematics major and complete all corresponding requirements.

Grade Requirements: Maintain an overall GPA of 3.3 and a mathematics GPA of 3.3.

Additional Requirements: Complete an undergraduate project/research-study or equivalent supervised by a faculty mentor, and present the findings in a public forum. To fulfill this requirement, students must enroll in MATH 4910 and complete the following:

- Research or equivalent project supervised by faculty mentor, and
- Presentation of research and required attendance at seminar talks.

Students may sign up for MATH 4910 any semester, subject to the approval of the faculty mentor. If the presentation takes place in a later semester, students will receive a T grade until the presentation is complete. The setting for the presentation will be determined by the faculty mentor.

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

Department of Microbiology

Department Chair: Michele Culumber

Location: Science Lab, Room 302M

Telephone: Carrie Minnoch 801-626-6949

Professors: William Lorowitz, Karen Nakaoka, Craig Oberg, Mohammad Sondossi; **Associate Professors:** Michele Culumber, Matthew Domek

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.

Pre-Medical, Pre-Dental, and Pre-Physician Assistant Emphasis, Microbiology

Program Prerequisite: Not required.

Minor: Not required.

Grade Requirements: An overall GPA of 2.00 or higher in microbiology courses required for this major 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 71 of these is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

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.

Admissions 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 and General Education Requirements for Bachelor of Science requirements. The following courses required for the Microbiology major also will satisfy general education requirements: MICR 2054, CHEM 1210, PHYS 1010 or PHYS 2010.

Major Course Requirements for BS Degree

Microbiology Courses Required (19 credit hours)

- MICR 2054 LS - Principles of Microbiology (4)
- MICR 3053 - Microbiological Procedures (3)
- MICR 3154 - Microbial Ecology (4)
- MICR 4054 - Microbial Physiology (4)
- MICR 4154 - Microbial Genetics (4)

Microbiology Elective Courses (20 credit hours)

Category A (8 credit hours minimum)

- MICR 3254 - Immunology (4)
- MICR 3305 - Medical Microbiology (5)
- MICR 3403 - Tropical Diseases (3)
- MICR 3484 - Environmental Microbiology (4)
- MICR 3502 - Environmental Health (2)
- MICR 3753 - Geomicrobiology (3)
- MICR 3853 - Food Microbiology (3)
- MICR 4252 - Cell Culture (2)
- MICR 4354 - Industrial Microbiology and Biotechnology (4)
- MICR 4554 - Virology (4)

Category B

- MICR 2600 - Laboratory Safety (1)
- MICR 2920 - Short Courses, Workshop, Institutes and Special Programs (1-3) (1 credit hour required)
- MICR 4800 - Directed Research (1-2) *
- MICR 4830 - Directed Readings (1-2) *
- MICR 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3) (1 credit hour required)
- MICR 4991 - Microbiology Seminar (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 (8 credit hours maximum)

elective courses in other life science departments

- BTNY 3504 - Mycology (4)
- BTNY 3514 - Algology (4)
- ZOOL 3200 - Cell Biology (4)
- ZOOL 3300 - Genetics (4) or
- BTNY 3303 - Plant Genetics (3)

Required Support Classes (32-35 credit hours)

A grade of D- or better is required in each support course.

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 3070 - Biochemistry I (4)
- MATH 1050 QL - College Algebra (4) or
- MATH 1080 QL - Pre-calculus (5) or
- MATH 1210 - Calculus I (4)
- PHYS 1010 PS - Elementary Physics (3) or
- PHYS 2010 PS - College Physics I (5) or
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) or
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- Life Science Course Electives (6) *

** Minimum of 6 credit hours from two Life Science courses in: BTNY 1203, BTNY 2104, BTNY 2114, BTNY 3105, BTNY 3204, BTNY 3214, BTNY 3454, BTNY 3473, BTNY 3523, BTNY 3624; ZOOL 1010, ZOOL 1110, ZOOL 2100, ZOOL 2200, ZOOL 3450, ZOOL 3470, ZOOL 3500, ZOOL 3720, ZOOL 3730, ZOOL 4050, ZOOL 4100, ZOOL 4120, ZOOL 4210, ZOOL 4220, ZOOL 4250, ZOOL 4300, ZOOL 4470, ZOOL 4480, ZOOL 4490, ZOOL 4500, ZOOL 4600, ZOOL 4640, ZOOL 4650, ZOOL 4660, ZOOL 4670, ZOOL 4680.*

Special Emphases

Microbiology majors pursuing the career programs below should consult appropriate advisors and include the specified courses while fulfilling the requirements for the Microbiology major.

Pre-Medical, Pre-Dental, and Pre-Physician Assistant

Pre-medical, pre-dental, and Pre-Physician assistant students should include the following:

- MATH 1050 QL - College Algebra (4) *
- ENGL 2010 EN - Intermediate College Writing (3) *prerequisite is ENGL 1010 Introductory College Writing (3) or equivalent*
- ENGL 2100 - Technical Writing (3) or
- ENGL 2250 CA - Creative Writing (3) or
- ENGL 3210 - Advanced College Writing (3) or
- COMM 1020 HU - Principles of Public Speaking (3)
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- ZOOL 2200 - Human Physiology (4)
- ZOOL 3200 - Cell Biology (4)
- ZOOL 3300 - Genetics (4)

and consider the following

- MICR 3254 - Immunology (4)
- MICR 3305 - Medical Microbiology (5)
- MICR 4554 - Virology (4)
- PSY 1010 SS - Introductory Psychology (3)
- ZOOL 1110 - Principles of Zoology I (4) and
- ZOOL 1120 - Principles of Zoology II (4)

** or equivalent of a full year of college math*

Medical schools do not accept AP or CLEP credits in English or science courses.

Biotechnology or Industrial Microbiology Emphasis, Microbiology (BS)

Program Prerequisite: Not required.

Minor: Not required.

Grade Requirements: An overall GPA of 2.00 or higher in microbiology courses required for this major 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 71 of these is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

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.

Admissions 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 and General Education Requirements for Bachelor of Science requirements. The following courses required for the Microbiology major also will satisfy general education requirements: MICR 2054, CHEM 1210, PHYS 1010 or PHYS 2010.

Major Course Requirements for BS Degree

Microbiology Courses Required (19 credit hours)

- MICR 2054 LS - Principles of Microbiology (4)
- MICR 3053 - Microbiological Procedures (3)
- MICR 3154 - Microbial Ecology (4)
- MICR 4054 - Microbial Physiology (4)
- MICR 4154 - Microbial Genetics (4)

Microbiology Elective Courses (20 credit hours)

Category A (8 credit hours minimum)

- MICR 3254 - Immunology (4)
- MICR 3305 - Medical Microbiology (5)
- MICR 3403 - Tropical Diseases (3)
- MICR 3484 - Environmental Microbiology (4)
- MICR 3502 - Environmental Health (2)
- MICR 3753 - Geomicrobiology (3)
- MICR 3853 - Food Microbiology (3)
- MICR 4252 - Cell Culture (2)
- MICR 4354 - Industrial Microbiology and Biotechnology (4)
- MICR 4554 - Virology (4)

Category B

- MICR 2600 - Laboratory Safety (1)
- MICR 2920 - Short Courses, Workshop, Institutes and Special Programs (1-3) (1 credit hour required)
- MICR 4800 - Directed Research (1-2) *
- MICR 4830 - Directed Readings (1-2) *
- MICR 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3) (1 credit hour required)
- MICR 4991 - Microbiology Seminar (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 (8 credit hours maximum)

elective courses in other life science departments

- BTNY 3504 - Mycology (4)
- BTNY 3514 - Algology (4)
- ZOOL 3200 - Cell Biology (4)
- ZOOL 3300 - Genetics (4) or
- BTNY 3303 - Plant Genetics (3)

Required Support Classes (32-35 credit hours)

A grade of D- or better is required in each support course.

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 3070 - Biochemistry I (4)
- MATH 1050 QL - College Algebra (4) or
- MATH 1080 QL - Pre-calculus (5) or
- MATH 1210 - Calculus I (4)
- PHYS 1010 PS - Elementary Physics (3) or
- PHYS 2010 PS - College Physics I (5) or
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) or
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- Life Science Course Electives (6) *

* Minimum of 6 credit hours from two Life Science courses in: BTNY 1203, BTNY 2104, BTNY 2114, BTNY 3105, BTNY 3204, BTNY 3214, BTNY 3454, BTNY 3473, BTNY 3523, BTNY 3624; ZOO 1010, ZOO 1110, ZOO 2100, ZOO 2200, ZOO 3450, ZOO 3470, ZOO 3500, ZOO 3720, ZOO 3730, ZOO 4050, ZOO 4100, ZOO 4120, ZOO 4210, ZOO 4220, ZOO 4250, ZOO 4300, ZOO 4470, ZOO 4480, ZOO 4490, ZOO 4500, ZOO 4600, ZOO 4640, ZOO 4650, ZOO 4660, ZOO 4670, ZOO 4680.

Special Emphases

Microbiology majors pursuing the career programs below should consult appropriate advisors and include the specified courses while fulfilling the requirements for the Microbiology major.

Biotechnology or Industrial Microbiology

Students interested in biotechnology or industrial microbiology careers should include the following

- MICR 3484 - Environmental Microbiology (4)
- MICR 3853 - Food Microbiology (3)
- MICR 4252 - Cell Culture (2)
- MICR 4354 - Industrial Microbiology and Biotechnology (4)
- ZOO 3300 - Genetics (4)

and consider the following

- BTNY 3504 - Mycology (4)
- BTNY 3514 - Algology (4)
- BTNY 3523 - Marine Biology (3)
- CHEM 3050 - Instrumental Analysis (4)

Microbiology (BS)

Program Prerequisite: Not required.

Minor: Not required.

Grade Requirements: An overall GPA of 2.00 or higher in microbiology courses required for this major 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 71 of these is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

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.

Admissions 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 and General Education Requirements for Bachelor of Science requirements. The following courses required for the Microbiology major also will satisfy general education requirements: MICR 2054, CHEM 1210, PHYS 1010 or PHYS 2010.

Major Course Requirements for BS Degree

Microbiology Courses Required (19 credit hours)

- MICR 2054 LS - Principles of Microbiology (4)
- MICR 3053 - Microbiological Procedures (3)
- MICR 3154 - Microbial Ecology (4)
- MICR 4054 - Microbial Physiology (4)
- MICR 4154 - Microbial Genetics (4)

Microbiology Elective Courses (20 credit hours)

Category A (8 credit hours minimum)

- MICR 3254 - Immunology (4)
- MICR 3305 - Medical Microbiology (5)
- MICR 3403 - Tropical Diseases (3)
- MICR 3484 - Environmental Microbiology (4)
- MICR 3502 - Environmental Health (2)
- MICR 3753 - Geomicrobiology (3)
- MICR 3853 - Food Microbiology (3)
- MICR 4252 - Cell Culture (2)
- MICR 4354 - Industrial Microbiology and Biotechnology (4)
- MICR 4554 - Virology (4)

Category B

- MICR 2600 - Laboratory Safety (1)
- MICR 2920 - Short Courses, Workshop, Institutes and Special Programs (1-3) (1 credit hour required)
- MICR 4800 - Directed Research (1-2) *
- MICR 4830 - Directed Readings (1-2) *
- MICR 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3) (1 credit hour required)
- MICR 4991 - Microbiology Seminar (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 (8 credit hours maximum)

elective courses in other life science departments

- BTNY 3504 - Mycology (4)
- BTNY 3514 - Algology (4)
- ZOO 3200 - Cell Biology (4)

- ZOOL 3300 - Genetics (4) or
- BTNY 3303 - Plant Genetics (3)

Required Support Classes (32-35 credit hours)

A grade of D- or better is required in each support course.

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 3070 - Biochemistry I (4)
- MATH 1050 QL - College Algebra (4) or
- MATH 1080 QL - Pre-calculus (5) or
- MATH 1210 - Calculus I (4)
- PHYS 1010 PS - Elementary Physics (3) or
- PHYS 2010 PS - College Physics I (5) or
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) or
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- Life Science Course Electives (6) *

* Minimum of 6 credit hours from two Life Science courses in: BTNY 1203, BTNY 2104, BTNY 2114, BTNY 3105, BTNY 3204, BTNY 3214, BTNY 3454, BTNY 3473, BTNY 3523, BTNY 3624; ZOOL 1010, ZOOL 1110, ZOOL 2100, ZOOL 2200, ZOOL 3450, ZOOL 3470, ZOOL 3500, ZOOL 3720, ZOOL 3730, ZOOL 4050, ZOOL 4100, ZOOL 4120, ZOOL 4210, ZOOL 4220, ZOOL 4250, ZOOL 4300, ZOOL 4470, ZOOL 4480, ZOOL 4490, ZOOL 4500, ZOOL 4600, ZOOL 4640, ZOOL 4650, ZOOL 4660, ZOOL 4670, ZOOL 4680.

Microbiology Special Emphases

Microbiology majors pursuing careers in Biotechnology, Industrial Microbiology, Public Health, Pre-Medical, Pre-Dental or Pre-Physician Assistant should consult appropriate advisors and complete the courses for one of the following emphasis areas: Biotechnology or Industrial Microbiology Emphasis, Microbiology (BS), Public Health Emphasis, Microbiology (BS), Pre-Medical, Pre-Dental, and Pre-Physician Assistant Emphasis, Microbiology.

Students planning to attend graduate school should take the following

- PHYS 2010 PS - College Physics I (5)
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5)
- PHYS 2220 - Physics for Scientists and Engineers II (5)

and consider the following

- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- and electives in data processing, statistics, and other biological sciences

Public Health Emphasis, Microbiology (BS)

Program Prerequisite: Not required.

Minor: Not required.

Grade Requirements: An overall GPA of 2.00 or higher in microbiology courses required for this major 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 71 of these is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above).

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.

Admissions 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 and General Education Requirements for Bachelor of Science requirements. The following courses required for the Microbiology major also will satisfy general education requirements: MICR 2054, CHEM 1210, PHYS 1010 or PHYS 2010.

Major Course Requirements for BS Degree

Microbiology Courses Required (19 credit hours)

- MICR 2054 LS - Principles of Microbiology (4)
- MICR 3053 - Microbiological Procedures (3)
- MICR 3154 - Microbial Ecology (4)
- MICR 4054 - Microbial Physiology (4)
- MICR 4154 - Microbial Genetics (4)

Microbiology Elective Courses (20 credit hours)

Category A (8 credit hours minimum)

- MICR 3254 - Immunology (4)
- MICR 3305 - Medical Microbiology (5)
- MICR 3403 - Tropical Diseases (3)
- MICR 3484 - Environmental Microbiology (4)
- MICR 3502 - Environmental Health (2)
- MICR 3753 - Geomicrobiology (3)
- MICR 3853 - Food Microbiology (3)
- MICR 4252 - Cell Culture (2)
- MICR 4354 - Industrial Microbiology and Biotechnology (4)
- MICR 4554 - Virology (4)

Category B

- MICR 2600 - Laboratory Safety (1)
- MICR 2920 - Short Courses, Workshop, Institutes and Special Programs (1-3) (1 credit hour required)
- MICR 4800 - Directed Research (1-2) *
- MICR 4830 - Directed Readings (1-2) *
- MICR 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3) (1 credit hour required)
- MICR 4991 - Microbiology Seminar (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 (8 credit hours maximum)

elective courses in other life science departments

- BTNY 3504 - Mycology (4)
- BTNY 3514 - Algology (4)
- ZOOL 3200 - Cell Biology (4)
- ZOOL 3300 - Genetics (4) or
- BTNY 3303 - Plant Genetics (3)

Required Support Classes
(32-35 credit hours)

A grade of D- or better is required in each support course.

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 3070 - Biochemistry I (4)
- MATH 1050 QL - College Algebra (4) or
- MATH 1080 QL - Pre-calculus (5) or
- MATH 1210 - Calculus I (4)
- PHYS 1010 PS - Elementary Physics (3) or
- PHYS 2010 PS - College Physics I (5) or
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) or
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- Life Science Course Electives (6) *

* Minimum of 6 credit hours from two Life Science courses in: BTNY 1203, BTNY 2104, BTNY 2114, BTNY 3105, BTNY 3204, BTNY 3214, BTNY 3454, BTNY 3473, BTNY 3523, BTNY 3624; ZOOL 1010, ZOOL 1110, ZOOL 2100, ZOOL 2200, ZOOL 3450, ZOOL 3470, ZOOL 3500, ZOOL 3720, ZOOL 3730, ZOOL 4050, ZOOL 4100, ZOOL 4120, ZOOL 4210, ZOOL 4220, ZOOL 4250, ZOOL 4300, ZOOL 4470, ZOOL 4480, ZOOL 4490, ZOOL 4500, ZOOL 4600, ZOOL 4640, ZOOL 4650, ZOOL 4660, ZOOL 4670, ZOOL 4680.

Special Emphases

Microbiology majors pursuing the career programs below should consult appropriate advisors and include the specified courses while fulfilling the requirements for the Microbiology major.

Public Health

Students emphasizing Public Health should include the following

- MICR 1153 LS - Elementary Public Health (3)
- MICR 3254 - Immunology (4)
- MICR 3305 - Medical Microbiology (5)

- MICR 3403 - Tropical Diseases (3)
- MICR 3502 - Environmental Health (2)
- MICR 3853 - Food Microbiology (3)
- MICR 4354 - Industrial Microbiology and Biotechnology (4)
- MICR 4554 - Virology (4)
- ZOOL 4500 - Parasitology (4)
- medical and ecological course electives

Microbiology Minor

Grade Requirements: A grade of "C-" or better in courses used toward the minor.

Credit Hour Requirements: Minimum of 18 hours in Microbiology courses, MICR 2054 LS and above.

Microbiology Departmental Honors

Please contact the Microbiology Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Enroll in the General Honors Program and complete at least 10 hours of General Honors courses.

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Fulfill the requirements for the Microbiology departmental major, of which at least 12 hours must be completed on an Honors basis. A student may receive Microbiology Honors credit in any upper division Microbiology course with the exception of MICR 4890, MICR 4920, and MICR 4991. Credit for MICR 4800 and MICR 4830 may be repeated for a maximum of 2 hours each for Honors. In addition, complete a Microbiology Directed Research Project.

Department of Physics

Department Chair: Colin Inglefield

Location: Science Lab, Room 202

Telephone: Nereyda Hesterberg 801-626-6163

Web Site: weber.edu/physics

Professors: Farhang Amiri, Brad Carroll, Ronald Galli, Colin Inglefield, Adam Johnston, Dale Ostlie, Daniel Schroeder, John Sohl, Walther Spjeldvik; **Associate Professors:** John Armstrong, Michelle Arnold, Stacy Palen; **Visiting Professor:** Tabettha Hole

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.

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 and General Education 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.

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). 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 and General Education 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.

Major Course Requirements for BS Degree

Required Courses (minimum of 69 credit hours)

Physics Courses (19 credit hours)

- PHYS 1040 PS - Elementary Astronomy (3)
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- Physics electives PHYS 2300 and above (6)

Geology Courses (17 credit hours)

- GEO 1060 PS - Environmental Geosciences (3)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- GEO 1115 - Physical Geology Lab (1)
- GEO 1130 PS - Introduction to Meteorology (3)
- GEO 1220 - Historical Geology (4)
- GEO 3010 - Oceanography and Earth Systems (3) or
- GEO 3210 - Quaternary Environmental Change (3)

Chemistry Courses (14-15 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- or**
- CHEM 3000 - Quantitative Analysis (4)

General Science Courses (8 credit hours)

- PHYS 2600 - Laboratory Safety (1) or
- CHEM 2600 - Laboratory Safety (1) or
- GEO 2600 - Laboratory Safety (1)
- PHYS 3570 - Foundations of Science Education (3) or
- CHEM 3570 - Foundations of Science Education (3) or
- GEO 3570 - Foundations of Science Education (3)
- PHYS 4570 - Secondary School Science Teaching Methods (3) or
- CHEM 4570 - Secondary School Science Teaching Methods (3) or
- GEO 4570 - Secondary School Science Teaching Methods (3)
- PHYS 4800 - Individual Research Problems (1-3) (1 credit hour required) or
- CHEM 4800 - Research and Independent Study in Chemistry (1-3) (1 credit hour required) or
- GEO 4800 - Independent Research (1-3) (1 credit hour required)

Science Support Courses (11 credit hours)

- HIST 3350 - History and Philosophy of Science (3)
- MATH 1210 - Calculus I (4) and
- MATH 1220 - Calculus II (4)

Students must also complete the Teacher Education Licensure Program.

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 and General Education Requirements.

Credit Hour Requirements: A total of 120 semester credit hours is required for graduation; 75 to 82 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); 30 to 34 of these (depending on the option chosen) are required within the Physics major.

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 and General Education Requirements for Bachelor of Science requirements. The following courses required for the Physics major will satisfy general education requirements: PHYS 2210 and MATH 1210.

Physics Major Course Requirements for BS Degree

Physics Courses Required (23 credit hours)

- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- PHYS 2300 - Scientific Computing for Physical Systems (3)
- PHYS 2710 - Introductory Modern Physics (3)
- PHYS 3500 - Analytical Mechanics (3)
- PHYS 3510 - Electromagnetic Theory (3)
- PHYS 4990 - Seminar in Physics (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 (22 credit hours)

- MATH 1200 - Mathematics Computer Laboratory (1)
- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)
- MATH 2210 - Calculus III (4)
- MATH 2270 - Elementary Linear Algebra (3)
- MATH 2280 - Ordinary Differential Equations (3)
- MATH 3710 - Boundary Value Problems (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 (3)
- PHYS 3190 - Applied Optics (3) or
- PHYS 3410 - Electronics for Scientists (4)
- PHYS 3540 - Mechanical and Electromagnetic Waves (3)
- PHYS 3710 - Nuclear and Particle Physics (3)
- PHYS 4400 - Advanced Physics Laboratory (2)
- PHYS 4610 - Quantum Mechanics (3)

Additional Support Courses Required (10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)

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 (3)
- PHYS 3410 - Electronics for Scientists (4)
- PHYS 3540 - Mechanical and Electromagnetic Waves (3)
- PHYS 4200 - The Physics of Materials (3)
- PHYS 4410 - Materials Characterization Laboratory (2)
- PHYS 4610 - Quantum Mechanics (3)

Additional Support Courses Required (10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)

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 (23 or 24 credit hours)

- ASTR 2040 - Principles of Observational Astronomy (3)
- ASTR 3160 - Stellar and Planetary Astrophysics (3)
- ASTR 3170 - Galaxies and Cosmology (3)
- PHYS 3180 - Thermal Physics (3)
- PHYS 3190 - Applied Optics (3) or
- PHYS 3410 - Electronics for Scientists (4)
- PHYS 3540 - Mechanical and Electromagnetic Waves (3)
- PHYS 4400 - Advanced Physics Laboratory (2)
- PHYS 4610 - Quantum Mechanics (3)

Additional Support Courses Required (9 or 10 credit hours)

- CHEM 1210 PS - Principles of Chemistry I (5)
select one of the following:
- CHEM 1220 - Principles of Chemistry II (5)
- MICR 2054 LS - Principles of Microbiology (4)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3) and
- GEO 1115 - Physical Geology Lab (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 (15 credit hours)

- PHYS 3300 - Advanced Computational Physics (3)
- PHYS 3410 - Electronics for Scientists (4)
- PHYS 4400 - Advanced Physics Laboratory (2)
select two of the following:
- PHYS 3180 - Thermal Physics (3)
- PHYS 3540 - Mechanical and Electromagnetic Waves (3)
- PHYS 4610 - Quantum Mechanics (3)

Additional Physics Courses Required (14 credit hours)

- MATH 4610 - Numerical Analysis I (3) and
- MATH 4620 - Numerical Analysis II (3)
select two of the following:
- CS 1410 - Object-Oriented Programming (4)
- CS 2420 - Introduction to Data Structures and Algorithms (4)
- CS 2450 - Software Engineering I (4)
- CS 2650 - Computer Architecture/Organization (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).

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).

Admissions 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 Degree and General Education 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.

Physics Teaching Major Course Requirements for BS Degree

Physics Courses Required (25 credit hours)

- PHYS 1040 PS - Elementary Astronomy (3)
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- PHYS 2600 - Laboratory Safety (1)
- PHYS 2710 - Introductory Modern Physics (3)
- PHYS 3570 - Foundations of Science Education (3)
- PHYS 4570 - Secondary School Science Teaching Methods (3)
- PHYS 4800 - Individual Research Problems (1-3) (1 credit hour required)
- PHYS 4990 - Seminar in Physics (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 (3)
- MATH 1210 - Calculus I (4) and
- MATH 1220 - Calculus II (4)

Students must also complete the Teacher Education Licensure Program.

Physics, Applied (BS)

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 and General Education 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.

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 and General Education 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.

Applied Physics Major Course Requirements for BS Degree

Physics Courses Required (34 or 35 credit hours)

- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- PHYS 2300 - Scientific Computing for Physical Systems (3)
- PHYS 2600 - Laboratory Safety (1)
- PHYS 2710 - Introductory Modern Physics (3)
- PHYS 3190 - Applied Optics (3)
- PHYS 3500 - Analytical Mechanics (3)
- PHYS 3510 - Electromagnetic Theory (3)
- PHYS 3540 - Mechanical and Electromagnetic Waves (3)
- PHYS 4400 - Advanced Physics Laboratory (2) or
- PHYS 4410 - Materials Characterization Laboratory (2)
- PHYS 4800 - Individual Research Problems (1-3)
- PHYS 4990 - Seminar in Physics (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 (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- MATH 1200 - Mathematics Computer Laboratory (1)
- MATH 1210 - Calculus I (4)
- MATH 1220 - Calculus II (4)

- MATH 2210 - Calculus III (4)
- MATH 2280 - Ordinary Differential Equations (3)
- MATH 3410 - Probability and Statistics I (3) and
- MATH 3420 - Probability and Statistics II (3)

Physics 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 26 credit hours in Physics and support courses. Prior department approval is required.

Course Requirements for Minor

Physics Courses Required (10 credit hours)

- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)

Elective Physics Courses (8 credit hours)

Select at least three Physics courses from the following

- PHYS 2710 - Introductory Modern Physics (3)
- PHYS 3160 - Stellar and Planetary Astrophysics (3)
- PHYS 3180 - Thermal Physics (3)
- PHYS 3190 - Applied Optics (3)
- PHYS 3300 - Advanced Computational Physics (3)
- PHYS 3410 - Electronics for Scientists (4)
- PHYS 3420 - Data Acquisition and Analysis (3)
- PHYS 3500 - Analytical Mechanics (3)
- PHYS 3510 - Electromagnetic Theory (3)
- PHYS 3540 - Mechanical and Electromagnetic Waves (3)
- PHYS 4200 - The Physics of Materials (3)
- PHYS 4400 - Advanced Physics Laboratory (2)
- PHYS 4610 - Quantum Mechanics (3)

Support Courses Required (8 credit hours)

- MATH 1210 - Calculus I (4) and
- MATH 1220 - Calculus II (4)

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.

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 (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)
- PHYS 2600 - Laboratory Safety (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 (4) and
- MATH 1220 - Calculus II (4)
- HIST 3350 - History and Philosophy of Science (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 (3)
- PHYS 4570 - Secondary School Science Teaching Methods (3)

Physics Departmental Honors

To earn Departmental Honors in Physics, a student must:

- Maintain a departmental GPA of 3.3, and an overall GPA of 3.3
- Fulfill all the requirements for a Physics major
- Complete a research project (at least 3 credit hours) with a faculty member, with a grade of A.
- Present the project at the Physics Department Seminar and the Weber State Undergraduate Research Symposium.
- Volunteer at least 12 hours of community outreach in a Physics related context, such as the planetarium. This requirement also includes making an oral presentation about the work in the Honors Center.

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

How to apply for Departmental Honors in Physics:

Students must apply to be awarded departmental honors and be cleared by both the Physics Department and the Honors Program.

1. Complete the entrance application form for Departmental Honors with the departmental advisor and submit it to the Honors Program (2nd floor of the Stewart Library).
2. Meet the requirements listed above.
3. Complete the exit application with the departmental advisor.
4. Visit with Marilyn Diamond, the Honors advisor, to be cleared for graduation with Departmental Honors. (801-626-7336) mdiamond@weber.edu

Students earning departmental honors will be recognized in the following ways:

- "Department of Physics Honors" designation on the transcript.
- "Department of Physics Honors" printed on the degree diploma.
- Personalized letter signed by the President of Weber State University and the Honors Director.
- Invitations to Honors educational and social events.
- Invitation to Honors Nye-Cortez banquet at the end of the academic year.

For more information, contact:

Dr. Brad Carroll	Dept Chair	801-626-7921
Dr. Judy Elsley	Honors Director	801-626-6186

Department of Zoology

Department Chair: Samuel Zeveloff

Location: Science Lab, Room 402

Telephone Contact: Lani Shepard 801-626-6165

Professors: John Cavitt, Jonathan Clark, Ron Meyers,

John Mull, Robert Okazaki, Samuel Zeveloff; **Associate**

Professors: Nicole Berthélémy, Christopher Hoagstrom,

Michele Skopec, Barbara Trask; **Assistant Professors:**

Brian Chung, Jon Marshall

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.

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. It is the only such facility in the state dedicated to undergraduate use.

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 and Interdisciplinary Programs section of this catalog.)

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.

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 and General Education 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.

Major Course Requirements for BS Degree

Biological Science Courses Required
(46 credit hours)

- BTNY 2104 - Plant Form and Function (4)
- BTNY 2114 - Evolutionary Survey of Plants (4)
- MICR 2054 LS - Principles of Microbiology (4)
- ZOOL 1110 - Principles of Zoology I (4) and
- ZOOL 1120 - Principles of Zoology II (4) and
- ZOOL 2200 - Human Physiology (4) or
- ZOOL 3600 - Comparative Physiology (4)
- ZOOL 3300 - Genetics (4)
- ZOOL 3720 - Evolution (3) or
- BTNY 4113 - Plant Evolution (3)
- BTNY 3454 - Plant Ecology (4) or
- ZOOL 3450 - Ecology (4) or
- MICR 3154 - Microbial Ecology (4)
- BTNY 2600 - Laboratory Safety (1) or
- MICR 2600 - Laboratory Safety (1) or
- BTNY 3000+ - Electives (3) or
- ZOOL 3000+ - Electives (3) or
- MICR 3000+ - Electives (3)
- BTNY 3570 - Foundations of Science Education (3) or
- MICR 3570 - Foundations of Science Education (3) or
- ZOOL 3570 - Foundations of Science Education (3)

- ZOOL 4570 - Secondary School Science Teaching Methods (3) or
- BTNY 4570 - Secondary School Science Teaching Methods (3) or
- MICR 4570 - Secondary School Science Teaching Methods (3)
- BTNY 4800 - Individual Research (2) or
- MICR 4800 - Directed Research (1-2) or
- ZOOL 4800 - Problems in Zoology (1-4)

Support Courses Required
(23-25 credit hours)

- CHEM 1110 PS - Elementary Chemistry (5) and
- CHEM 1120 - Elementary Organic Bio-Chemistry (5) or
- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3)
- PHYS 1010 PS - Elementary Physics (3) or
- PHYS 2010 PS - College Physics I (5)
- MATH 1050 QL - College Algebra (4)
- HIST 3350 - History and Philosophy of Science (3)

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.

Zoology (BS)

Program Prerequisite: Not required.

Minor: 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; 40 of these are required within Zoology. A total of 40 upper division hours is required (courses number 3000 and above); 32 of these are required within the major.

Advisement

All Zoology students are encouraged to 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.

Admissions Requirements

Declare your program of study (Enrollment Services and Information). There are no special admission or application requirements for this major.

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements. The following Zoology courses will satisfy general education requirements: ZOOL 1010, ZOOL 1020, ZOOL 1030 and ZOOL 1370. Students are encouraged to take general education courses concurrently with courses in the major.

Major Course Requirements for BS Degree

Zoology Courses Required (28 credit hours)

- ZOOL 1110 - Principles of Zoology I (4)
- ZOOL 1120 - Principles of Zoology II (4)
- ZOOL 3200 - Cell Biology (4)
- ZOOL 3300 - Genetics (4)
- ZOOL 3450 - Ecology (4)
- ZOOL 3600 - Comparative Physiology (4)
- ZOOL 3720 - Evolution (3)
- ZOOL 4990 - Seminar (1)

Elective Zoology Courses (12 credit hours)

Select a minimum of 12 upper division credit hours.

- ZOOL 3340 - Information Resources in the Life Sciences (2)
- ZOOL 3470 - Zoogeography (3)
- ZOOL 3500 - Conservation Biology (3)
- ZOOL 3730 - Population Biology (3)
- ZOOL 4050 - Comparative Vertebrate Anatomy (4)
- ZOOL 4100 - Vertebrate Embryology (4)
- ZOOL 4120 - Histology (4)
- ZOOL 4210 - Advanced Human Physiology (4)
- ZOOL 4220 - Endocrinology (4)
- ZOOL 4250 - Radiation Biology (4)
- ZOOL 4300 - Molecular Genetics (4)
- ZOOL 4350 - Animal Behavior (4)
- ZOOL 4470 - Wildlife Ecology and Management (4)
- ZOOL 4480 - Aquatic Ecology (4)
- ZOOL 4500 - Parasitology (4)
- ZOOL 4600 - Protozoology (4)
- ZOOL 4640 - Entomology (4)
- ZOOL 4650 - Ichthyology (4)
- ZOOL 4660 - Herpetology (4)
- ZOOL 4670 - Ornithology (4)
- ZOOL 4680 - Mammalogy (4)
- ZOOL 4800 - Problems in Zoology (1-4) *
- ZOOL 4900 - Topics in Zoology (1-4)
- ZOOL 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- ZOOL 4950 - Field Zoology (1-3)
- ZOOL 4970 - Thesis (2)
- ZOOL 4980 - Research Design (2)
- ZOOL 4990 - Seminar (1) **

* No more than 4 hours of ZOOL 4800 may count toward the major. Students enrolled in ZOOL 4800 must be engaged in active research with a faculty member.

** ZOOL 4990 may count toward fulfilling the elective hours requirement only if it is additional to the 1 credit required for the major.

Other Zoology Courses

These do not count toward the major, but courses numbered 3000 or higher count as upper division credits for the Bachelor of Science Degree.

- ZOOL 2100 - Human Anatomy (4)
- ZOOL 2200 - Human Physiology (4)
- ZOOL 2800 - History of Life Sciences (3)
- ZOOL 2900 - Topics in Zoology (1-4)
- ZOOL 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- ZOOL 4830 - Readings in Zoology (1-4)
- ZOOL 4890 - Cooperative Work Experience (1-4)

Support Courses Required

- CHEM 1110 PS - Elementary Chemistry (5) and
- CHEM 1120 - Elementary Organic Bio-Chemistry (5) or
- CHEM 1210 PS - Principles of Chemistry I (5) and
- CHEM 1220 - Principles of Chemistry II (5) and
- CHEM 2310 - Organic Chemistry I (4) and
- CHEM 2315 - Organic Chemistry I Lab (1)
- CHEM 2320 - Organic Chemistry II (4) and
- CHEM 2325 - Organic Chemistry II Lab (1)
- MATH 1050 QL - College Algebra (4) or
- MATH 1080 QL - Pre-calculus (5) or
- MATH 1210 - Calculus I (4)
- PHYS 1010 PS - Elementary Physics (3) or
- PHYS 2010 PS - College Physics I (5) and
- PHYS 2020 - College Physics II (5) or
- PHYS 2210 PS - Physics for Scientists and Engineers I (5) and
- PHYS 2220 - Physics for Scientists and Engineers II (5)

CHEM 3070 may be taken instead of CHEM 2320.

Pre-medical professional students should take CHEM 1210/CHEM 1220 and CHEM 2310/CHEM 2320.

Students planning to attend graduate or professional schools are encouraged to take a class in the Calculus series (MATH 1210/MATH 1220). Pre-medical professional students are required to take one year of mathematics.

Pre-medical professional students should take PHYS 2010/PHYS 2020 with labs.

Choose any two (2) Botany or Microbiology courses from the list below.

Approval must be obtained from the Botany and Microbiology Department Chair before taking Botany and Microbiology courses numbered 3000 and above. Ecology-oriented students should take at least one Botany class, and Pre-medical professional students should take at least one Microbiology class.

- BTNY 1203 LS - Plant Biology (3)
- BTNY 2104 - Plant Form and Function (4)
- BTNY 2114 - Evolutionary Survey of Plants (4)
- BTNY 2303 DV - Ethnobotany (3)
- BTNY 3105 - Anatomy and Morphology of Vascular Plants (5)
- BTNY 3204 - Plant Physiology (4)
- BTNY 3214 - Soils (4)
- BTNY 3454 - Plant Ecology (4)
- BTNY 3504 - Mycology (4)
- BTNY 3514 - Algology (4)
- BTNY 3523 - Marine Biology (3)
- BTNY 3624 - Taxonomy of Vascular Plants (4)
- BTNY 4113 - Plant Evolution (3)
- MICR 2054 LS - Principles of Microbiology (4)
- MICR 3053 - Microbiological Procedures (3)
- MICR 3203 - The Immune System in Health & Disease (3)
- MICR 3254 - Immunology (4)
- MICR 3305 - Medical Microbiology (5)
- MICR 3484 - Environmental Microbiology (4)
- MICR 3502 - Environmental Health (2)
- MICR 3853 - Food Microbiology (3)
- MICR 4054 - Microbial Physiology (4)
- MICR 4252 - Cell Culture (2)
- MICR 4554 - Virology (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 (3)
- ZOOL 4300 - Molecular Genetics (4)
- ZOOL 4470 - Wildlife Ecology and Management (4)
- ZOOL 4480 - Aquatic Ecology (4)
- ZOOL 4640 - Entomology (4)
- ZOOL 4650 - Ichthyology (4)
- ZOOL 4660 - Herpetology (4)
- ZOOL 4670 - Ornithology (4)
- ZOOL 4680 - Mammalogy (4)

Support Course Electives in Botany

- BTNY 3624 - Taxonomy of Vascular Plants (4)
- BTNY 3473 - Plant Geography (3)

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.)

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.

Course Requirements for Minor

Zoology Courses Required (11 Credit Hours)

- ZOOL 1110 - Principles of Zoology I (4)
- ZOOL 1120 - Principles of Zoology II (4)
- ZOOL 3720 - Evolution (3)

Elective Zoology Courses (8 credit hours)

Select 8 credit hours of Zoology courses at or above the 2000 level.

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).

Course Requirements for Biology Teaching Minor

Science Courses Required (39 credit hours)

- ZOOL 1110 - Principles of Zoology I (4)
- ZOOL 1120 - Principles of Zoology II (4)
- BTNY 2104 - Plant Form and Function (4)
- BTNY 2114 - Evolutionary Survey of Plants (4)
- MICR 2054 LS - Principles of Microbiology (4)
- ZOOL 3300 - Genetics (4)
- ZOOL 3600 - Comparative Physiology (4) or
- ZOOL 2200 - Human Physiology (4)
- MICR 3154 - Microbial Ecology (4) or
- BTNY 3454 - Plant Ecology (4) or
- ZOOL 3450 - Ecology (4)
- BTNY 3570 - Foundations of Science Education (3) or
- MICR 3570 - Foundations of Science Education (3) or
- ZOOL 3570 - Foundations of Science Education (3)
- BTNY 4570 - Secondary School Science Teaching Methods (3) or
- MICR 4570 - Secondary School Science Teaching Methods (3) or
- ZOOL 4570 - Secondary School Science Teaching Methods (3)
- BTNY 2600 - Laboratory Safety (1) or
- MICR 2600 - Laboratory Safety (1) or

Required Support Courses (8 credit hours)

- HIST 3350 - History and Philosophy of Science (3)
- CHEM 1110 PS - Elementary Chemistry (5) or
- CHEM 1210 PS - Principles of Chemistry I (5)

Zoology Departmental Honors

Please contact the Zoology Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Enroll in the General Honors Program and complete 10 hours of General Honors courses.

Grade Requirements: Maintain an overall GPA of 3.5.

Credit Hour Requirements: Fulfill the requirements for the Zoology major, of which at least 12 hours must be completed on an Honors basis. A student may receive Honors credit for any Zoology course numbered above 3000. In addition, complete the senior seminar with Zoology department Honors credit and the Zoology thesis.

College of Social & Behavioral Sciences

Dr. Frank Harrold, Dean

The College of Social & Behavioral Sciences provides several avenues to academic, professional, and vocational competence. Besides specific courses preparing students for a broad variety of occupational categories, general education classes furnish an extensive breadth of knowledge and a keen appreciation for moral, intellectual, and aesthetic values.

Although stressing breadth of education, curricula of the College afford enough specialization and career education to prepare students for enrollment in professional schools and graduate programs or for participation in various occupational classifications immediately upon graduation.

College Advisor: Seth Wilhelmsen 801-626-7809
Telephone Contact: JoAnn Reynolds 801-626-6232
Location: Social Science Building, Room 270

Department Chairs/Directors

Criminal Justice: Dr. David R. Lynch	801-626-6714
Geography: Dr. Bryan Dorsey	801-626-6944
History: Dr. Susan Matt	801-626-6706
Political Science & Philosophy: Dr. Nancy Haanstad	801-626-6694
Psychology: Dr. Eric Amsel	801-626-6247
Social Work & Gerontology: Dr. Mark O. Bigler	801-626-6157
Sociology & Anthropology: Dr. Marjukka Ollilainen	801-626-6241

ROTC Units

Aerospace Studies: Lt Col Michael Eliason (SLC) <i>or contact the College of Social & Behavioral Sciences 801-626-7649</i>	801-581-6236
Military Science: Lieutenant Colonel Robert B. Bashein	801-626-6518

Social Science Education Center

Director: Dr. LaRae Larkin
Location: Social Science Building, Room 138
Telephone: 801-626-7404

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.

Master of Criminal Justice Program

Program Director: Bruce Bayley
Telephone Contact: 801-626-8134

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, and parole board members. 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

Classes will be held in the late afternoon and evening to allow for attendance by the non-traditional student who may have a full time work obligation. Initially, most classes will be held on the Weber State University campus in Ogden, Utah. Depending on the time and commitment, students will be able to complete all of the course work in two years.

Master of Science in Criminal Justice (MSCJ)

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 in Criminal Justice or a related social or behavioral science area.

Each candidate will be evaluated on (1) past academic performance, (2) score on the Graduate Record Examination (GRE), and (3) overall experience and progression in the criminal justice field or other areas of experience. Specific admissions criteria include:

- Completion of the WSU admissions application form
- Completion of the Department Master's Degree application form
- Submission of official transcripts from all colleges/universities attended
- Submission of a current resume
- Submission of a written personal statement explaining interest in the program
- Submission of GRE scores

Each applicant will be considered on an individual basis, and those whose undergraduate work does not reflect a basic foundation in criminal justice study, or who do not meet the specific admission requirements, may be admitted on a provisional basis. Students applying without undergraduate competency in Criminal Justice may be required to take basic undergraduate criminal justice classes before being admitted to full candidacy.

Graduation Requirements

The Master of Science degree in Criminal Justice requires the completion of 36 semester hours. Four core courses totaling 12 semester hours are required. These courses are:

- MCJ 6100 - Contemporary Criminal Justice (3)
- MCJ 6120 - Theories of Crime and Delinquency (3)
- MCJ 6110 - Research Methods in Criminal Justice (3)
- MCJ 6150 - Diversity Issues in Criminal Justice (3)

A minimum GPA of 3.0 for all courses is required. No "C" grade 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. Students must choose between completing a Master's Project, or taking additional course work in lieu of the project. The requirements for each option are identified below. Regardless of the option chosen, the student must complete all degree requirements within four years of entry into the program.

Project Option

1. Complete 12 core credit hours.
2. Complete 21 elective credit hours.
3. Complete three project credit hours.

Non-Project Option

1. Complete 12 core credit hours.
2. Complete 24 elective credit hours.

Master of Science Degree Criminal Justice Courses

Required Courses

- MCJ 6100 - Contemporary Criminal Justice (3) *
- MCJ 6120 - Theories of Crime and Delinquency (3) *
- MCJ 6110 - Research Methods in Criminal Justice (3) **
- MCJ 6150 - Diversity Issues in Criminal Justice (3) **

* Core course that must be taken during first (Fall) semester as prerequisite to other courses.

** Core course must be taken during second (Spring) semester as prerequisite to other courses.

Elective Courses

- MCJ 6130 - Law and Social Control (3)
- MCJ 6140 - Technology and Innovation in Criminal Justice (3)
- MCJ 6160 - Seminar: Criminal Justice Policy Analysis (3)
- MCJ 6170 - Seminar: Juvenile Justice (3)
- MCJ 6180 - Seminar: Contemporary Legal Issues (3)
- MCJ 6190 - Legal Foundations of Criminal Justice (3)
- MCJ 6210 - Seminar: Judicial Administration (3)
- MCJ 6220 - Seminar: Contemporary Law Enforcement (3)
- MCJ 6230 - Seminar: Contemporary Corrections (3)
- MCJ 6240 - Criminal Justice Planning, Budgeting, and Evaluation (3)
- MCJ 6250 - Topics in Criminal Justice (1-3)
- MCJ 6255 - Great Thoughts in Criminal Justice (3) *
- MCJ 6260 - Graduate Readings (3)
- MCJ 6270 - Project (3) **
- MCJ 6810 - Experimental Course (1-3)
- MCJ 6920 - Workshops and Conference (1-3)

* May be taken twice for a total of 6 credit hours.

** Students wishing to do a project must complete a project proposal prior to the end of their first year of coursework.

Department of Criminal Justice

Department Chair: David Lynch

Location: Social Science Building, Room 218

Telephone Contact: Faye Medd 801-626-6146

Professors: David Lynch, Scott Senjo;

Associate Professors: Bruce Bayley, Julie Buck, Brent Horn; **Assistant Professors:** Russ Dean, Samuel Newton, Bradford Reyns, Molly Sween; **Instructors:** Mike Chabries, Brian Namba

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.

Criminal Justice (AS)

Grade Requirements: A grade of "C" or better in courses required for an associate's degree in addition to an overall GPA for these courses of 2.50 or higher.

Credit Hour Requirements: 60 total hours are required, including at least 21 Criminal Justice credits (CJ prefix).

Advisement

All Criminal Justice students are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6146 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 and General Education Requirements for Associate's Degree requirements.

Major Course Requirements for AS Degree

Criminal Justice Courses Required (21 credit hours)

- CJ 1010 SS - Introduction to Criminal Justice (3)
- CJ 1330 - Criminal Law (3)
- CJ 1340 - Criminal Investigation (3)
- CJ 1350 - Introduction to Forensic Science (3)
- CJ 2350 - Laws of Evidence (3)

An additional 6 credit hours must be selected from elective criminal justice courses (see listing under the Criminal Justice Major) in consultation with a Criminal Justice advisor.

Criminal Justice (BS)

Program Prerequisite: Not required.

Minor: A minor or a double major is required. Students wishing to pursue careers in Federal criminal justice agencies are highly recommended to minor in a foreign language. In lieu of a minor, an 18 hour specialization may be selected in consultation with the chair and only in those instances where a specific minor is not offered by WSU. Students in the Forensic Science/Investigation concentration are exempt from the minor requirement.

Grade Requirements: A grade of "C" or better in all courses required for this major 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; a minimum of 45 of these is required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 18 of these are required within the major.

Advisement

All Criminal Justice students are encouraged to meet with a faculty advisor at least annually for course and program advisement. Call 801-626-6146 for more information or to find an advisor.

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 and General Education Requirements for Bachelor of Science requirements. The following course required for the Criminal Justice major will also satisfy general education requirements: CJ 1010. The diversity requirement can be met by completing CJ 3040 or CJ 3360.

Major Course Requirements for BS Degree

Students obtaining a major in Criminal Justice are required to complete 45 credit hours in courses with a CJ prefix. Of these, 18 credit hours must be upper division courses numbering 3000 or above.

Core Courses Required (21 credit hours)

- CJ 1010 SS - Introduction to Criminal Justice (3)
- CJ 1330 - Criminal Law (3)
- CJ 3270 - Theories of Crime and Delinquency (3)
- CJ 3600 - Criminal Justice Statistics (3) or
- SOC 3600 - Social Statistics (3) * or
- PSY 3600 - Statistics in Psychology (3) * or
- GERT 3600 - Social Statistics (3) *
- CJ 4200 - Ethical Issues in Criminal Justice (3)
- CJ 4980 - Research Methods in Criminal Justice (3) **
- CJ 4990 - Criminal Justice Seminar (3) ***

* Will meet the core requirement but may not be counted if used in another department (will not receive CJ credit).

** Statistics prerequisite.

*** Senior standing required.

Concentrations

Select one concentration and complete 15 credit hours or select a general concentration of 15 credit hours from any combination. The Forensic Science concentrations have additional requirements. Courses taken in one concentration cannot be used to fill the requirement in another concentration.

Law Enforcement (15 credit hours)

- CJ 1340 - Criminal Investigation (3)
- CJ 1350 - Introduction to Forensic Science (3)
- CJ 2860 - Criminal Justice Field Experience (3) or
- CJ 4860 - Criminal Justice Field Experience (3)
- CJ 3020 - Criminal Justice Management (3)
- CJ 3040 DV - Community Policing (3)
- CJ 4100 - Laws of Arrest, Search and Seizure (3)
- CJ 4300 - History of Law Enforcement (3)
- CJ 4160 - Constitutional Rights and Responsibilities (3)

Corrections (15 credit hours)

- CJ 1300 - Introduction to Corrections (3)
- CJ 2330 - Juvenile Justice (3)
- CJ 2860 - Criminal Justice Field Experience (3) or
- CJ 4860 - Criminal Justice Field Experience (3)
- CJ 3020 - Criminal Justice Management (3)
- CJ 3060 - Corrections in the Community (3)
- CJ 3140 - Corrections Law (3)
- CJ 3350 - The American Jail (3)
- CJ 3360 DV - Prisons - Contemporary Issues and Dilemmas (3)

Law and Justice (15 credit hours)

- CJ 2350 - Laws of Evidence (3)
- CJ 2360 - Juvenile Law and Procedure (3)
- CJ 2860 - Criminal Justice Field Experience (3) or
- CJ 4860 - Criminal Justice Field Experience (3)
- CJ 3080 - Criminal Courts (3)
- CJ 3140 - Corrections Law (3)
- CJ 4000 - Critical Legal Studies (3)
- CJ 4100 - Laws of Arrest, Search and Seizure (3)
- CJ 4160 - Constitutional Rights and Responsibilities (3)

Forensic Science

Those students wishing to pursue a concentration in forensics will have the option of choosing one of two tracks:

- I. Forensic Science I / Laboratory - for those wishing to predominantly work in a crime lab, including chemical analysis, serology and DNA analysis.
- II. Forensic Science II / Investigation - for those wishing to have a more general background and training in order to work in the field, including crime scene investigation, pattern analysis and photography.

Requirements for a concentration in Forensic Science/Laboratory:

This concentration requires a double major: one in Chemistry, Botany, Zoology, or Microbiology and a major in Criminal Justice with a concentration in Forensic Science. No minor is required. The CJ major requires all of the core courses and other requirements for other CJ majors as well as the following 14 credit hours for a concentration.

- CJ 1350 - Introduction to Forensic Science (3)
- CJ 2350 - Laws of Evidence (3)
- CJ 4110 - Physical Methods in Forensic Science (4)
- CJ 4120 - Advanced Methods in Forensic Science (4)

Requirements for a Concentration in Forensic Science/Investigation:

Complete all of the following 60-62 credit hours of Criminal Justice and support courses.

Criminal Justice Courses (30 credit hours)

- CJ 1340 - Criminal Investigation (3)
- CJ 1350 - Introduction to Forensic Science (3)
- CJ 2340 - Scientific Crime Scene Investigation (3)
- CJ 2350 - Laws of Evidence (3)
- CJ 4060 - Special Problems in Criminal Justice (3)
- CJ 4100 - Laws of Arrest, Search and Seizure (3)
- CJ 4110 - Physical Methods in Forensic Science (4)
- CJ 4115 - Friction Ridge Analysis (4)
- CJ 4120 - Advanced Methods in Forensic Science (4)

Support Courses (30-32 credit hours)

- ZOOL 2100 - Human Anatomy (4)
- MATH 1040 QL - Introduction to Statistics (3)
- COMM 1020 HU - Principles of Public Speaking (3)
- ART 2250 - Foundations of Photography: Black & White/Analog (3)
- ANTH 2030 SS - Principles of Archaeology (3)

One of

- PHYS 1010 PS - Elementary Physics (3)
- PHYS 2010 PS - College Physics I (5)
- PHYS 2210 PS - Physics for Scientists and Engineers I (5)

One of

- BTNY 2600 - Laboratory Safety (1)
- CHEM 2600 - Laboratory Safety (1)
- GEO 2600 - Laboratory Safety (1)
- MICR 2600 - Laboratory Safety (1)
- PHYS 2600 - Laboratory Safety (1)

Either

- CHEM 1110 PS - Elementary Chemistry (5) and CHEM 1120 - Elementary Organic Bio-Chemistry (5)
- or**
- CHEM 1210 PS - Principles of Chemistry I (5) and CHEM 1220 - Principles of Chemistry II (5)

This concentration requires the student to also complete the Criminal Justice Core Courses (21 hours) listed previously. The Forensic Science/Investigation student does not need to complete a minor or a double major. The student also does not need to complete the additional 9 credit hours of elective courses. *Students are encouraged to take CJ 4860 Field Experience during their senior year.*

General (15 credit hours)

Students selecting this option will be required to propose a total of 15 credit hours selected from a combination of the preceding list of courses. Students will be expected to provide a rationale for the specific combination of courses they select.

Elective Courses

In addition to the 21 credit hours of core courses and the 15 credit hours in each area of concentration, students are required to complete an additional 9 credit hours of criminal justice courses (with CJ prefixes - courses may not be counted twice) to be selected from the following:

- CJ 1300 - Introduction to Corrections (3)
- CJ 1340 - Criminal Investigation (3)
- CJ 1350 - Introduction to Forensic Science (3)
- CJ 2110 - Introduction to Security (3)
- CJ 2330 - Juvenile Justice (3)
- CJ 2340 - Scientific Crime Scene Investigation (3)
- CJ 2350 - Laws of Evidence (3)
- CJ 2360 - Juvenile Law and Procedure (3)
- CJ 2810 - Experimental Course (1-3) or
- CJ 4810 - Experimental Course (1-3)
- CJ 2860 - Criminal Justice Field Experience (3) or
- CJ 4860 - Criminal Justice Field Experience (3)
- CJ 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4) or
- CJ 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
- CJ 3020 - Criminal Justice Management (3)
- CJ 3040 DV - Community Policing (3)
- CJ 3060 - Corrections in the Community (3)
- CJ 3080 - Criminal Courts (3)
- CJ 3110 - Issues in Security and Loss Prevention (3)
- CJ 3130 - Investigation of Computer Crime (3)
- CJ 3140 - Corrections Law (3)
- CJ 3300 - Victimology (3)
- CJ 3350 - The American Jail (3)
- CJ 3360 DV - Prisons - Contemporary Issues and Dilemmas (3)

- CJ 3400 - Drugs and Crime (3)
- CJ 4000 - Critical Legal Studies (3)
- CJ 4060 - Special Problems in Criminal Justice (3)
- CJ 4100 - Laws of Arrest, Search and Seizure (3)
- CJ 4110 - Physical Methods in Forensic Science (4)
- CJ 4115 - Friction Ridge Analysis (4)
- CJ 4120 - Advanced Methods in Forensic Science (4)
- CJ 4160 - Constitutional Rights and Responsibilities (3)
- CJ 4200 - Ethical Issues in Criminal Justice (3)
- CJ 4300 - History of Law Enforcement (3)
- CJ 4700 - Comparative Criminal Justice Systems (3)
- CJ 4830 - Directed Readings and Special Projects (1-3) *
- CJ 4900 - Current Issues in Criminal Justice (3)
- CJ 4950 - Field Trips/Travel Study (1-6)

* Requires Department Chair approval.

Additional credit for P.O.S.T. certification may be obtained but does not count toward major, minor or BIS.

- CJ 1070 - Law Enforcement/Corrections Academy, Part I (3)
- CJ 1080 - Law Enforcement/Corrections Academy, Part II (3)

Criminal Justice (BIS)

Program Prerequisite: Refer to Integrated Studies (BIS).

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.

Criminal Justice Minor

Grade Requirements: A grade of "C" or better in courses used toward the minor in addition to an overall GPA for these courses of 2.50 or higher.

Credit Hour Requirements: Minimum of 18 credit hours in Criminal Justice courses (CJ prefix).

Course Requirements for Minor

Criminal Justice Courses Required
(12 credit hours)

- CJ 1010 SS - Introduction to Criminal Justice (3)
- CJ 1330 - Criminal Law (3)
- CJ 3270 - Theories of Crime and Delinquency (3)
- CJ 4200 - Ethical Issues in Criminal Justice (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).

Criminal Justice Departmental Honors

Please contact the Criminal Justice Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Complete the "Entrance Form" with the Criminal Justice Department Honors Advisor.

Grade Requirements: Earn a WSU GPA of 3.5 and a departmental GPA of 3.6.

Other Requirements: See Dr. Julie Buck, Departmental Honors Advisor, for additional requirements.

Department of Geography

Department Chair: Bryan Dorsey

Location: Social Science Building, Room 314

Telephone Contact: Debra Lacey 801-626-6207

Professors: Daniel Bedford, Bryan Dorsey, Hal Elliott;

Associate Professors: Eric Ewert, Julie Rich; **Assistant**

Professor: Alice Mulder

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 interfaces with other disciplines in the natural sciences, social & behavioral sciences, business, and economics.

Interdisciplinary Minors

The Geography Department 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 and Interdisciplinary Programs section of this catalog.)

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.

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.

General Education

Refer to Degree and General Education 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, or GEOG 1520 (these courses will also satisfy general education requirements).

Major Course Requirements for BS Degree

Core Courses Required (12 credit hours)

- GEOG 1000 PS - Natural Environments of the Earth **(3)**
- GEOG 1300 SS/DV - Places and Peoples of the World **(3)**
- GEOG 3600 - Quantitative Methods in Geography **(3)**
- GEOG 4990 - Research Seminar **(3)**

Track A

(General Geography Emphasis – 24-25 credit hours)

Required Systematic Courses (12-13 credit hours)

Select 4 of the following, with at least 1 course from each group.

Group 1

- GEOG 3050 - Weather and Climate **(3)**
- GEOG 3070 - Wetland Environments **(3)**
- GEOG 3080 - Arid Lands **(3)**
- GEOG 3090 - Arctic and Alpine Environments **(3)**
- GEO 3010 - Oceanography and Earth Systems **(3)**
- GEO 3150 - Geomorphology **(4)**
- GEO 3210 - Quaternary Environmental Change **(3)**

Group 2

- GEOG 3060 - World Environmental Issues **(3)**
- GEOG 3210 - Urban Geography **(3)**
- GEOG 3300 - Historical Geography of the United States **(3)**
- GEOG 3360 - Economic Geography **(3)**

Group 3

- GEOG 3450 - Cartography **(3)**
- GEOG 3460 - Advanced Cartography **(3)**
- GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems **(4)**
- GEO 4220 - Technical and Applicational Issues in GIS **(4)**

Electives (12 credit hours)

Select from **Geography** courses (either upper or lower division) twelve additional credit hours

Track B

(Regional Emphasis with Concentrations in Asian Studies, Ethnic Studies, European Studies, or Latin American Studies – 24 credit hours)

Required Regional Courses (6 credit hours)

Select two of the following

- GEOG 1520 SS/DV - Geography of the United States and Canada **(3)** *
- GEOG 3500 - Geography of Utah **(3)**
- GEOG 3540 DV - Geography of Latin America **(3)**
- GEOG 3590 DV - Geography of Europe **(3)**
- GEOG 3620 DV - Geography of Russia and the Former USSR **(3)**
- GEOG 3640 DV - Geography of Asia **(3)**
- GEOG 3660 DV - Geography of China and Japan **(3)**
- GEOG 3740 DV - Geography of Africa **(3)**
- GEOG 3780 - Geographic Area Studies **(1-3)**

* Required for Ethnic Studies concentration

Asian Studies, Ethnic Studies, European Studies, or Latin American Studies Electives (18 credit hours)

From the Asian Studies Minor Program list of classes, or from the Ethnic Studies Emphasis Program list of classes, or from the European Studies Minor Program list of classes, or from Latin American Studies Minor Program list of classes select 18 credit hours from at least three different departments or disciplines. No regional courses from the preceding list may be counted twice.

Track C

(Regional Emphasis with Concentration in Global Studies – 24 credit hours)

Required Regional Courses (12 credit hours)

Select four of the following

- GEOG 1520 SS/DV - Geography of the United States and Canada **(3)**
- GEOG 3500 - Geography of Utah **(3)**
- GEOG 3540 DV - Geography of Latin America **(3)**
- GEOG 3590 DV - Geography of Europe **(3)**
- GEOG 3620 DV - Geography of Russia and the Former USSR **(3)**
- GEOG 3640 DV - Geography of Asia **(3)**
- GEOG 3660 DV - Geography of China and Japan **(3)**
- GEOG 3740 DV - Geography of Africa **(3)**
- GEOG 3780 - Geographic Area Studies **(1-3)**

Technique Courses (3 credit hours)

Select one of the following

- GEOG 3450 - Cartography (3)
- GEOG 3460 - Advanced Cartography (3)

Additional Upper Division Courses (9 credit hours)

Students must take 9 additional hours in geography. These may be environmental, cultural, regional, or technique courses. Support courses in related fields that emphasize global and regional studies are encouraged.

Track D**(Technical Emphasis – 24 credit hours)****Required Technical Courses (15 credit hours)**

- GEOG 3450 - Cartography (3)
- GEO 3400 - Remote Sensing I (4)
- GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems (4)
- GEO 4220 - Technical and Applicational Issues in GIS (4)

Technical Elective Courses (9 credit hours)

Select 9 hours of the following

- GEOG 3390 - Aerial Photo Interpretation (3)
- GEOG 3460 - Advanced Cartography (3)
- GEOG 4410 - Land Use Planning Techniques and Practices (3)
- GEOG 4420 - Advanced Planning Techniques (3)
- GEO 1115 - Physical Geology Lab (1)
- GEO 4400 - Remote Sensing II: Advanced Digital Image Processing (4)

Track E**(Environmental Studies Emphasis -- 24 credit hours)****Required Geography Courses (4 credit hours)****Environmental Studies Electives (20 credit hours)**

Select 20 credit hours from any of the courses listed below, with at least 9 credit hours chosen from at least three different programs.*

- BTNY 2203 - Home and Garden Plants (3)
- BTNY 2413 - Introduction to Natural Resource Management (3)
- BTNY 2950 - Elementary Field Botany (1-2)
- BTNY 3214 - Soils (4) **
- BTNY 3403 - Environment Appreciation (3) **
- BTNY 3454 - Plant Ecology (4) **
- BTNY 3473 - Plant Geography (3) **
- ECON 1100 SS - Environmental Issues and Economic Policy (3)
- ENGL 3520 HU - Literature of the Natural World (3)
- GEOG 1002 - Map Reading and Land Navigation (2)
- GEOG 1400 PS - The Science of Global Warming: Myths, Realities and Solutions (3)
- GEOG 3050 - Weather and Climate (3) **
- GEOG 3070 - Wetland Environments (3)
- GEOG 3080 - Arid Lands (3) **
- GEOG 3090 - Arctic and Alpine Environments (3) **
- GEOG 3450 - Cartography (3)

- GEOG 3460 - Advanced Cartography (3) **
- GEOG 3500 - Geography of Utah (3)
- GEOG 4410 - Land Use Planning Techniques and Practices (3)
- GEOG 4420 - Advanced Planning Techniques (3) **
- GEOG 4950 - Advanced Regional Field Studies (1-3)
- GEOG 4950 - Advanced Regional Field Studies (1-3)
- GEO 3010 - Oceanography and Earth Systems (3) **
- GEO 3150 - Geomorphology (4) **
- GEO 3210 - Quaternary Environmental Change (3) **
- GEO 3400 - Remote Sensing I (4) **
- GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems (4) **
- GEO 4220 - Technical and Applicational Issues in GIS (4) **
- HNRS 1500 PS - Perspectives in the Physical Sciences (3)
- HNRS 1540 HU - Perspectives in the Humanities (3)
- HIST 3270 - American Environmental History (3)
- MICR 1153 LS - Elementary Public Health (3)
- MICR 3484 - Environmental Microbiology (4) **
- MICR 3502 - Environmental Health (2) **
- SOC 3300 - Environment and Society (3)
- ZOOL 3450 - Ecology (4) **
- ZOOL 3470 - Zoogeography (3) **
- ZOOL 3500 - Conservation Biology (3) **
- ZOOL 4470 - Wildlife Ecology and Management (4) **

* Other environmental courses 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 the natural environment.

** Courses with prerequisites.

Geography Teaching (BS)

Program Prerequisite: Must satisfy Teacher Education admission and licensure requirements (see Department of Teacher Education).

Minor: 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 within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above); 18-24 of these are required within the major.

Advisement

Teaching majors are encouraged to consult with advisors in both the College of Social Science (call 801-626-6945) 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 and General Education Requirements of this catalog for Bachelor of Science requirements. The following general education courses required for the Geography Teaching major also will satisfy general education requirements: GEOG 1000, GEOG 1300, and GEOG 1520.

Major Course Requirements for BS Degree

Students completing the department's Regular Emphasis (see Geography (BS)) with a General Geography concentration (Track A) 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.

Geography Courses Required (18 credit hours)

- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEOG 1300 SS/DV - Places and Peoples of the World (3)
- GEOG 1520 SS/DV - Geography of the United States and Canada (3)
- GEOG 3500 - Geography of Utah (3)
- GEOG 3600 - Quantitative Methods in Geography (3)
- GEOG 4990 - Research Seminar (3)

Electives (6 credit hours)

Select two of the following, including one non-western or third world region

- GEOG 3540 DV - Geography of Latin America (3)
- GEOG 3590 DV - Geography of Europe (3)
- GEOG 3620 DV - Geography of Russia and the Former USSR (3)
- GEOG 3640 DV - Geography of Asia (3)
- GEOG 3660 DV - Geography of China and Japan (3)
- GEOG 3740 DV - Geography of Africa (3)
- GEOG 3780 - Geographic Area Studies (1-3)

Technique Courses (3 credit hours)

Select one of the following

- GEOG 3390 - Aerial Photo Interpretation (3)
- GEOG 3450 - Cartography (3)
- GEOG 3460 - Advanced Cartography (3)

Additional Upper Division Courses (9 credit hours)

Students must take 9 additional hours in geography. These may be physical, cultural, regional, or technique courses. Support courses in related majors are encouraged.

Geography Teaching majors are also required to take HIST 4500, Teaching Social Studies in Grades 5-12, (3) in addition to the courses required by the Teacher Education program.

Geography Minor

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.

Students who select the Geography Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department).

Course Requirements for Minor

Geography Courses Required (9 credit hours)

- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEOG 1300 SS/DV - Places and Peoples of the World (3)
- GEOG 1520 SS/DV - Geography of the United States and Canada (3)

Elective Geography Courses (12 credit hours)

Select 12 additional credit hours of upper division Geography courses.

It is required that Geography Teaching minors also take HIST 4500, Teaching Social Studies in Grades 5-12, (3) in addition to the courses required by the Teacher Education program.

Geography Teaching Minor

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.

Students who select the Geography Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Teacher Education Department).

Course Requirements for Minor

Geography Courses Required (9 credit hours)

- GEOG 1000 PS - Natural Environments of the Earth (3)
- GEOG 1300 SS/DV - Places and Peoples of the World (3)
- GEOG 1520 SS/DV - Geography of the United States and Canada (3)

Elective Geography Courses (12 credit hours)

Select 12 additional credit hours of upper division Geography courses.

It is required that Geography Teaching minors also take HIST 4500, Teaching Social Studies in Grades 5-12, (3) in addition to the courses required by the Teacher Education program.

Geography Departmental Honors

Please contact the Geography Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Enroll in the General Honors Program and complete 6 hours of General Honors courses.

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Fulfill requirements for Geography departmental or Teaching major, of which at least 12 credit hours of Geography courses must be completed on an Honors basis. A student may receive Geography Honors credit in any upper division Geography course.

Department of History

Department Chair: Susan Matt

Location: Social Science Building, Room 234

Telephone Contact: Angela Swaner 801-626-6706

Professors: Sara Dant, Gregory Lewis, Kathryn MacKay, Susan Matt, Richard Sadler, Gene Sessions; **Associate Professors:** Stephen Francis, LaRae Larkin, Vikki Vickers; **Assistant Professors:** Brady Brower, Branden Little

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 and Interdisciplinary Programs section of this catalog.)

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). Also refer to the general grade requirements for graduation on page 38.

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); 24 of these are required within the major.

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.

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 and General Education Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

Major Course Requirements for BA Degree

History Core Courses Required (12 credit hours)

- HIST 1500 SS - World History to 1500 C.E. (3)
- HIST 1510 SS/DV - World History from 1500 C.E. to the Present (3)
- HIST 2700 - History of the United States to 1877 (3)
- HIST 2710 - History of the United States since 1877 (3)

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 3000 - Investigating History (3)
- HIST 4990 - Senior Seminar (3) *

** Should be taken during senior year. HIST 3000 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 DV - American Indian History: 1300 to Present (3)
- HIST 3030 DV - African-American History (3)
- HIST 3050 DV - History of U.S. Latinos (3)
- HIST 3070 DV - Women in American History: 1600 to Present (3)
- HIST 3090 DV - American Social History (3)
- HIST 3110 - American Ideas and Culture (3)
- HIST 3130 - U.S. Urban History (3)
- HIST 3210 - U.S. Constitutional History (3)
- HIST 3230 - American Foreign Relations (3)
- HIST 3250 - Religion in American History (3)
- HIST 3270 - American Environmental History (3)
- HIST 3280 - American Military History to 1917 (3)

- HIST 3290 - American Military History since 1917 (3)
- HIST 4010 - Colonial America (3)
- HIST 4020 - Era of the American Revolution: 1763-1800 (3)
- HIST 4030 - New Nation: 1800-1840 (3)
- HIST 4040 - Era of the Civil War and Reconstruction: 1840-1877 (3)
- HIST 4050 - U.S. in the Gilded Age and Progressive Era: 1877-1919 (3)
- HIST 4060 - Twentieth-Century United States: 1919-1945 (3)
- HIST 4070 - Twentieth-Century United States since 1945 (3)
- HIST 4110 DV - History of the American West to 1900 (3)
- HIST 4120 - The American West since 1900 (3)
- HIST 4130 - History of Utah (3)
- HIST 4710 - Special Issues and Topics in American History (3)

European History

- HIST 4210 - Ancient History (3)
- HIST 4220 - History of the Middle Ages 300-1300 (3)
- HIST 4230 - Renaissance and Reformation - Europe: 1300-1660 (3)
- HIST 4240 - Absolutism, Enlightenment and Revolution - Europe: 1660-1815 (3)
- HIST 4250 - Nineteenth-Century Europe (3)
- HIST 4260 - Twentieth-Century Europe (3)
- HIST 4280 - History of Christianity in Europe (3)
- HIST 4310 - History of Russia to 1917 (3)
- HIST 4320 - Russia since 1917 (3)
- HIST 4330 - History of England to 1485 (3)
- HIST 4335 - Tudor and Stuart England (3)
- HIST 4340 - History of England since 1714 (3)
- HIST 4350 DV - History of Modern Germany (3)
- HIST 4370 - History of Modern France 1789-present (3)
- HIST 4410 - History of Spain and Portugal (3)
- HIST 4430 - History of Scandinavia (3)
- HIST 4450 - History of Modern Eastern Europe since 1815 (3)
- HIST 4720 - Special Issues and Topics in European History (3)

Global, Comparative, and General

- HIST 3050 DV - History of U.S. Latinos (3)
- HIST 4510 DV - Twentieth Century World (3)
- HIST 4530 DV - Far Eastern History (3)
- HIST 4550 DV - Southeast Asian History (3)
- HIST 4590 DV - Middle Eastern History (3)
- HIST 4610 - History of Africa (3)
- HIST 4630 - History of Ancient and Colonial Latin America (3)
- HIST 4650 DV - Modern Latin America (3)
- HIST 4670 DV - History of Mexico (3)

Other Electives

May be taken to meet credit hour requirements.

- HIST 3400 - Principles of Public History (3)
- HIST 3500 - Historical Preservation (3)
- HIST 4810 Experimental Courses (1-3)
- HIST 4810 - Experimental Courses (3)
- HIST 4830 - Directed Readings (1-3)
(max 3 cr towards major/minor)
- HIST 4860 - Internships in Historical Studies (1-6)
(max 6 cr towards major/minor)

- HIST 4890 - Cooperative Work Experience (1-6)
(max 6 cr towards major/minor)
- HIST 4920 - Short Courses, Workshops, and Special Programs (1-6) (max 6 cr towards major/minor)
- HIST 4930 - History Workshop (1-5)
(max 5 cr towards major/minor)
- HIST 4980 - History Honors Senior Project (2)

History majors are encouraged to also take POLS 1100 AI - American National Government (3).

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. Asian Studies minor eligible with History Teaching major.

Grade Requirements: A grade of "C" or better in courses applied toward this major (a grade of "C-" is not acceptable). Also refer to the general grade requirements for graduation on Degree and General Education Requirements.

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); 24 of these are required within the major.

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 (call 801-626-6269).

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).

General Education

Refer to Degree and General Education Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements.

Major Course Requirements for BA Degree

History Core Courses Required (12 credit hours)

- HIST 1500 SS - World History to 1500 C.E. (3)
- HIST 1510 SS/DV - World History from 1500 C.E. to the Present (3)
- HIST 2700 - History of the United States to 1877 (3)
- HIST 2710 - History of the United States since 1877 (3)

All the above should be taken before upper-division course work (courses numbered 3000 and above).

In addition, please note that HIST 4500 is required for completion of the Secondary Education Licensure program.

Language Courses Required to fulfill the BA (12 credit hours)

- 6 credit hours of foreign language

and the following language arts courses

- HIST 3000 - Investigating History (3)
- HIST 4990 - Senior Seminar (3) *

** Should be taken during senior year. HIST 3000 is a prerequisite to HIST 4990.*

Upper Division Elective Courses (18 credit hours)

Select at least one course in each area.

History Teaching majors must select either HIST 4110, HIST 4120 or HIST 4130 as part of their 18 credit hours.

North American History

- HIST 3010 DV - American Indian History: 1300 to Present (3)
- HIST 3030 DV - African-American History (3)
- HIST 3050 DV - History of U.S. Latinos (3)
- HIST 3070 DV - Women in American History: 1600 to Present (3)
- HIST 3090 DV - American Social History (3)
- HIST 3110 - American Ideas and Culture (3)
- HIST 3130 - U.S. Urban History (3)
- HIST 3210 - U.S. Constitutional History (3)
- HIST 3230 - American Foreign Relations (3)
- HIST 3250 - Religion in American History (3)
- HIST 3270 - American Environmental History (3)
- HIST 3280 - American Military History to 1917 (3)
- HIST 3290 - American Military History since 1917 (3)
- HIST 4010 - Colonial America (3)
- HIST 4020 - Era of the American Revolution: 1763-1800 (3)
- HIST 4030 - New Nation: 1800-1840 (3)
- HIST 4040 - Era of the Civil War and Reconstruction: 1840-1877 (3)
- HIST 4050 - U.S. in the Gilded Age and Progressive Era: 1877-1919 (3)
- HIST 4060 - Twentieth-Century United States: 1919-1945 (3)
- HIST 4070 - Twentieth-Century United States since 1945 (3)
- HIST 4110 DV - History of the American West to 1900 (3)

- HIST 4120 - The American West since 1900 (3)
- HIST 4130 - History of Utah (3)
- HIST 4710 - Special Issues and Topics in American History (3)

European History

- HIST 4210 - Ancient History (3)
- HIST 4220 - History of the Middle Ages 300-1300 (3)
- HIST 4230 - Renaissance and Reformation - Europe: 1300-1660 (3)
- HIST 4240 - Absolutism, Enlightenment and Revolution - Europe: 1660-1815 (3)
- HIST 4250 - Nineteenth-Century Europe (3)
- HIST 4260 - Twentieth-Century Europe (3)
- HIST 4310 - History of Russia to 1917 (3)
- HIST 4320 - Russia since 1917 (3)
- HIST 4330 - History of England to 1485 (3)
- HIST 4335 - Tudor and Stuart England (3)
- HIST 4340 - History of England since 1714 (3)
- HIST 4350 DV - History of Modern Germany (3)
- HIST 4370 - History of Modern France 1789-present (3)
- HIST 4410 - History of Spain and Portugal (3)
- HIST 4430 - History of Scandinavia (3)
- HIST 4450 - History of Modern Eastern Europe since 1815 (3)
- HIST 4720 - Special Issues and Topics in European History (3)

Global, Comparative, and General

- HIST 3000 - Investigating History (3)
- HIST 3350 - History and Philosophy of Science (3)
- HIST 4510 DV - Twentieth Century World (3)
- HIST 4530 DV - Far Eastern History (3)
- HIST 4550 DV - Southeast Asian History (3)
- HIST 4590 DV - Middle Eastern History (3)
- HIST 4610 - History of Africa (3)
- HIST 4630 - History of Ancient and Colonial Latin America (3)
- HIST 4650 DV - Modern Latin America (3)
- HIST 4670 DV - History of Mexico (3)
- HIST 4730 - Special Issues and Topics in Global and Comparative History (3)

Other Electives

May be taken to meet credit hour requirements.

- HIST 3400 - Principles of Public History (3)
- HIST 3500 - Historical Preservation (3)
- HIST 4830 - Directed Readings (1-3)
- HIST 4860 - Internships in Historical Studies (1-6)
- HIST 4890 - Cooperative Work Experience (1-6)
- HIST 4920 - Short Courses, Workshops, and Special Programs (1-6)
- HIST 4930 - History Workshop (1-5)
- HIST 4980 - History Honors Senior Project (2)

History Teaching majors are encouraged to also take POLS 1100 AI, American National Government (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). 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 66 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).

Advisement

After declaring the Composite major, a student should meet with the Composite Coordinator to establish the track to be taken as part of the program. The student is also encouraged to consult with the advisors in the Teacher Education Department.

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 in this catalog).

General Education

Refer to Degree and General Education Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements for the teaching major selected.

Major Course Requirement for BA

Required Major Courses

Complete a Teaching major in one of the following three areas

- History (minimum of 36 credit hours) BA only
- Geography (minimum of 36 credit hours) BS only
- Political Science (minimum of 39 credit hours) BA or BS

The student will also fulfill the requirements of the track that corresponds with their major.

History Teaching Major Track

Fulfill all the requirements for a History Teaching Major and also take the following:

Geography Courses (9 credit hours)

- GEOG 1000 PS - Natural Environments of the Earth (3)

One of the following

- GEOG 1300 SS/DV - Places and Peoples of the World (3)
- GEOG 1520 SS/DV - Geography of the United States and Canada (3)

One of the following

- GEOG 3060 - World Environmental Issues (3)
- GEOG 3450 - Cartography (3)
- GEOG 3500 - Geography of Utah (3)

Political Science Courses (9 credit hours)

- POLS 1100 AI - American National Government (3)

One of the following

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 3330 - American Political Thought (3)
- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)

One of the following

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 4640 - American Presidency (3)

Psychology Courses (9 credit hours)

- PSY 1010 SS - Introductory Psychology (3)

Two of the following

- PSY 2730 - Biopsychology (3)
- PSY 3010 - Abnormal Psychology (3)
- PSY 3430 - Theories of Personality (3)
- PSY 3460 - Social Psychology (3)

Social Science Elective Course (3 credit hours)

One of the following

- ANTH 3600 DV - Culture Area Studies (1-3) (3 credit hours required)
- ECON 1010 SS - Economics as a Social Science (3)
- SOC 1020 SS/DV - Social Problems (3)

Geography Teaching Major Track

Fulfill all the requirements for a Geography Teaching Major and also take the following:

History Courses (15 credit hours)

One of the following

- HIST 1500 SS - World History to 1500 C.E. (3)
- HIST 1510 SS/DV - World History from 1500 C.E. to the Present (3)

Both of the following

- HIST 2700 - History of the United States to 1877 (3)
- HIST 2710 - History of the United States since 1877 (3)

One of the following

- HIST 3010 DV - American Indian History: 1300 to Present (3)
- HIST 3030 DV - African-American History (3)
- HIST 3050 DV - History of U.S. Latinos (3)
- HIST 3070 DV - Women in American History: 1600 to Present (3)

- HIST 3090 DV - American Social History (3)
- HIST 3110 - American Ideas and Culture (3)
- HIST 3130 - U.S. Urban History (3)
- HIST 3210 - U.S. Constitutional History (3)
- HIST 3230 - American Foreign Relations (3)
- HIST 3250 - Religion in American History (3)
- HIST 3270 - American Environmental History (3)

One of the following

- HIST 4110 DV - History of the American West to 1900 (3)
- HIST 4120 - The American West since 1900 (3)
- HIST 4130 - History of Utah (3)

Political Science Courses (9 credit hours)

- POLS 1100 AI - American National Government (3)

One of the following

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 3330 - American Political Thought (3)
- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)

One of the following

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 4640 - American Presidency (3)

Psychology Course (3 credit hours)

- PSY 1010 SS - Introductory Psychology (3)

Social Science Elective Course (3 credit hours)

One of the following

- ANTH 3600 DV - Culture Area Studies (1-3) (3 credit hours required)
- ECON 1010 SS - Economics as a Social Science (3)
- SOC 1020 SS/DV - Social Problems (3)

Political Science Teaching Major Track

Fulfill all the requirements for a Political Science Teaching Major and also take the following:

History Courses (15 credit hours)

One of the following

- HIST 1500 SS - World History to 1500 C.E. (3)
- HIST 1510 SS/DV - World History from 1500 C.E. to the Present (3)

Both of the following

- HIST 2700 - History of the United States to 1877 (3)
- HIST 2710 - History of the United States since 1877 (3)

One of the following

- HIST 4010 - Colonial America (3)
- HIST 4020 - Era of the American Revolution: 1763-1800 (3)
- HIST 4030 - New Nation: 1800-1840 (3)
- HIST 4040 - Era of the Civil War and Reconstruction: 1840-1877 (3)

- HIST 4050 - U.S. in the Gilded Age and Progressive Era: 1877-1919 (3)
- HIST 4060 - Twentieth-Century United States: 1919-1945 (3)
- HIST 4070 - Twentieth-Century United States since 1945 (3)

One of the following

- HIST 4110 DV - History of the American West to 1900 (3)
- HIST 4120 - The American West since 1900 (3)
- HIST 4130 - History of Utah (3)

Geography Courses (9 credit hours)

- GEOG 1000 PS - Natural Environments of the Earth (3)

One of the following

- GEOG 1300 SS/DV - Places and Peoples of the World (3)
- GEOG 1520 SS/DV - Geography of the United States and Canada (3)

One of the following

- GEOG 3060 - World Environmental Issues (3)
- GEOG 3450 - Cartography (3)
- GEOG 3500 - Geography of Utah (3)

Psychology Course (3 credit hours)

- PSY 1010 SS - Introductory Psychology (3)

Social Science Elective Course (3 credit hours)

One of the following

- ANTH 3600 DV - Culture Area Studies (1-3) (3 credit hours required)
- ECON 1010 SS - Economics as a Social Science (3)
- SOC 1020 SS/DV - Social Problems (3)

History Minor

Grade Requirements: A grade of "C" or better in courses applied toward the minor (a grade of "C-" is not acceptable) in addition to an overall GPA for these courses of 2.50 or higher.

Credit Hour Requirements: Minimum of 24 credit hours in History courses. Transferring students with History minors must take at least one approved History course at Weber State.

Course Requirements for Minor

History Courses Required (6 credit hours)

- HIST 1500 SS - World History to 1500 C.E. (3)
- HIST 1510 SS/DV - World History from 1500 C.E. to the Present (3)

Upper-division History Electives (18 credit hours)

Select at least 18 credit hours from the upper-division History courses. These courses are listed under the History Program.

Public History Minor

Coordinator: Dr. Kathryn L. MacKay

Location: Social Science, Room 244

Telephone: 801-626-6782 email: kmackay@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 an overall GPA for these courses of 2.50 or higher.

Credit Hour Requirements: A minimum of 24 credit hours is required.

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 (15 credit hours)

- HIST 3400 - Principles of Public History (3)
- One additional upper division course in History (3 credits) taken in consultation with coordinator.
- HIST 4860 - Internships in Historical Studies (1-6) (6 credit hours required)

One of the following (3 credit hours)

- HIST 3500 - Historical Preservation (3)
- ART 4010 - Museum Methods (3)

Required Interdisciplinary Courses (9 credit hours)

Only 6 credit hours may be taken under one course prefix

- ANTH 3100 - Prehistory of North America (3)
- ANTH 3300 - Archaeological Field Techniques (3-6) (3 credit hours required)
- ANTH 3400 - Archaeological Laboratory Techniques (3)
- ANTH 3600 DV - Culture Area Studies (1-3) (3 credit hours required)
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management (3)
- ART 3420 A-D Introduction to Digital Media (1 credit each)
- ART 3430 - Typography and Publication Design (3)
- ART 3440 - Visual Communication (3)
- COMM 3400 - Public Relations (3)
- COMM 3440 - Public Relations Writing (3)
- COMM 3730 - Media Programming and Audiences (3)
- COMM 3740 - Copy Writing for Audio and Video (3)
- ENGL 3100 - Professional and Technical Writing (3)
- ENGL 3210 - Advanced College Writing (3)
- ENGL 3270 - Magazine Article Writing (3)
- ENGL 3280 - Biographical Writing (3)
- GEOG 3300 - Historical Geography of the United States (3)
- GEOG 3450 - Cartography (3)
- GEOG 4410 - Land Use Planning Techniques and Practices (3)
- GEOG 4420 - Advanced Planning Techniques (3)
- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 4700 - Politics of Administration (3)

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 an overall GPA for these courses of 2.50 or higher.

Credit Hour Requirements: Minimum of 24 credit hours in History courses.

Course Requirements for Teaching Minor

History Courses Required (12 credit hours)

- HIST 1500 SS - World History to 1500 C.E. (3)
- HIST 1510 SS/DV - World History from 1500 C.E. to the Present (3)
- HIST 2700 - History of the United States to 1877 (3)
- HIST 2710 - History of the United States since 1877 (3)

In addition, please note that HIST 4500 is required for completion of the Secondary Education Licensure program.

Upper-Division Electives (12 credit hours)

Select at least 12 credit hours from the upper-division History courses, including one course from each of the upper division areas. These courses are listed under the History Program.

Teaching minors must select either HIST 4110, HIST 4120 or HIST 4130 as part of their 12 credit hours.

History Departmental Honors

Please contact the History Department for advisement and permission prior to enrolling in Honors courses.

To earn Departmental Honors in History, a student must:

1. Be a History or History Teaching;
2. Have a cumulative GPA of 3.5 and a departmental GPA of 3.7;
3. Be a member of Phi Alpha Theta history honor society;
4. Disseminate their research publicly
 - a. by presenting a paper at a national or at local academic conferences (e.g., Phi Alpha Theta Utah Regional History Conference; Utah Conference on Undergraduate Research; Annual Conference of the Utah Academy of Sciences, Arts, and Letters; Weber State Annual Undergraduate Research Symposium)
 - OR
 - b. by submitting an article manuscript to be considered for publication by a scholarly journal,
 - OR

- c. by creating a museum or web-based exhibit with the support of a recognized institution of public history.

*Students working on their General Education requirements are also **encouraged** to take General Education courses offered through the Honors Program.*

Department of Political Science and Philosophy

Department Chair: Nancy Haanstad

Location: Social Science Building, Room 280

Telephone Contact: Debra Strait 801-626-6694

Professors: Richard Greene, Thomas Kuehls, T. R. Reddy;

Associate Professors: Robert Fudge, Nancy Haanstad, Leah Murray, Gary Johnson, Mary Beth Willard

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

Special projects and internship programs are offered 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. Gary Johnson acts as the Pre-Law Advisor.)

Interdisciplinary Minors

The Political Science Department participates in the Asian Studies, Environmental Studies, European Studies, Latin American Studies and Legal 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 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.

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. A minimum of 27 upper division hours are required within the major.

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 and General Education Requirements for Bachelor of Arts requirements. See Language Courses Required to fulfill the BA listed under the major course requirements. PHIL 3550 will fulfill the University diversity requirement. One of the following courses may be used to fulfill both general education (humanities) and program requirements: PHIL 1000, PHIL 1250, PHIL 1120.

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 Seminar.

Major Course Requirements for BA Degree

Core Courses Required (9 credit hours)

- PHIL 1000 HU - Introduction to Philosophy (3)
- PHIL 1250 HU - Critical Thinking (3) or
- PHIL 2200 QL - Deductive Logic (3)
- PHIL 4900 - Senior Capstone Seminar (3)

Electives (27 credit hours minimum)

Select a minimum of 27 credit hours from the following list, of which at least 24 must be upper division, including one of either PHIL 3010 or PHIL 3020, one of either PHIL 3600 or PHIL 3650, and one of either PHIL 4510 or PHIL 4520.

- PHIL 1120 HU - Contemporary Moral Problems (3)
- PHIL 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
- PHIL 3010 - History of Philosophy: Classical & Medieval (3)
- PHIL 3020 - History of Philosophy: Modern (3)
- PHIL 3100 - Philosophy of Language (3)
- PHIL 3150 - Existentialism (3)
- PHIL 3200 - Philosophy of Democracy (3)
- PHIL 3300 - Great Issues in Philosophy (3)
- PHIL 3350 - Medical Ethics (3)
- PHIL 3400 - Great Thinkers of Philosophy (3)
- PHIL 3500 - Philosophy of Western Religion (3)
- PHIL 3550 DV - Philosophy of Eastern Religion (3)
- PHIL 3600 - Ethical Theory (3)
- PHIL 3650 - Aesthetics (3)
- PHIL 4250 - Philosophy of Law (3)
- PHIL 4510 - Metaphysics (3)
- PHIL 4520 - Epistemology (3)
- PHIL 4830 - Directed Readings (1-2)
- PHIL 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)

Language Courses Required to fulfill the BA

Students completing a BA in philosophy must complete 6 hours of foreign language courses 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.

Advisement

All Political Science 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. 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 Enrollment Services and Information). 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 and General Education 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 will fulfill both general education and program requirements: POLS 2100, POLS 2200, and POLS 2300. Consult with a department advisor for specific general education guidelines. Political Science majors are generally encouraged to take MATH 1040 (Statistics) to fulfill their Quantitative Literacy Requirement and LIBS 2804 to fulfill Part D of their Computer and Information Literacy requirement.

Students majoring or minoring in Political Science 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 POLS, and in the case of the major, at least two classes in POLS, including Senior Seminar. 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. 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 "4" or above is required.

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 (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)
- ENGL 3210 - Advanced College Writing (3)
- ENGL 3510 HU/DV - World Literature (3)
- PHIL 3020 - History of Philosophy: Modern (3)
- PHIL 3100 - Philosophy of Language (3)
- PHIL 3200 - Philosophy of Democracy (3)
- PHIL 3400 - Great Thinkers of Philosophy (3)
- PHIL 4250 - Philosophy of Law (3)

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 1100 AI - American National Government (3)
- POLS 1010 - Introduction to Political Science (3)
- POLS 4990 - Senior Seminar/Senior Thesis (3) *Fall Only POLS 1010 is a prerequisite for POLS 4990*

And two of the following:

- POLS 2100 SS - Introduction to International Politics (3)
- POLS 2200 SS - Introduction to Comparative Politics (3)
- POLS 2300 SS - Introduction to Political Theory (3)

Additional Upper Division Major Course Requirements (18 credit hours)

See Additional Upper Division Major Course Requirements after the BS requirements below

Additional Upper Division Major Course Requirements for BA and BS

Take at least two classes in each of three of the five following areas of specialization.

American Government and Public Administration

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 3630 DV - Identity Politics (3)
- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 3760 - State Government and Politics (3)
- POLS 4600 - American Congress (3)
- POLS 4640 - American Presidency (3)
- POLS 4700 - Politics of Administration (3)
- POLS 4750 - Public Policy Analysis (3)

Comparative Politics

- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4280 - Foreign Policies of Major Powers (3)

International Politics

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 4160 - Topics in World Politics (3) or
- POLS DV4160 - Diversity credit is available when the selected topic is "Topics in World Politics: Third World Women" (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)
- HIST 3230 - American Foreign Relations (3)

Public and Constitutional Law

- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)
- POLS 4060 - Elements of Law (3)
- POLS 4070 DV - Sex Roles and the Law (3)

Political Theory

- POLS 3330 - American Political Thought (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- PHIL 3200 - Philosophy of Democracy (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

Other Elective Courses

Take any of the following as needed for additional credit hour total, or select additional courses from the courses in the five areas above.

- POLS 2060 - Freedoms (3)
- POLS 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3) or
- POLS 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
- POLS 3060 - Mock Trial (2)
- POLS 3150 - Model United Nations (2)
- POLS 3990 - Quantitative Analysis (3) *(only counts as elective for BA)*

- POLS 4800 - Individual Projects and Research (1-3)
- POLS 4860 - Internships (1-6)
- POLS 4870 - Internship in Perspective (3)
- POLS 4880 - Internship Research (3)
- POLS 4830 - Directed Readings (1-3)
- POLS 4940 - Topics in American Politics & Thought (1-3)

Students may count up to 6 hours of POLS 4830, 6 hours of POLS 4800, and 6 hours of POLS 4860 toward the total of 39 hours required for the major, if needed.

All Political Science courses— as well as HIST 3230, PHIL 3200 and WS 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.

Suggested Specialization Courses

Students who wish to focus on one of the six areas of specialization in Political Science (American Government, Public Administration, Comparative Politics, International Politics, Political Theory or Public and Constitutional Law) should take 12 of the required 39 credit hours in that specific subfield as listed below.

American Politics

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 4600 - American Congress (3)
- POLS 4640 - American Presidency (3)

Public Administration

- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 3760 - State Government and Politics (3)
- POLS 4700 - Politics of Administration (3)
- POLS 4750 - Public Policy Analysis (3)

Comparative Politics

- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4280 - Foreign Policies of Major Powers (3)

International Politics

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 4160 - Topics in World Politics (3) or
- POLS DV4160 - Diversity credit is available when the selected topic is "Topics in World Politics: Third World Women" (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)
- HIST 3230 - American Foreign Relations (3)

Public and Constitutional Law

- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)

- POLS 4060 - Elements of Law (3)
- POLS 4070 DV - Sex Roles and the Law (3)

Political Theory

- POLS 3330 - American Political Thought (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- PHIL 3200 - Philosophy of Democracy (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

Political Science Teaching (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.

Advisement

All Political Science 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. 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 Enrollment Services and Information). 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 and General Education 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 will fulfill both general education and program requirements: POLS 2100, POLS 2200, and POLS 2300. Consult with a department advisor for specific general education guidelines. Political Science majors are generally encouraged to take MATH 1040 (Statistics) to fulfill their Quantitative Literacy Requirement and LIBS 2804 to fulfill Part D of their Computer and Information Literacy requirement.

Students majoring or minoring in Political Science 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 POLS, and in the case of

the major, at least two classes in POLS, including Senior Seminar. 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. 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 "4" or above is required.

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 (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)
- ENGL 3210 - Advanced College Writing (3)
- ENGL 3510 HU/DV - World Literature (3)
- PHIL 3020 - History of Philosophy: Modern (3)
- PHIL 3100 - Philosophy of Language (3)
- PHIL 3200 - Philosophy of Democracy (3)
- PHIL 3400 - Great Thinkers of Philosophy (3)
- PHIL 4250 - Philosophy of Law (3)

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 1100 AI - American National Government (3)
- POLS 1010 - Introduction to Political Science (3)
- POLS 4990 - Senior Seminar/Senior Thesis (3) *Fall Only POLS 1010 is a prerequisite for POLS 4990*

And two of the following:

- POLS 2100 SS - Introduction to International Politics (3)
- POLS 2200 SS - Introduction to Comparative Politics (3)
- POLS 2300 SS - Introduction to Political Theory (3)

Additional Upper Division Major Course Requirements (18 credit hours)

See Additional Upper Division Major Course Requirements after the BS requirements.

Additional Upper Division Major Course Requirements for BA and BS

Take at least two classes in each of three of the five following areas of specialization.

American Government and Public Administration

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 3630 DV - Identity Politics (3)
- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 3760 - State Government and Politics (3)
- POLS 4600 - American Congress (3)
- POLS 4640 - American Presidency (3)
- POLS 4700 - Politics of Administration (3)
- POLS 4750 - Public Policy Analysis (3)

Comparative Politics

- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4280 - Foreign Policies of Major Powers (3)

International Politics

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 4160 - Topics in World Politics (3) or
- POLS DV4160 - Diversity credit is available when the selected topic is "Topics in World Politics: Third World Women" (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)
- HIST 3230 - American Foreign Relations (3)

Public and Constitutional Law

- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)
- POLS 4060 - Elements of Law (3)
- POLS 4070 DV - Sex Roles and the Law (3)

Political Theory

- POLS 3330 - American Political Thought (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- PHIL 3200 - Philosophy of Democracy (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

Other Elective Courses

Take any of the following as needed for additional credit hour total, or select additional courses from the courses in the five areas above.

- POLS 2060 - Freedoms (3)
- POLS 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3) or
- POLS 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
- POLS 3060 - Mock Trial (2)
- POLS 3150 - Model United Nations (2)

- POLS 3990 - Quantitative Analysis **(3)**
(only counts as elective for BA)
- POLS 4800 - Individual Projects and Research **(1-3)**
- POLS 4860 - Internships **(1-6)**
- POLS 4870 - Internship in Perspective **(3)**
- POLS 4880 - Internship Research **(3)**
- POLS 4830 - Directed Readings **(1-3)**
- POLS 4940 - Topics in American Politics & Thought **(1-3)**

Students may count up to 6 hours of POLS 4830, 6 hours of POLS 4800, and 6 hours of POLS 4860 toward the total of 39 hours required for the major, if needed.

All Political Science courses— as well as HIST 3230, PHIL 3200 and WS 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.

Suggested Specialization Courses

Students who wish to focus on one of the six areas of specialization in Political Science (American Government, Public Administration, Comparative Politics, International Politics, Political Theory or Public and Constitutional Law) should take 12 of the required 39 credit hours in that specific subfield as listed below.

American Politics

- POLS 3600 - Political Parties **(3)**
- POLS 3610 - Campaigns and Elections **(3)**
- POLS 3620 - Political Behavior **(3)**
- POLS 4600 - American Congress **(3)**
- POLS 4640 - American Presidency **(3)**

Public Administration

- POLS 3700 - Introduction to Public Administration **(3)**
- POLS 3750 - Urban Government and Politics **(3)**
- POLS 3760 - State Government and Politics **(3)**
- POLS 4700 - Politics of Administration **(3)**
- POLS 4750 - Public Policy Analysis **(3)**

Comparative Politics

- POLS 3210 - Politics and Governments of Europe **(3)**
- POLS 3220 - Politics and Governments of Asia **(3)**
- POLS 3290 - Introduction to Politics and Governments of Developing Nations **(3)**
- POLS 4280 - Foreign Policies of Major Powers **(3)**

International Politics

- POLS 3140 - Foreign Policy of the United States **(3)**
- POLS 4160 - Topics in World Politics **(3)** or
- POLS DV4160 - Diversity credit is available when the selected topic is "Topics in World Politics: Third World Women" **(3)**
- POLS 4180 - International Law and Organization **(3)**
- POLS 4190 - Theories of International Politics **(3)**
- HIST 3230 - American Foreign Relations **(3)**

Public and Constitutional Law

- POLS 4020 - American Constitutional Law I: Governmental Powers **(3)**
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights **(3)**
- POLS 4060 - Elements of Law **(3)**
- POLS 4070 DV - Sex Roles and the Law **(3)**

Political Theory

- POLS 3330 - American Political Thought **(3)**
- POLS 4360 - Classical Political Thought **(3)**
- POLS 4380 - Modern Political Thought **(3)**
- PHIL 3200 - Philosophy of Democracy **(3)**
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present **(3)**

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.

Advisement

All Political Science 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. 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 Enrollment Services and Information). 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 and General Education 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 will fulfill both general education and program requirements: POLS 2100, POLS 2200, and POLS 2300. Consult with a department advisor for specific general education guidelines. Political Science majors are generally encouraged to take MATH 1040 (Statistics) to fulfill their Quantitative Literacy Requirement and LIBS 2804 to fulfill Part D of their Computer and Information Literacy requirement.

Students majoring or minoring in Political Science 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 POLS, and in the case of the major, at least two classes in POLS, including Senior Seminar. 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. 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 "4" or above is required.

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. Three of these twelve hours will be met by taking POLS 3990, a core requirement for Political Science majors seeking a Bachelor of Science. The other nine hours must come from the following list of courses:

- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 4750 - Public Policy Analysis (3)
- SOC 3600 - Social Statistics (3)
- ANTH 4300 - Anthropological Research Methods (3)
- GEOG 3060 - World Environmental Issues (3)
- GEOG 3600 - Quantitative Methods in Geography (3)
- GEOG 4410 - Land Use Planning Techniques and Practices (3)
- ECON 3120 - International Finance and Monetary Systems (3)
- ECON 4170 - Economic Development (3)
- ECON 4520 - Public Finance (3)
- PSY 3600 - Statistics in Psychology (3)
- PSY 4760 - Tests and Measurements (3)
- SW 3600 - Social Statistics (3)

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 (18 credit hours)

- POLS 1100 AI - American National Government (3)
- POLS 1010 - Introduction to Political Science (3)
- POLS 3990 - Quantitative Analysis (3) *Spring Only*
POLS 1010 is a prerequisite for POLS 3990
- POLS 4990 - Senior Seminar/Senior Thesis (3) *Fall Only*
POLS 3990 must be taken before POLS 4990

And two of the following:

- POLS 2100 SS - Introduction to International Politics (3)
- POLS 2200 SS - Introduction to Comparative Politics (3)
- POLS 2300 SS - Introduction to Political Theory (3)

Additional Upper Division Major Course Requirements (18 credit hours)

See Additional Upper Division Major Course Requirements below

Additional Upper Division Major Course Requirements for BA and BS

Take at least two classes in each of three of the five following areas of specialization.

American Government and Public Administration

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 3630 DV - Identity Politics (3)
- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 3760 - State Government and Politics (3)
- POLS 4600 - American Congress (3)
- POLS 4640 - American Presidency (3)
- POLS 4700 - Politics of Administration (3)
- POLS 4750 - Public Policy Analysis (3)

Comparative Politics

- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4280 - Foreign Policies of Major Powers (3)

International Politics

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 4160 - Topics in World Politics (3) or
- POLS DV4160 - Diversity credit is available when the selected topic is "Topics in World Politics: Third World Women" (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)
- HIST 3230 - American Foreign Relations (3)

Public and Constitutional Law

- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)
- POLS 4060 - Elements of Law (3)
- POLS 4070 DV - Sex Roles and the Law (3)

Political Theory

- POLS 3330 - American Political Thought (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- PHIL 3200 - Philosophy of Democracy (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

Other Elective Courses

Take any of the following as needed for additional credit hour total, or select additional courses from the courses in the five areas above.

- POLS 2060 - Freedoms (3)
- POLS 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3) or
- POLS 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
- POLS 3060 - Mock Trial (2)
- POLS 3150 - Model United Nations (2)
- POLS 3990 - Quantitative Analysis (3) (only counts as elective for BA)
- POLS 4800 - Individual Projects and Research (1-3)
- POLS 4860 - Internships (1-6)
- POLS 4870 - Internship in Perspective (3)
- POLS 4880 - Internship Research (3)
- POLS 4830 - Directed Readings (1-3)
- POLS 4940 - Topics in American Politics & Thought (1-3)

Students may count up to 6 hours of POLS 4830, 6 hours of POLS 4800, and 6 hours of POLS 4860 toward the total of 39 hours required for the major, if needed.

All Political Science courses— as well as HIST 3230, PHIL 3200 and WS 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.

Suggested Specialization Courses

Students who wish to focus on one of the six areas of specialization in Political Science (American Government, Public Administration, Comparative Politics, International Politics, Political Theory or Public and Constitutional Law) should take 12 of the required 39 credit hours in that specific subfield as listed below.

American Politics

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 4600 - American Congress (3)
- POLS 4640 - American Presidency (3)

Public Administration

- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 3760 - State Government and Politics (3)
- POLS 4700 - Politics of Administration (3)
- POLS 4750 - Public Policy Analysis (3)

Comparative Politics

- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4280 - Foreign Policies of Major Powers (3)

International Politics

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 4160 - Topics in World Politics (3) or
- POLS DV4160 - Diversity credit is available when the selected topic is "Topics in World Politics: Third World Women" (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)
- HIST 3230 - American Foreign Relations (3)

Public and Constitutional Law

- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)
- POLS 4060 - Elements of Law (3)
- POLS 4070 DV - Sex Roles and the Law (3)

Political Theory

- POLS 3330 - American Political Thought (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- PHIL 3200 - Philosophy of Democracy (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

Political Science Teaching (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.

Advisement

All Political Science 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. 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 Enrollment Services and Information). 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 and General Education 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 will fulfill both general education and program requirements: POLS 2100, POLS 2200, and POLS 2300. Consult with a department advisor for specific general education guidelines. Political Science majors are generally encouraged to take MATH 1040 (Statistics) to fulfill their Quantitative Literacy Requirement and LIBS 2804 to fulfill Part D of their Computer and Information Literacy requirement.

Students majoring or minoring in Political Science 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 POLS, and in the case of the major, at least two classes in POLS, including Senior Seminar. 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. 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 "4" or above is required.

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. Three of these twelve hours will be met by taking POLS 3990, a core requirement for Political Science majors seeking a Bachelor of Science. The other nine hours must come from the following list of courses:

- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 4750 - Public Policy Analysis (3)
- SOC 3600 - Social Statistics (3)
- ANTH 4300 - Anthropological Research Methods (3)
- GEOG 3060 - World Environmental Issues (3)
- GEOG 3600 - Quantitative Methods in Geography (3)
- GEOG 4410 - Land Use Planning Techniques and Practices (3)
- ECON 3120 - International Finance and Monetary Systems (3)
- ECON 4170 - Economic Development (3)
- ECON 4520 - Public Finance (3)
- PSY 3600 - Statistics in Psychology (3)
- PSY 4760 - Tests and Measurements (3)
- SW 3600 - Social Statistics (3)

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 previous courses may have pre-requisites not listed here that will need to be met.

Core Courses Required for BS (18 credit hours)

- POLS 1100 AI - American National Government (3)
- POLS 1010 - Introduction to Political Science (3)

- POLS 3990 - Quantitative Analysis (3) *Spring Only*
POLS 1010 is a prerequisite for POLS 3990
- POLS 4990 - Senior Seminar/Senior Thesis (3) *Fall Only*
POLS 3990 must be taken before POLS 4990

And two of the following:

- POLS 2100 SS - Introduction to International Politics (3)
- POLS 2200 SS - Introduction to Comparative Politics (3)
- POLS 2300 SS - Introduction to Political Theory (3)

Additional Upper Division Major Course Requirements (18 credit hours)

See Additional Upper Division Major Course Requirements.

Additional Upper Division Major Course Requirements for BA and BS

Take at least two classes in each of three of the five following areas of specialization.

American Government and Public Administration

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 3630 DV - Identity Politics (3)
- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 3760 - State Government and Politics (3)
- POLS 4600 - American Congress (3)
- POLS 4640 - American Presidency (3)
- POLS 4700 - Politics of Administration (3)
- POLS 4750 - Public Policy Analysis (3)

Comparative Politics

- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4280 - Foreign Policies of Major Powers (3)

International Politics

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 4160 - Topics in World Politics (3) or
- POLS DV4160 - Diversity credit is available when the selected topic is "Topics in World Politics: Third World Women" (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)
- HIST 3230 - American Foreign Relations (3)

Public and Constitutional Law

- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)
- POLS 4060 - Elements of Law (3)
- POLS 4070 DV - Sex Roles and the Law (3)

Political Theory

- POLS 3330 - American Political Thought (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)

- PHIL 3200 - Philosophy of Democracy (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

Other Elective Courses

Take any of the following as needed for additional credit hour total, or select additional courses from the courses in the five areas above.

- POLS 2060 - Freedoms (3)
- POLS 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3) or
- POLS 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
- POLS 3060 - Mock Trial (2)
- POLS 3150 - Model United Nations (2)
- POLS 3990 - Quantitative Analysis (3) (only counts as elective for BA)
- POLS 4800 - Individual Projects and Research (1-3)
- POLS 4860 - Internships (1-6)
- POLS 4870 - Internship in Perspective (3)
- POLS 4880 - Internship Research (3)
- POLS 4830 - Directed Readings (1-3)
- POLS 4940 - Topics in American Politics & Thought (1-3)

Students may count up to 6 hours of POLS 4830, 6 hours of POLS 4800, and 6 hours of POLS 4860 toward the total of 39 hours required for the major, if needed.

All Political Science courses— as well as HIST 3230, PHIL 3200 and WS 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.

Suggested Specialization Courses

Students who wish to focus on one of the six areas of specialization in Political Science (American Government, Public Administration, Comparative Politics, International Politics, Political Theory or Public and Constitutional Law) should take 12 of the required 39 credit hours in that specific subfield as listed below.

American Politics

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 4600 - American Congress (3)
- POLS 4640 - American Presidency (3)

Public Administration

- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 3760 - State Government and Politics (3)
- POLS 4700 - Politics of Administration (3)
- POLS 4750 - Public Policy Analysis (3)

Comparative Politics

- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4280 - Foreign Policies of Major Powers (3)

International Politics

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 4160 - Topics in World Politics (3) or
- POLS DV4160 - Diversity credit is available when the selected topic is "Topics in World Politics: Third World Women" (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)
- HIST 3230 - American Foreign Relations (3)

Public and Constitutional Law

- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)
- POLS 4060 - Elements of Law (3)
- POLS 4070 DV - Sex Roles and the Law (3)

Political Theory

- POLS 3330 - American Political Thought (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- PHIL 3200 - Philosophy of Democracy (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

Political Science (BIS)

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.

Students who select the Political Science Teaching minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Course Requirements

Political Science Courses Required (6 credit hours)

- POLS 1100 AI - American National Government (3)

And select one of the following

- POLS 2100 SS - Introduction to International Politics (3)
- POLS 2200 SS - Introduction to Comparative Politics (3)
- POLS 2300 SS - Introduction to Political Theory (3)

Upper Division Requirements (15 credit hours)

Select at least two courses from Group 1 and at least two courses from Group 2, plus one additional course from either Group 1, Group 2, or the list of electives.

Group 1 (select two courses)

American Government and Public Administration

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 3630 DV - Identity Politics (3)

- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 3760 - State Government and Politics (3)
- POLS 4600 - American Congress (3)
- POLS 4640 - American Presidency (3)
- POLS 4700 - Politics of Administration (3)
- POLS 4750 - Public Policy Analysis (3)

Public and Constitutional Law

- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)
- POLS 4060 - Elements of Law (3)
- POLS 4070 DV - Sex Roles and the Law (3)

Group 2 (select two courses)

Comparative Politics

- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4280 - Foreign Policies of Major Powers (3)

International Politics

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 4160 - Topics in World Politics (3) or
- POLS DV4160 - Diversity credit is available when the selected topic is "Topics in World Politics: Third World Women" (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)
- HIST 3230 - American Foreign Relations (3)

Political Theory

- POLS 3330 - American Political Thought (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- PHIL 3200 - Philosophy of Democracy (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

Electives (select one course)

- POLS 2060 - Freedoms (3)
- POLS 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3) or
- POLS 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
- POLS 3060 - Mock Trial (2)
- POLS 3150 - Model United Nations (2)
- POLS 4800 - Individual Projects and Research (1-3)
- POLS 4830 - Directed Readings (1-3)
- POLS 4860 - Internships (1-6)
- POLS 4870 - Internship in Perspective (3)
- POLS 4880 - Internship Research (3)
- POLS 4940 - Topics in American Politics & Thought (1-3)

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 and WS 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.

International Politics 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 24 credit hours required.

Students may not major in Political Science and Minor in International Politics.

Course Requirements for Minor

Required Core Courses (9 credit hours)

- POLS 2100 SS - Introduction to International Politics (3)
- POLS 3140 - Foreign Policy of the United States (3)
- POLS 4280 - Foreign Policies of Major Powers (3)

Elective Courses (6 credit hours required)

- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4160 - Topics in World Politics (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)

Interdisciplinary Electives (9 credit hours required)

Select 9 credit hours with no more than 3 credit hours from each prefix.

- ANTH 2010 SS/DV - Peoples and Cultures of the World (3) or
- GEOG 1300 SS/DV - Places and Peoples of the World (3)
- CJ 4700 - Comparative Criminal Justice Systems (3)
- ECON 3110 - International Trade (3)
- ECON 3120 - International Finance and Monetary Systems (3)
- FL 2020 HU - Second Year II (3)
- FL 3550 DV - Cultural Heritage I (3) or
- FL 3560 - Cultural Heritage II (3) or
- FL 3570 - Special Topics in Culture (3)
- FL 3710 - Business Language I (3)
- FL 3850 - Study Abroad (1-6) or
- FL 4850 - Study Abroad (1-6)
- GEOG 3060 - World Environmental Issues (3)
- GEOG 3360 - Economic Geography (3)
- GEOG 3540 DV - Geography of Latin America (3)
- GEOG 3590 DV - Geography of Europe (3)
- GEOG 3620 DV - Geography of Russia and the Former USSR (3)
- GEOG 3640 DV - Geography of Asia (3)
- GEOG 3660 DV - Geography of China and Japan (3)
- GEOG 3740 DV - Geography of Africa (3)
- HIST 4450 - History of Modern Eastern Europe since 1815 (3)
- HIST 4510 DV - Twentieth Century World (3)
- HIST 4530 DV - Far Eastern History (3)

- HIST 4550 DV - Southeast Asian History (3)
- HIST 4590 DV - Middle Eastern History (3)
- HIST 4610 - History of Africa (3)
- HIST 4650 DV - Modern Latin America (3)
- SOC 4410 DV - Sociology of Globalization (3)

Philosophy Minor

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.

Course Requirements for Minor

Philosophy Courses Required (6 credit hours).

- PHIL 1000 HU - Introduction to Philosophy (3)
- PHIL 1250 HU - Critical Thinking (3) or
- PHIL 2200 QL - Deductive Logic (3)

Philosophy Electives (minimum 15 credit hours)

Select a minimum of 15 credit hours from the following, of which at least 12 must be upper division, including one of either PHIL 3010 or PHIL 3020.

- PHIL 1120 HU - Contemporary Moral Problems (3)
- PHIL 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3) or
- PHIL 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
- PHIL 3010 - History of Philosophy: Classical & Medieval (3)
- PHIL 3020 - History of Philosophy: Modern (3)
- PHIL 3100 - Philosophy of Language (3)
- PHIL 3150 - Existentialism (3)
- PHIL 3200 - Philosophy of Democracy (3)
- PHIL 3300 - Great Issues in Philosophy (3)
- PHIL 3350 - Medical Ethics (3)
- PHIL 3400 - Great Thinkers of Philosophy (3)
- PHIL 3500 - Philosophy of Western Religion (3)
- PHIL 3550 DV - Philosophy of Eastern Religion (3)
- PHIL 3600 - Ethical Theory (3)
- PHIL 3650 - Aesthetics (3)
- PHIL 4250 - Philosophy of Law (3)
- PHIL 4510 - Metaphysics (3)
- PHIL 4520 - Epistemology (3)
- PHIL 4830 - Directed Readings (1-2)
- PHIL 4900 - Senior Capstone Seminar (3)

Political Science Minor

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.

Students who select the Political Science Teaching minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Course Requirements

Political Science Courses Required (6 credit hours)

- POLS 1100 AI - American National Government (3)

And select one of the following

- POLS 2100 SS - Introduction to International Politics (3)
- POLS 2200 SS - Introduction to Comparative Politics (3)
- POLS 2300 SS - Introduction to Political Theory (3)

Upper Division Requirements (15 credit hours)

Select at least two courses from Group 1 and at least two courses from Group 2, plus one additional course from either Group 1, Group 2, or the list of electives.

Group 1 (select two courses)

American Government and Public Administration

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 3630 DV - Identity Politics (3)
- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 3760 - State Government and Politics (3)
- POLS 4600 - American Congress (3)
- POLS 4640 - American Presidency (3)
- POLS 4700 - Politics of Administration (3)
- POLS 4750 - Public Policy Analysis (3)

Public and Constitutional Law

- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)
- POLS 4060 - Elements of Law (3)
- POLS 4070 DV - Sex Roles and the Law (3)

Group 2 (select two courses)

Comparative Politics

- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4280 - Foreign Policies of Major Powers (3)

International Politics

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 4160 - Topics in World Politics (3) or
- POLS DV4160 - Diversity credit is available when the selected topic is "Topics in World Politics: Third World Women" (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)
- HIST 3230 - American Foreign Relations (3)

Political Theory

- POLS 3330 - American Political Thought (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- PHIL 3200 - Philosophy of Democracy (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

Electives (select one course)

- POLS 2060 - Freedoms (3)
- POLS 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3) or
- POLS 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
- POLS 3060 - Mock Trial (2)
- POLS 3150 - Model United Nations (2)
- POLS 4800 - Individual Projects and Research (1-3)
- POLS 4830 - Directed Readings (1-3)
- POLS 4860 - Internships (1-6)
- POLS 4870 - Internship in Perspective (3)
- POLS 4880 - Internship Research (3)
- POLS 4940 - Topics in American Politics & Thought (1-3)

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 and WS 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

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.

Students may not major in Political Science and Minor in Public Administration.

Course Requirements for Minor

Required Core Courses (9 credit hours)

- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 4750 - Public Policy Analysis (3)

Elective Courses (15 credit hours required)

- ECON 1010 SS - Economics as a Social Science (3)
- ECON 2010 SS - Principles of Microeconomics (3)
- ECON 4520 - Public Finance (3)
- ECON 4550 - Introduction to Econometrics (3)
- ENGL 3100 - Professional and Technical Writing (3)
- FIN 3500 - Capital Budgeting (3)
- GEOG 4410 - Land Use Planning Techniques and Practices (3)
- GEOG 4420 - Advanced Planning Techniques (3)
- MGMT 3010 - Organizational Behavior and Management (3)
- MGMT 4400 - Advanced Organizational Behavior (3)
- HIST 3130 - U.S. Urban History (3)
- PSY 3460 - Social Psychology (3)

- SCM 3720 - Transportation and Global Supply Chain Management (3)
- SOC 3840 - Cities and Urban Life (3)
- SOC 3850 DV - American Minorities in Urban Settings (3)
- SOC 4270 - Sociology of Law (3)
- POLS 3760 - State Government and Politics (3)
- POLS 4700 - Politics of Administration (3)

Political Science Teaching Minor

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.

Students who select the Political Science Teaching minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Course Requirements

Political Science Courses Required (6 credit hours)

- POLS 1100 AI - American National Government (3)

And select one of the following

- POLS 2100 SS - Introduction to International Politics (3)
- POLS 2200 SS - Introduction to Comparative Politics (3)
- POLS 2300 SS - Introduction to Political Theory (3)

Upper Division Requirements (15 credit hours)

Select at least two courses from Group 1 and at least two courses from Group 2, plus one additional course from either Group 1, Group 2, or the list of electives.

Group 1 (select two courses)

American Government and Public Administration

- POLS 3600 - Political Parties (3)
- POLS 3610 - Campaigns and Elections (3)
- POLS 3620 - Political Behavior (3)
- POLS 3630 DV - Identity Politics (3)
- POLS 3700 - Introduction to Public Administration (3)
- POLS 3750 - Urban Government and Politics (3)
- POLS 3760 - State Government and Politics (3)
- POLS 4600 - American Congress (3)
- POLS 4640 - American Presidency (3)
- POLS 4700 - Politics of Administration (3)
- POLS 4750 - Public Policy Analysis (3)

Public and Constitutional Law

- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)
- POLS 4060 - Elements of Law (3)
- POLS 4070 DV - Sex Roles and the Law (3)

Group 2 (select two courses)

Comparative Politics

- POLS 3210 - Politics and Governments of Europe (3)
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)
- POLS 4280 - Foreign Policies of Major Powers (3)

International Politics

- POLS 3140 - Foreign Policy of the United States (3)
- POLS 4160 - Topics in World Politics (3) or
- POLS DV4160 - Diversity credit is available when the selected topic is "Topics in World Politics: Third World Women" (3)
- POLS 4180 - International Law and Organization (3)
- POLS 4190 - Theories of International Politics (3)
- HIST 3230 - American Foreign Relations (3)

Political Theory

- POLS 3330 - American Political Thought (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- PHIL 3200 - Philosophy of Democracy (3)
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

Electives (select one course)

- POLS 2060 - Freedoms (3)
- POLS 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3) or
- POLS 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
- POLS 3060 - Mock Trial (2)
- POLS 3150 - Model United Nations (2)
- POLS 4800 - Individual Projects and Research (1-3)
- POLS 4830 - Directed Readings (1-3)
- POLS 4860 - Internships (1-6)
- POLS 4870 - Internship in Perspective (3)
- POLS 4880 - Internship Research (3)
- POLS 4940 - Topics in American Politics & Thought (1-3)

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 and WS 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.

Philosophy Departmental Honors

Please contact the Political Science & Philosophy Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Enroll in the General Honors Program and complete at least 12 hours of General Honors courses.

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Fulfill requirements for the Philosophy minor as outlined above, of which at least 12 credit hours must be completed on an Honors basis. This must include special honors study to be negotiated with the professor and the Honors student.

Political Science Departmental Honors

Please contact the Political Science Department for advisement and permission prior to enrolling in Honors courses.

To earn Departmental Honors in Political Science, a student must:

1. Earn a cumulative GPA of 3.5, and a GPA of 3.7 in the major.
2. Complete POLS 4990 Senior Seminar and, in a following semester, POLS 4800 Individual Projects and Research, wherein a Senior Thesis will be researched, written and defended before a committee.
3. Take one Honors Social Science class. This will most likely be HNRS 1520: "Perspectives in the Social Sciences," which also gives the student General Education credit.
4. Present a paper in a professional setting, such as Weber State's Undergraduate Research Symposium, or the Utah Capitol Conference.

A departmental honors student is also encouraged to join and participate in a professional organization, such as the American Political Science Association.

Department of Psychology

Department Chair: Eric Amsel

Location: Social Science Building, Room 370

Telephone Contact: Aubrey Jenkins 801-626-6247

Professors: Eric Amsel, Lauren Fowler, Joseph Horvat; **Associate Professors:** Aaron Ashley, Azenett Garza, Theresa Kay, Matthew Schmolesky, Leigh Shaw; **Assistant Professors:** Todd C. Baird, Melinda Russell-Stamp, ; **Instructor:** Maria Parrilla de Kokal; **Emeritus Professors:** Julianne Arbuckle, Richard Grow, Bruce Haslam, Merrill May, William McVaugh, Thomas Musgrave, Benne Williams

The reasons for selecting a major or minor or choosing a BIS emphasis in Psychology are to broadly prepare yourself to understand human and animal behavior and to prepare yourself for a possible career working with or doing research on people. The program is designed to teach the content of psychology, the major methods of psychological inquiry, and some skills and techniques in applying its concepts.

Students majoring in Psychology can select a program of study individually tailored to interests in counseling, child and family, business, corrections, neuroscience, research, graduate study in psychology and other areas such as law, political science and personnel. Students are required to select courses as described below to insure some breadth in their program of study. All majors are assigned an advisor

who will help them develop their course of study. Teaching majors and minors and BIS students should contact the department chairperson for advisement.

Residency Policy

The Psychology Department has established a residency policy for students transferring undergraduate psychology credits from another accredited institution of higher education. Students who are majoring in Psychology must complete at least 9 credit hours of Psychology courses with a C or better in residence at Weber State University; students who are minoring in Psychology must complete at least 6 credit hours of Psychology courses with a C or better in residence at Weber State University. All transfer requests must go through the University Transfer Office.

Psychology Courses Table

Required Core Courses (26 credit hours)

Core General Courses (11 credit hours)

- PSY 1010 SS - Introductory Psychology (3)
- PSY 3600 - Statistics in Psychology (3) *
- PSY 3605 - Psychology Statistics Lab (1) *
- PSY 3610 - Research Methods in Psychology (4) **

Core Content Courses (15 credit hours)

- PSY 2730 - Biopsychology (3) † or
- NEUR 2050 - Introduction to Neuroscience (3) †
- PSY 3000 - Child Psychology (3) † or
- PSY 3140 - Psychology of Adolescence (3) †
- PSY 3010 - Abnormal Psychology (3)
- PSY 3250 - Conditioning & Learning (3) † or
- PSY 3500 - Cognition (3) †
- PSY 3460 - Social Psychology (3) † or
- PSY 3430 - Theories of Personality (3) †

* PSY 3600 - Statistics in Psychology and PSY 3605 Psychology Statistics Lab are recommended to be taken no later than first semester Junior year. MATH 1010 or equivalent is required for PSY 3600 . For PSY 3605 : MATH 1010 or equivalent is a prerequisite and PSY 3600 is a prerequisite/co-requisite.

** PSY 3610 - Research Methods in Psychology is recommended to be taken no later than second semester Junior year. Note that PSY 3600 and PSY 3605 (or an equivalent with prior approval from the Department Chair) are prerequisites for PSY 3610 .

† One of these two courses must be taken to fulfill the core course requirement. However, the student may opt to also take the second course as an elective.

Additional Courses (10 credit hours): from the Core General Courses, Core Content Courses, or Electives (Group A or B)

Electives Group A: Area Specialization Courses

- PSY 2000 SS - Interpersonal Relationships (3)
- PSY 2370 DV - Psychology of Women and Gender (3)
- PSY 3020 - Child and Adolescent Psychopathology (3)
- PSY 3100 DV - Psychology of Diversity (3)
- PSY 3200 - Psychology of Sport, Injury & Rehabilitation (3)
- PSY 3270 - Motivation and Emotion (3)

- PSY 3300 - Applied Behavior Intervention (3)
- PSY 3450 - Psychology of Language (3)
- PSY 3550 - Psychology of Consciousness (3)
- PSY 3560 - Group Dynamics and Counseling (3)
- PSY 3710 - Physiological Psychology (3)
- PSY 3730 - Perception (3)
- PSY 3740 - Drugs and Behavior (3)
- PSY 4000 - Advanced General (3)
- PSY 4050 - Evolutionary Psychology (3)
- PSY 4090 - History and Systems of Psychology (3)
- PSY 4310 - Introduction to Counseling Theories (3)
- PSY 4340 - Skills and Techniques of Counseling (3) *
- PSY 4510 - Industrial and Organizational Behavior (3)
- PSY 4760 - Tests and Measurements (3) **
- PSY 4900 - Selected Topics in Psychology (2-3)
- PSY 4990 - Seminar (1)

* PSY 4310 or permission of the instructor is a prerequisite for PSY 4340

** PSY 3010 and PSY 3600 are prerequisites for PSY 4760

Electives Group B: Individualized Instruction and Experiential Courses

- PSY 1050 - Careers in Psychology (1)
- PSY 1540 - Psychology of Adjustment and Growth (3)
- PSY 2010 - Science and Profession of Psychology (3)
- PSY 2800 - Projects and Research (1-3) ***
- PSY 2830 - Directed Readings (1-3) ***
- PSY 2890 - Cooperative Work Experience (1-2) ****
- PSY 4380 - Practicum (2) *****
- PSY 4390 - Practicum (2) *****
- PSY 4800 - Projects and Research (1-3) ***
- PSY 4830 - Directed Readings (1-3) ***
- PSY 4890 - Cooperative Work Experience (1-2) ****
- PSY 4910 - Capstone Research Project (3) *****
- PSY 4920 - Workshops, Institutes and Special Programs (1-3) *****

*** PSY 2800 , PSY 2830 , PSY 4800 and PSY 4830 require a contract to be filled out with an instructor prior to registration.

**** PSY 2890 and PSY 4890 require the student to have a current job in the field and get permission of the coordinator in the department.

***** Eighteen credit hours of psychology courses approved by the supervising instructor are required, one of which must be PSY 1010 . Also, permission of the instructor is required. A maximum of four credit hours counted toward the psychology major and minor from the following courses: PSY 2890 , PSY 4890 , PSY 4380 and PSY 4390 .

***** PSY 4910 requires a contract to be completed for the project and approval of the Department of Psychology prior to registration. The course is taken for one semester to complete the proposal and gain approval. This course is taken for a second semester to complete the project.

***** PSY 4920 may be used for credit toward a major or minor or BIS in psychology but only when written permission of the department is given at the time of registration.

Course Designations:

DV = Fulfills a University Diversity Requirement

SS = Fulfills a Social Science General Education Requirement

Interdisciplinary Minors

The Psychology Department participates in the Latin American Studies, Linguistics, Neuroscience 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 and Interdisciplinary Programs section of this catalog.)

Psychology Major (BS)

Program Prerequisite: None. Psychology Teaching majors and minors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Minor: Required, unless a student is a double major.

Grade Requirements: A grade of "C" or better is required in all courses used to fulfill requirements for the psychology major or minor (a grade of "C-" is not acceptable). In addition an overall GPA for Psychology courses of 2.50 or higher is required. Also refer to the general grade requirements for graduation Degree and General Education Requirements.

Credit Hour Requirements: The University requires a total of 120 credit hours for graduation. For psychology, a minimum of 36 credit hours are required within the major. The University requires a total of 40 upper division credit hours (courses numbered 3000 and above).

Advisement

After declaring psychology as a major, each student is assigned an advisor. Psychology majors should consult with their advisor each semester prior to registration or as needed. Call the department secretary to schedule an appointment. Psychology teaching majors are encouraged to also consult with an advisor in the Jerry and Vickie Moyes College of Education (call 801-626-6269, Teacher Education Department).

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for the psychology major. Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements. A number of courses in the major fulfill general education requirements (PSY 1010, PSY 2000) or graduation requirements (PSY 2370, PSY 3100).

Major Course Requirements for BS Degree

Summary of Psychology Courses Required (36 credit hours)

Refer to the Psychology Courses Table in the Department of Psychology.

- Core General Courses: 11 hours
- Core Content Courses: 15 hours

- Additional Courses: 10 hours
Additional Course requirements may be fulfilled by taking further Core Courses, Electives Group A (Area Specialization) Courses, or Electives Group B (Individualized Instruction and Experiential) Courses.

Psychology Teaching majors are also required to take HIST 4500, Teaching Social Studies in Grades 5-12, in addition to the courses required by the Teacher Education program, and also PSY 4000 or PSY 4090. PSY 4000 is recommended as the choice unless a case can be made for PSY 4090.

Psychology Teaching (BS)

Program Prerequisite: None. Psychology Teaching majors and minors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Minor: Required, unless a student is a double major.

Grade Requirements: A grade of "C" or better is required in all courses used to fulfill requirements for the psychology major or minor (a grade of "C-" is not acceptable). In addition an overall GPA for Psychology courses of 2.50 or higher is required. Also refer to the general grade requirements for graduation Degree and General Education Requirements.

Credit Hour Requirements: The University requires a total of 120 credit hours for graduation. For psychology, a minimum of 36 credit hours are required within the major. The University requires a total of 40 upper division credit hours (courses numbered 3000 and above).

Advisement

After declaring psychology as a major, each student is assigned an advisor. Psychology majors should consult with their advisor each semester prior to registration or as needed. Call the department secretary to schedule an appointment. Psychology teaching majors are encouraged to also consult with an advisor in the Jerry and Vickie Moyes College of Education (call 801-626-6269, Teacher Education Department).

Admission Requirements

Declare your program of study (see Enrollment Services and Information). There are no special admission or application requirements for the psychology major. Teaching majors must meet the Teacher Education admission and licensure requirements (see Department of Teacher Education).

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements. A number of courses in the major fulfill general education requirements (PSY 1010, PSY 2000) or graduation requirements (PSY 2370, PSY 3100).

Major Course Requirements for BS Degree

Summary of Psychology Courses Required (36 credit hours)

Refer to the Psychology Courses Table in the Department of Psychology.

- Core General Courses: 11 hours
 - Core Content Courses: 15 hours
 - Additional Courses: 10 hours
- Additional Course requirements may be fulfilled by taking further Core Courses, Electives Group A (Area Specialization) Courses, or Electives Group B (Individualized Instruction and Experiential) Courses.

Psychology Teaching majors are also required to take HIST 4500, Teaching Social Studies in Grades 5-12, in addition to the courses required by the Teacher Education program, and also PSY 4000 or PSY 4090. PSY 4000 is recommended as the choice unless a case can be made for PSY 4090.

Psychology (BIS)

Grade Requirements: A grade of "C" or better in courses used toward the Minor or BIS emphasis (a grade of "C-" is not acceptable).

Credit Hour Requirements: Minimum of 18 credit hours (includes PSY 1010).

For advisement contact the Department Chairperson who will help you select courses which will compliment your other two BIS areas or complement your major.

Course Requirements for BIS Emphasis

Psychology Courses Required

- PSY 1010 SS - Introductory Psychology (3)
- PSY 3600 - Statistics in Psychology (3) *
- PSY 3605 - Psychology Statistics Lab (1) *
- PSY 3610 - Research Methods in Psychology (4) **

* PSY 3600 - Statistics in Psychology and PSY 3605 Psychology Statistics Lab are recommended to be taken no later than first semester Junior year. MATH 1010 or equivalent is required for PSY 3600. For PSY 3605: MATH 1010 or equivalent is a prerequisite and PSY 3600 is a prerequisite/co-requisite.

** Prerequisite: PSY 3600 and PSY 3605 or equivalent with prior approval from the Department Chair.

Elective Courses
(minimum 7 additional credit hours)

Refer to the Psychology Courses Table in the Department of Psychology.

Only one course from Electives Group B will be allowed to apply toward the BIS. Approval of the Department Chair is required. (Also refer to the Psychology (BIS) Bachelor of Integrated Studies Program.)

Psychology Minor

Grade Requirements: A grade of "C" or better in courses used toward the Minor or BIS emphasis (a grade of "C-" is not acceptable).

Credit Hour Requirements: Minimum of 18 credit hours (includes PSY 1010).

For advisement contact the Department Chairperson who will help you select courses which will compliment your other two BIS areas or complement your major.

Course Requirements for Minor

Psychology Course Required

- PSY 1010 SS - Introductory Psychology (3)

Elective Courses (minimum 15 credit hours)

Refer to the Psychology Courses Table in the Department of Psychology.

May be taken from any of the courses in the Core General Courses, Core Content Courses, Elective Groups A or B. However, only one course from Electives Group B will be allowed to apply toward the minor.

Psychology Teaching Minor

Grade Requirements: A grade of "C" or better in courses used toward the Minor or BIS emphasis (a grade of "C-" is not acceptable).

Credit Hour Requirements: Minimum of 18 credit hours (includes PSY 1010).

For advisement contact the Department Chairperson who will help you select courses which will compliment your other two BIS areas or complement your major.

Course Requirements for Teaching Minor

Required Courses (6 credit hours)

- PSY 1010 SS - Introductory Psychology (3)
- PSY 4000 - Advanced General (3)

Elective Courses (minimum 12 credit hours)

Refer to the Psychology Courses Table in the Department of Psychology.

A minimum of 6 credit hours must come from the Core Courses and a maximum of 3 credit hours may be taken from Group B Elective Courses.

Students who select the Psychology Teaching Minor must satisfy the Teacher Education admission and licensure requirements (see Department of Teacher Education).

Psychology Departmental Honors

Please contact the Psychology Department for advisement and permission prior to enrolling in Honors courses.

To earn Departmental Honors in Psychology, a student must:

1. Maintain a departmental GPA of 3.7, and an overall GPA of 3.25
2. Complete 3 hours of General Honors courses
3. In fulfilling a Psychology major, complete at least 6 hours in PSY 4910 taken as Psychology Honors senior project. Typically students will outline the Honors project by the 2nd semester of their junior year. The purpose of this project is to do research of quality worthy of presentation to a professional meeting of psychologists such as UPA and RMPA. If the student is not able to present the research to one of these groups, they will present it to the faculty of the Department of Psychology and one outside member.

Students who have not completed their General Education requirements are encouraged to take Honors General Education classes.

Department of Social Work and Gerontology

Department Chair: Mark Bigler

Location: Social Science Building, Room 140

Telephone Contact: Brenda Stockberger, 801-626-6157

Associate Professor: Mark Bigler, Corina Segovia Tadehara; **Assistant Professors:** Kerry Kennedy-Pressey, Steve Vigil; **Instructor:** Herman Hooten

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.

Social Work (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 and General Education 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); a minimum of 38 of these upper division credit hours is required within the Social Work major, plus 3 additional credits in SW 3600 - Social Statistics (which has Quantitative Literacy as a prerequisite), or equivalent.

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, at 801-626-6156, for more information or to schedule an appointment.

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 Quantitative Literacy*
3. WSU Computer Literacy*
4. 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.
5. Students agree to abide by the National Association of Social Workers Code of Ethics.

* Refer to General Requirements on Degree and General Education Requirements

Courses Required Prior to Formal Acceptance to the Social Work Program

Behavioral and Social Science Prerequisites (9 credit hours)

- ANTH 1000 SS/DV - Introduction to Anthropology (3)
- PSY 1010 SS - Introductory Psychology (3)
- SOC 1010 SS/DV - Introduction to Sociology (3)

Human Development Prerequisite (3 credit hours)

- ZOOL 1020 LS - Human Biology (3)

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 - Introduction to Generalist Social Work (3)
- SW 2100 - Human Behavior and the Social Environment I (3)

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 all the prerequisites or anytime thereafter. Applications may be obtained at the Social Work office (Social Science Building, room 140). The Admissions and Retention Committee will consider all applications and make recommendations in one of the following areas:

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 and General Education 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 - Introduction to Generalist Social Work; ANTH 1000 SS/DV - Introduction to Anthropology; PSY 1010 SS - Introductory Psychology; SOC 1010 SS/DV - 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 DV - Issues in Diversity (3)
- SW 3100 - Human Behavior and the Social Environment II (2)
- SW 3200 - Child and Family Welfare (2)
- SW 3500 - Social Welfare & Gerontological Policy Development and Service (3)
- SW 3600 - Social Statistics (3) (or equivalent)
- (Prerequisite – Quantitative Literacy. Must be completed prior to SW 4861)
- SW 3700 - Social Work Research (3) (It is recommended to take a Statistics course [SW 3600] prior to Research)
- SW 3900 - Social Work Methods, Values, and Ethics (3)
- SW 3910 - Social Work Practice I (3) (Make application for Social Service Field Experience prior to completing SW 3910)
- SW 3920 - Social Work Practice II (3)
- SW 3930 - Social Work Practice III (3)

- SW 4500 - Interventions for Populations at Risk **(3)**
- SW 4860 - Social Service Field Experience I **(4)**
- SW 4861 - Social Service Field Experience II **(4)**
- SW 4990 - Social Work Senior Seminar **(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/DV - Language and Culture **(3)**
- COMM 1020 HU - Principles of Public Speaking **(3)**
- COMM 2110 HU - Interpersonal & Small Group Communication **(3)**
- ENGL 2200 HU/DV - Introduction to Literature **(3)**
- ENGL 2220 HU/DV - Introduction to Fiction **(3)**
- ENGL 2710 HU /DV - Perspectives on Women's Literature **(3)**
- ENGL 3510 HU/DV - World Literature **(3)**
- PHIL 1120 HU - Contemporary Moral Problems **(3)**
- PHIL 1250 HU - Critical Thinking **(3)**

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 **(1-4)**
- SW 3800 - Writing in Social Work **(3)**
(optional for BS in Social Work)
- SW 4140 - Perspectives on Drug Use and Substance Abuse **(3)**
- SW 4150 - DSM IV-TR **(3)**
(optional for BA in Social Work)
- SW 4250 - Medical Social Work **(3)**
- SW 4600 - Social Work in Special Settings **(2-4)**
- SW 4800 - Projects and Research **(1-3)**
- SW 4810 - Experimental Courses **(2-3)**
- SW 4830 - Directed Readings **(1-3)**
- SW 4920 - Short Courses, Workshops, Institutes, and Special Programs **(2-4)**

Courses Approved as an Alternative to a Traditional Minor

As an alternative to a minor, a Social Work Major may choose to complete 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 **(1-4)**
- SW 4140 - Perspectives on Drug Use and Substance Abuse **(3)**
- SW 4150 - DSM IV-TR **(3)**
- SW 4250 - Medical Social Work **(3)**
- SW 4600 - Social Work in Special Settings **(2-4)**
- SW 4800 - Projects and Research **(1-3)**
(consent of department chair required)
- SW 4810 - Experimental Courses **(2-3)**
- SW 4830 - Directed Readings **(1-3)**
(consent of department chair required)
- SW 4920 - Short Courses, Workshops, Institutes, and Special Programs **(2-4)**

Anthropology

- ANTH 3500 DV - Advanced Cultural Anthropology **(3)**
- ANTH 3700 DV - Sex Roles: Past, Present and Future **(3)** (same as SOC 3120)
- ANTH 3900 DV - Magic, Shamanism and Religion **(3)**

Communication

- COMM 3080 DV - Intercultural Communication **(3)**
(prerequisite COMM 2110)

Child and Family Studies

- CHF 3350 DV - Diverse Families **(3)**
- CHF 3500 - Young Children at Risk **(3)**
(prerequisite CHF 1500)
- CHF 3550 - Parenting Education **(3)**
- CHF 3650 - Family Processes **(3)**
(prerequisite CHF 2400, CHF 3350)
- CHF 4400 - The Family in Stress **(3)**

Criminal Justice

- CJ 3040 DV - Community Policing **(3)**
- CJ 3060 - Corrections in the Community **(3)**
- CJ 3270 - Theories of Crime and Delinquency **(3)**
- CJ 3300 - Victimology **(3)**
- CJ 3400 - Drugs and Crime **(3)**

Economics

- ECON 3410 - Women in the World Economy **(3)**
(prerequisite ECON 2010)

Gerontology

- GERT 3000 - Death and Dying **(3)** *
- GERT 3120 - Aging: Adaptation and Behavior **(3)** *
- GERT 3320 DV - Ethnicity and Older Women in the American Society **(3)** *

* Cross-listed with Social Work (SW)

Health

- HLTH 3000 - Foundations of Health Promotion **(3)** (prerequisite HLTH 1030)
- HLTH 3400 - Substance Abuse Prevention **(3)**
- HLTH 3420 DV - Multicultural Health and Nutrition **(3)** (same as NUTR 3420)
- HLTH 3500 - Human Sexuality **(3)**

Health Administrative Services

- HAS 3000 - The Health Care System **(3)**
- HAS 3150 - Community Health Agencies and Services **(3)**

- HAS 3190 DV - Cultural Diversity in Patient Education **(3)**
- HAS 3260 - Health Care Administrative and Supervisory Theory **(3)** (prerequisite HAS 3000)
- HAS 4400 - Legal and Ethical Aspects of Health Administration **(3)**
(prerequisite HAS 3000 & HAS 3260)
- HAS 4520 - Long-Term Care Administration **(2)**
(prerequisite HAS 3000 & HAS 4400)

Management

- MGMT 3010 - Organizational Behavior and Management **(3)**
- MGMT 4400 - Advanced Organizational Behavior **(3)** (prerequisite MGMT 3010)

Philosophy

- PHIL 3350 - Medical Ethics **(3)**
- PHIL 3600 - Ethical Theory **(3)**
- PHIL 4250 - Philosophy of Law **(3)**

Political Science

- POLS 3330 - American Political Thought **(3)**
- POLS 3630 DV - Identity Politics **(3)**
- POLS 3700 - Introduction to Public Administration **(3)**
- POLS 4070 DV - Sex Roles and the Law **(3)**
- POLS 4600 - American Congress **(3)**
- POLS 4750 - Public Policy Analysis **(3)**

Psychology

- PSY 3000 - Child Psychology **(3)**
- PSY 3010 - Abnormal Psychology **(3)**
- PSY 3100 DV - Psychology of Diversity **(3)**
- PSY 3300 - Applied Behavior Intervention **(3)**
(prerequisite PSY 1010/equivalent)
- PSY 3430 - Theories of Personality **(3)**
(prerequisite PSY 1010)
- PSY 3460 - Social Psychology **(3)**
(prerequisite PSY 1010)
- PSY 3500 - Cognition **(3)**
(prerequisite PSY 1010)

Sociology

- SOC 3110 - Sociology of Family **(3)**
- SOC 3120 DV - Sex/Gender Roles: Past, Present, Future **(3)** (same as ANTH 3700)
- SOC 3270 - Criminology **(3)**
(prerequisite SOC 1010 or SOC 1020)
- SOC 3300 - Environment and Society **(3)**
- SOC 3410 - Sociology of Religion **(3)**
- SOC 3420 - Sociology of Education **(3)**
- SOC 3430 - Medicine and Healthcare in Society **(3)**

Women's Studies

- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present **(3)**

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 and General Education 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.

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.

Admission Requirements

Declare your program of study (see Enrollment Services and Information). Students must file "Major/Minor Declaration" form with the department office.

General Education

Refer to Degree and General Education 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 **(3)**
- GERT 3320 DV - Ethnicity and Older Women in the American Society **(3)**
- GERT 3400 - Methods of Research: Social and Behavioral Research **(4)**
- GERT 3500 - Social Welfare & Gerontological Policy Development and Service **(3)**
- GERT 3600 - Social Statistics **(3)**
- GERT 4860 - Introductory Field Practicum **(2)**
- GERT 4861 - Advanced Field Practicum **(2)**
- GERT 4990 - Senior Seminar **(2)**

Gerontology Elective (3 credit hours)

Select 1 course from the following

- GERT 2220 - Introduction to Social Gerontology **(3)**
- GERT 3000 - Death and Dying **(3)**
- GERT 3120 - Aging: Adaptation and Behavior **(3)**
- GERT 4220 - Societal Responses to Aging **(3)**
- GERT 4650 - Retirement: Adjustment/Planning **(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 (3)
- PSY 4310 - Introduction to Counseling Theories (3)
- PSY 4340 - Skills and Techniques of Counseling (3)
- SOC 3000 - Social Psychology (3)
- SOC 3540 - Small Groups & Leadership (3)
- ANTH 1040 HU/DV - Language and Culture (3)
- SW 3910 - Social Work Practice I (3)
- SW 3920 - Social Work Practice II (3)

2. Health and Leisure

- HLTH 3400 - Substance Abuse Prevention (3)
- HTHS 1101 - Medical Terminology (2)
- HTHS 3328 - Pathophysiology of Cells and Tissues (2)
- PE 1098 - Fitness for Life (1)
- PEP 2480 - Fitness for Life Concepts (1)
- REC 3810 - Recreation Leadership & Management (3)

3. Administrative/Management

- ACTG 2010 - Survey of Accounting I (3)
- ACTG 2020 - Survey of Accounting II (3)
- BSAD 3000 - Small Business Management (3)
- MKTG 3010 - Marketing Concepts and Practices (3)

4. Social Services (select from two academic areas)

- SW 1010 SS - Introduction to Generalist Social Work (3)
- SW 2100 - Human Behavior and the Social Environment I (3)
- SW 3900 - Social Work Methods, Values, and Ethics (3)
- ANTH 3500 DV - Advanced Cultural Anthropology (3)
- CHF 2400 - Family Relations (3)
- CHF 4400 - The Family in Stress (3)

5. Nutrition

- NUTR 1020 LS - Science and Application of Human Nutrition (3)
- NUTR 2320 - Food Values, Diet Design and Health (3)
- NUTR 3320 - Health and Nutrition in the Older Adult (3) or
- HLTH 3320 - Health and Nutrition in the Older Adult (3)
- NUTR 3420 DV - Multicultural Health & Nutrition (3) or
- HLTH 3420 DV - Multicultural Health and Nutrition (3)

Social Work (BS)

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 and General Education 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); a minimum of 38 of these upper division credit hours is required within the Social Work major, plus 3 additional credits in SW 3600 - Social Statistics (which has Quantitative Literacy as a prerequisite), or equivalent.

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, at 801-626-6156, for more information or to schedule an appointment.

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 Quantitative Literacy*
3. WSU Computer Literacy*

4. 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.
5. Students agree to abide by the National Association of Social Workers Code of Ethics.

** Refer to General Requirements on Degree and General Education Requirements*

Courses Required Prior to Formal Acceptance to the Social Work Program

Behavioral and Social Science Prerequisites (9 credit hours)

- ANTH 1000 SS/DV - Introduction to Anthropology **(3)**
- PSY 1010 SS - Introductory Psychology **(3)**
- SOC 1010 SS/DV - Introduction to Sociology **(3)**

Human Development Prerequisite (3 credit hours)

- ZOOL 1020 LS - Human Biology **(3)**

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 - Introduction to Generalist Social Work **(3)**
- SW 2100 - Human Behavior and the Social Environment I **(3)**

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 all the prerequisites or anytime thereafter. Applications may be obtained at the Social Work office (Social Science Building, room 140). The Admissions and Retention Committee will consider all applications and make recommendations in one of the following areas:

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 and General Education 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 - Introduction to Generalist Social Work; ANTH 1000 SS/DV - Introduction to Anthropology; PSY 1010 SS - Introductory Psychology; SOC 1010 SS/DV - 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 previous prerequisites.

Required Social Work Core Courses (38 credit hours)

- SW 2200 DV - Issues in Diversity **(3)**
- SW 3100 - Human Behavior and the Social Environment II **(2)**
- SW 3200 - Child and Family Welfare **(2)**
- SW 3500 - Social Welfare & Gerontological Policy Development and Service **(3)**
- SW 3600 - Social Statistics **(3)** (or equivalent)
- *(Prerequisite – Quantitative Literacy. Must be completed prior to SW 4861)*
- SW 3700 - Social Work Research **(3)**
(It is recommended to take a Statistics course [SW 3600] prior to Research)
- SW 3900 - Social Work Methods, Values, and Ethics **(3)**
- SW 3910 - Social Work Practice I **(3)**
(Make application for Social Service Field Experience prior to completing SW 3910)
- SW 3920 - Social Work Practice II **(3)**
- SW 3930 - Social Work Practice III **(3)**
- SW 4500 - Interventions for Populations at Risk **(3)**
- SW 4860 - Social Service Field Experience I **(4)**
- SW 4861 - Social Service Field Experience II **(4)**
- SW 4990 - Social Work Senior Seminar **(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 **(3)**
- SW 3700 - Social Work Research **(3)**
- SW 4150 - DSM IV-TR **(3)**

And select one of the following

- HLTH 1020 LS - Science and Application of Human Nutrition **(3)**
- HTHS 1110 LS - Biomedical Core **(4)**
- ZOOL 1020 LS - Human Biology **(3)**

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 IV-TR 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 **(1-4)**
- SW 3800 - Writing in Social Work **(3)** (optional for BS in Social Work)
- SW 4140 - Perspectives on Drug Use and Substance Abuse **(3)**
- SW 4150 - DSM IV-TR **(3)** (optional for BA in Social Work)
- SW 4250 - Medical Social Work **(3)**
- SW 4600 - Social Work in Special Settings **(2-4)**

- SW 4800 - Projects and Research **(1-3)**
- SW 4810 - Experimental Courses **(2-3)**
- SW 4830 - Directed Readings **(1-3)**
- SW 4920 - Short Courses, Workshops, Institutes, and Special Programs **(2-4)**

Courses Approved as an Alternative to a Traditional Minor

As an alternative to a minor, a Social Work Major may choose to complete 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 **(1-4)**
- SW 4140 - Perspectives on Drug Use and Substance Abuse **(3)**
- SW 4150 - DSM IV-TR **(3)**
- SW 4250 - Medical Social Work **(3)**
- SW 4600 - Social Work in Special Settings **(2-4)**
- SW 4800 - Projects and Research **(1-3)** (consent of department chair required)
- SW 4810 - Experimental Courses **(2-3)**
- SW 4830 - Directed Readings **(1-3)** (consent of department chair required)
- SW 4920 - Short Courses, Workshops, Institutes, and Special Programs **(2-4)**

Anthropology

- ANTH 3500 DV - Advanced Cultural Anthropology **(3)**
- ANTH 3700 DV - Sex Roles: Past, Present and Future **(3)** (same as SOC 3120)
- ANTH 3900 DV - Magic, Shamanism and Religion **(3)**

Communication

- COMM 3080 DV - Intercultural Communication **(3)** (prerequisite COMM 2110)

Child and Family Studies

- CHF 3350 DV - Diverse Families **(3)**
- CHF 3500 - Young Children at Risk **(3)** (prerequisite CHF 1500)
- CHF 3550 - Parenting Education **(3)**
- CHF 3650 - Family Processes **(3)** (prerequisite CHF 2400, CHF 3350)
- CHF 4400 - The Family in Stress **(3)**

Criminal Justice

- CJ 3040 DV - Community Policing **(3)**
- CJ 3060 - Corrections in the Community **(3)**
- CJ 3270 - Theories of Crime and Delinquency **(3)**
- CJ 3300 - Victimology **(3)**
- CJ 3400 - Drugs and Crime **(3)**

Economics

- ECON 3410 - Women in the World Economy **(3)** (prerequisite ECON 2010)

Gerontology

- GERT 3000 - Death and Dying **(3)** *
- GERT 3120 - Aging: Adaptation and Behavior **(3)** *
- GERT 3320 DV - Ethnicity and Older Women in the American Society **(3)** *

* Cross-listed with Social Work (SW)

Health

- HLTH 3000 - Foundations of Health Promotion **(3)** (prerequisite HLTH 1030)
- HLTH 3400 - Substance Abuse Prevention **(3)**
- HLTH 3420 DV - Multicultural Health and Nutrition **(3)** (same as NUTR 3420)
- HLTH 3500 - Human Sexuality **(3)**

Health Administrative Services

- HAS 3000 - The Health Care System **(3)**
- HAS 3150 - Community Health Agencies and Services **(3)**
- HAS 3190 DV - Cultural Diversity in Patient Education **(3)**
- HAS 3260 - Health Care Administrative and Supervisory Theory **(3)** (prerequisite HAS 3000)
- HAS 4400 - Legal and Ethical Aspects of Health Administration **(3)** (prerequisite HAS 3000 & HAS 3260)
- HAS 4520 - Long-Term Care Administration **(2)** (prerequisite HAS 3000 & HAS 4400)

Management

- MGMT 3010 - Organizational Behavior and Management **(3)**
- MGMT 4400 - Advanced Organizational Behavior **(3)** (prerequisite MGMT 3010)

Philosophy

- PHIL 3350 - Medical Ethics **(3)**
- PHIL 3600 - Ethical Theory **(3)**
- PHIL 4250 - Philosophy of Law **(3)**

Political Science

- POLS 3330 - American Political Thought **(3)**
- POLS 3630 DV - Identity Politics **(3)**
- POLS 3700 - Introduction to Public Administration **(3)**
- POLS 4070 DV - Sex Roles and the Law **(3)**
- POLS 4600 - American Congress **(3)**
- POLS 4750 - Public Policy Analysis **(3)**

Psychology

- PSY 3000 - Child Psychology **(3)**
- PSY 3010 - Abnormal Psychology **(3)**
- PSY 3100 DV - Psychology of Diversity **(3)**
- PSY 3300 - Applied Behavior Intervention **(3)** (prerequisite PSY 1010/equivalent)
- PSY 3430 - Theories of Personality **(3)** (prerequisite PSY 1010)
- PSY 3460 - Social Psychology **(3)** (prerequisite PSY 1010)
- PSY 3500 - Cognition **(3)** (prerequisite PSY 1010)

Sociology

- SOC 3110 - Sociology of Family **(3)**
- SOC 3120 DV - Sex/Gender Roles: Past, Present, Future **(3)** (same as ANTH 3700)
- SOC 3270 - Criminology **(3)** (prerequisite SOC 1010 or SOC 1020)

- SOC 3300 - Environment and Society (3)
- SOC 3410 - Sociology of Religion (3)
- SOC 3420 - Sociology of Education (3)
- SOC 3430 - Medicine and Healthcare in Society (3)

Women's Studies

- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

Gerontology (BIS)

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.

Course Requirements

Gerontology Courses Required (11 credit hours)

- GERT 1010 SS - Introduction to Gerontology (3)
- GERT 3320 DV - Ethnicity and Older Women in the American Society (3)
- GERT 3500 - Social Welfare & Gerontological Policy Development and Service (3)
- GERT 4860 - Introductory Field Practicum (2)

Gerontology Electives (6 credit hours)

Select two courses from the following 5 courses

- GERT 2220 - Introduction to Social Gerontology (3)
- GERT 3000 - Death and Dying (3)
- GERT 3120 - Aging: Adaptation and Behavior (3)
- GERT 4220 - Societal Responses to Aging (3)
- GERT 4650 - Retirement: Adjustment/Planning (3)

Social Work (BIS)

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.

Course Requirements for BIS Emphasis

Social Work Courses Required (19 credit hours)

- SW 1010 SS - Introduction to Generalist Social Work (3)
- SW 2100 - Human Behavior and the Social Environment I (3)
- SW 2200 DV - Issues in Diversity (3)
- SW 3100 - Human Behavior and the Social Environment II (2)
- SW 3200 - Child and Family Welfare (2)
- SW 3500 - Social Welfare & Gerontological Policy Development and Service (3)
- SW 3700 - Social Work Research (3)

Gerontology Minor

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.

Course Requirements

Gerontology Courses Required (11 credit hours)

- GERT 1010 SS - Introduction to Gerontology (3)
- GERT 3320 DV - Ethnicity and Older Women in the American Society (3)
- GERT 3500 - Social Welfare & Gerontological Policy Development and Service (3)
- GERT 4860 - Introductory Field Practicum (2)

Gerontology Electives (6 credit hours)

Select two courses from the following 5 courses

- GERT 2220 - Introduction to Social Gerontology (3)
- GERT 3000 - Death and Dying (3)
- GERT 3120 - Aging: Adaptation and Behavior (3)
- GERT 4220 - Societal Responses to Aging (3)
- GERT 4650 - Retirement: Adjustment/Planning (3)

Gerontology Departmental Honors

Please contact the Social Work & Gerontology Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisites: Enroll in the General Honors Program and complete 10 hours of General Honors courses.

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Fulfill the requirements for the Gerontology major, of which at least 20 credit hours must be completed on an Honors basis. A student may receive Departmental Honors credit in any upper division Gerontology course with the exception of GERT 4860, GERT 4861, or GERT 4862. In addition, complete the Gerontology Honors senior project of 2 credit hours.

Social Work Departmental Honors

Please contact the Social Work Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisites: Enroll in General Honors Program and complete 10 hours of General Honors Courses.

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Fulfill the requirements for the Social Work major, of which the following courses must be completed on an Honors basis: SW 2100 (3); SW 3100 (2); 3200 (2); SW 3900 (3); and select two courses from SW 3500 (3); SW 3910 (3); SW 3920 (2); or SW 3930 (3); for a total of 5 classes. For the remainder of the Social Work Honors major see the chair of the Social Work department.

Gerontology Non-degree Certification

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.

Course Requirements

Gerontology Courses Required (11 credit hours)

- GERT 1010 SS - Introduction to Gerontology (3)
- GERT 3320 DV - Ethnicity and Older Women in the American Society (3)
- GERT 3500 - Social Welfare & Gerontological Policy Development and Service (3)
- GERT 4860 - Introductory Field Practicum (2)

Gerontology Electives (6 credit hours)

Select two courses from the following 5 courses

- GERT 2220 - Introduction to Social Gerontology (3)
- GERT 3000 - Death and Dying (3)
- GERT 3120 - Aging: Adaptation and Behavior (3)
- GERT 4220 - Societal Responses to Aging (3)
- GERT 4650 - Retirement: Adjustment/Planning (3)

Department of Sociology and Anthropology

Department Chair: Marjukka Ollilainen

Location: Social Science Building, Room 114

Telephone Contact: Carol Jensen 801-626-6241

Professors: Brooke Arkush, Rosemary Conover, Linda Eaton, Kay Gillespie, Ron Holt, Brenda Marsteller Kowalewski, Marjukka Ollilainen, Huiying Wei-Arthus;

Associate Professor: Robert Reynolds; **Assistant**

Professors: Pepper Glass, Carla Trentelman

Sociology

Sociology Coordinator: Robert Reynolds

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 and Interdisciplinary Programs section of this catalog.)

Anthropology

Anthropology Coordinator: Dr. Brooke Arkush, 801-626-7202

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 and Interdisciplinary Programs section of this catalog.)

Archaeological Technician (AAS)

Archaeological Technician

Director: Brooke Arkush

Telephone Contact: Carol Jensen 801-626-6241

Archaeology can be an emphasis within the anthropology major or minor, part of a Bachelor of Integrated Studies degree, or stand alone as an independent program. The program trains students for work as archaeological technicians, adding a vocational component to an academic discipline. Archaeology, with its modern emphases on scientific problem solving, an evolutionary perspective, and ecological theory, is also a valuable part of a student's science education.

Grade Requirements: A 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: Minimum of 26 credit hours for the Institutional Certificate, which must include ENGL 1010 (3) or equivalent. Minimum of 63 credit hours for the Associate of Applied Science degree, which must include ENGL 1010 (3) (or equivalent), COMM 1020 (3), and MATH 1050 (3) and 9 additional credit hours of general education, including one course in each of the Humanities, Sciences, and Social Sciences areas.

General Education

Refer to Degree and General Education Requirements for Associate of Applied Science degree requirements.

Advisement

All declared Archaeological Technician students are assigned to the Director of the Archaeological Technician program for advisement. Students are officially notified that they must be formally advised by the Director at least once a year with all contacts posted in their files to be maintained in the department. Contact with the Director is by appointment; undeclared students with questions should also contact the Director of the Archaeological Technician Program (Dr. Brooke Arkush, phone: 801-626-7202) or the Anthropology Coordinator (Dr. Linda Eaton, phone: 801-626-6244).

Major Course Requirements for AAS Degree

Required Program Core Courses
(37-40 credit hours)

- ANTH 1000 SS/DV - Introduction to Anthropology (3)
- ANTH 1020 LS/DV - Biological Anthropology (3)
- ANTH 2030 SS - Principles of Archaeology (3)
- ANTH 3100 - Prehistory of North America (3)
- ANTH 3200 DV - Archaeology of Early Civilizations (3)
- ANTH 3300 - Archaeological Field Techniques (3-6)
(*must complete a minimum of 5 credit hours*)
- ANTH 3400 - Archaeological Laboratory Techniques (3)
- ANTH 3600 DV - Culture Area Studies (1-3)
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management (3)
- ENGL 2100 - Technical Writing (3)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3) and
- GEO 1115 - Physical Geology Lab (1)
- SOC 3600 - Social Statistics (3)

Support Courses

Complete at least two of the following:

- ANTH 4200 - Anthropological Theory (3)
- ENGL 3100 - Professional and Technical Writing (3)
- GEO 3150 - Geomorphology (4)
- HIST 4110 DV - History of the American West to 1900 (3)

Archaeological Technician Institutional Certificate

Archaeological Technician

Director: Brooke Arkush

Telephone Contact: Carol Jensen 801-626-6241

Archaeology can be an emphasis within the anthropology major or minor, part of a Bachelor of Integrated Studies degree, or stand alone as an independent program. The program trains students for work as archaeological technicians, adding a vocational component to an academic discipline. Archaeology, with its modern emphases on scientific problem solving, an evolutionary perspective, and ecological theory, is also a valuable part of a student's science education.

Grade Requirements: A 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: Minimum of 26 credit hours for the Institutional Certificate, which must include ENGL 1010 (3) or equivalent. Minimum of 63 credit hours for the Associate of Applied Science degree, which must include ENGL 1010 (3) (or equivalent), COMM 1020 (3), and MATH 1050 (3) and 9 additional credit hours of general education, including one course in each of the Humanities, Sciences, and Social Sciences areas.

General Education

Refer to Degree and General Education Requirements for Associate of Applied Science degree requirements.

Advisement

All declared Archaeological Technician students are assigned to the Director of the Archaeological Technician program for advisement. Students are officially notified that they must be formally advised by the Director at least once a year with all contacts posted in their files to be maintained in the department. Contact with the Director is by appointment; undeclared students with questions should also contact the Director of the Archaeological Technician Program (Dr. Brooke Arkush, phone: 801-626-7202) or the Anthropology Coordinator (Dr. Linda Eaton, phone: 801-626-6244).

Course Requirements for Institutional Certificate

Required Program Core Courses
(20-21 credit hours)

- ANTH 2030 SS - Principles of Archaeology (3)
- ANTH 3100 - Prehistory of North America (3)
- ANTH 3200 DV - Archaeology of Early Civilizations (3)
- ANTH 3300 - Archaeological Field Techniques (3-6) (*must complete a minimum of 5 credit hours*)
- ANTH 3400 - Archaeological Laboratory Techniques (3)
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management (3)

Support Courses

Complete at least one of the following:

- GEO 1110 PS - Dynamic Earth: Physical Geology (3) and
- GEO 1115 - Physical Geology Lab (1)
- GEOG 1000 PS - Natural Environments of the Earth (3)

Recommended Courses

Students are encouraged to select one or two additional courses from the following:

- ANTH 1000 SS/DV - Introduction to Anthropology (3)
- ENGL 2100 - Technical Writing (3)
- SOC 3600 - Social Statistics (3)

Anthropology (BA)

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 36 Anthropology credit hours is required within the major.

Advisement

A systematic advisement system assigns all declared Major students to a faculty advisor. Students are officially notified that they must be formally advised at least once a year with all contacts posted in their files which are maintained in the department. Undeclared Majors/Minors/BIS students and those with general questions should contact the Coordinator of Anthropology (Dr. Linda Eaton, phone: 801-626-6244).

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 and General Education 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 1000, ANTH 1020, ANTH 1040, ANTH 2010, and ANTH 2030.

Major Course Requirements for BS or BA Degree

Required Program Courses (12 credit hours)

- ANTH 1000 SS/DV - Introduction to Anthropology (3)
- ANTH 4200 - Anthropological Theory (3)

- ANTH 4300 - Anthropological Research Methods (3)
- SOC 3600 - Social Statistics (3) or equivalent as approved by the program coordinator

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 the following language arts courses
- ANTH 1040 HU/DV - Language and Culture (3)
- ANTH 4830 - Readings and/or Projects (1-3)

or refer to the Degree and General Education Requirements section in this catalog and complete Option 1 - Foreign Language listed under Requirements for Bachelor's Degrees.

General Anthropology Track

Four-Field Fundamentals Courses (6 credit hours)

Select two courses from the following

- ANTH 1020 LS/DV - Biological Anthropology (3)
- ANTH 1040 HU/DV - Language and Culture (3)
- ANTH 2010 SS/DV - Peoples and Cultures of the World (3)
- ANTH 2030 SS - Principles of Archaeology (3)

Electives (18 credit hours)

Select a minimum of 18 additional credit hours from the following

- ANTH 1020 LS/DV - Biological Anthropology (3)*
- ANTH 1040 HU/DV - Language and Culture (3)*
- ANTH 2010 SS/DV - Peoples and Cultures of the World (3)*
- ANTH 2030 SS - Principles of Archaeology (3)*
- ANTH 2810 - Experimental Courses (1-3)
- ANTH 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- ANTH 2950 - Elementary Anthropological Field Trip (1-3)
- ANTH 2990 - Special Topics in Anthropology (1-3)
- ANTH 3100 - Prehistory of North America (3)
- ANTH 3200 DV - Archaeology of Early Civilizations (3)
- ANTH 3300 - Archaeological Field Techniques (3-6)
- ANTH 3400 - Archaeological Laboratory Techniques (3)
- ANTH 3500 DV - Advanced Cultural Anthropology (3)
- ANTH 3600 DV - Culture Area Studies (1-3)
- ANTH 3700 DV - Sex Roles: Past, Present and Future (3)
- ANTH 3900 DV - Magic, Shamanism and Religion (3)
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management (3)
- ANTH 4810 - Experimental Courses (1-3)
- ANTH 4830 - Readings and/or Projects (1-3)
- ANTH 4890 - Internship in Anthropology (1-3)
- ANTH 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

- ANTH 4950 - Advanced Anthropological Field Trip (1-3)
- ANTH 4990 - Seminar in Anthropology (1-3)

* Course may not be used to fulfill both elective and four-field fundamental course requirements.

Archaeology Track, Anthropology (BA)

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 36 Anthropology credit hours is required within the major.

Advisement

A systematic advisement system assigns all declared Major students to a faculty advisor. Students are officially notified that they must be formally advised at least once a year with all contacts posted in their files which are maintained in the department. Undeclared Majors/Minors/BIS students and those with general questions should contact the Coordinator of Anthropology (Dr. Linda Eaton, phone: 801-626-6244).

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 and General Education 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 1000, ANTH 1020, ANTH 1040, ANTH 2010, and ANTH 2030.

Major Course Requirements for BS or BA Degree

Required Program Courses (12 credit hours)

- ANTH 1000 SS/DV - Introduction to Anthropology (3)
- ANTH 4200 - Anthropological Theory (3)
- ANTH 4300 - Anthropological Research Methods (3)
- SOC 3600 - Social Statistics (3) *or equivalent as approved by the program coordinator*

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 the following language arts courses
- ANTH 1040 HU/DV - Language and Culture (3)
- ANTH 4830 - Readings and/or Projects (1-3)

or refer to the Degree and General Education Requirements section in this catalog and complete Option 1 - Foreign Language listed under Requirements for Bachelor's Degrees.

Archaeology Track

Core Courses (21-24 credit hours)

- ANTH 1020 LS/DV - Biological Anthropology (3)
- ANTH 2030 SS - Principles of Archaeology (3)
- ANTH 3100 - Prehistory of North America (3)
- ANTH 3200 DV - Archaeology of Early Civilizations (3)
- ANTH 3300 - Archaeological Field Techniques (3-6)
- ANTH 3400 - Archaeological Laboratory Techniques (3)
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management (3)

Electives (3 hours)

Must select one of the following.

- ANTH 3600 DV - Culture Area Studies (1-3)
- ANTH 4890 - Internship in Anthropology (1-3)

Recommended

- ENGL 3100 - Professional and Technical Writing (3)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3) and
- GEO 1115 - Physical Geology Lab (1)
- GEO 3150 - Geomorphology (4)
- HIST 4110 - History of the American West (3)

Strongly recommended additional skills for all majors: foreign language & computer skills.

Anthropology (BS)

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 36 Anthropology credit hours is required within the major.

Advisement

A systematic advisement system assigns all declared Major students to a faculty advisor. Students are officially notified that they must be formally advised at least once a year with all contacts posted in their files which are maintained in the department. Undeclared Majors/Minors/BIS students and those with general questions should contact the Coordinator of Anthropology (Dr. Linda Eaton, phone: 801-626-6244).

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 and General Education 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 1000, ANTH 1020, ANTH 1040, ANTH 2010, and ANTH 2030.

Major Course Requirements for BS or BA Degree

Required Program Courses (12 credit hours)

- ANTH 1000 SS/DV - Introduction to Anthropology (3)
- ANTH 4200 - Anthropological Theory (3)
- ANTH 4300 - Anthropological Research Methods (3)
- SOC 3600 - Social Statistics (3) *or equivalent as approved by the program coordinator*

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/DV - Biological Anthropology (3)
- ANTH 1040 HU/DV - Language and Culture (3)
- ANTH 2010 SS/DV - Peoples and Cultures of the World (3)
- ANTH 2030 SS - Principles of Archaeology (3)

Electives (18 credit hours)

Select a minimum of 18 additional credit hours from the following

- ANTH 1020 LS/DV - Biological Anthropology (3)*
- ANTH 1040 HU/DV - Language and Culture (3)*
- ANTH 2010 SS/DV - Peoples and Cultures of the World (3)*
- ANTH 2030 SS - Principles of Archaeology (3)*
- ANTH 2810 - Experimental Courses (1-3)
- ANTH 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- ANTH 2950 - Elementary Anthropological Field Trip (1-3)
- ANTH 2990 - Special Topics in Anthropology (1-3)
- ANTH 3100 - Prehistory of North America (3)
- ANTH 3200 DV - Archaeology of Early Civilizations (3)
- ANTH 3300 - Archaeological Field Techniques (3-6)
- ANTH 3400 - Archaeological Laboratory Techniques (3)
- ANTH 3500 DV - Advanced Cultural Anthropology (3)
- ANTH 3600 DV - Culture Area Studies (1-3)

- ANTH 3700 DV - Sex Roles: Past, Present and Future (3)
- ANTH 3900 DV - Magic, Shamanism & Religion (3)
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management (3)
- ANTH 4810 - Experimental Courses (1-3)
- ANTH 4830 - Readings and/or Projects (1-3)
- ANTH 4890 - Internship in Anthropology (1-3)
- ANTH 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- ANTH 4950 - Advanced Anthropological Field Trip (1-3)
- ANTH 4990 - Seminar in Anthropology (1-3)

* Course may not be used to fulfill both elective and four-field fundamental course requirements.

Archaeology Track, Anthropology (BS)

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 36 Anthropology credit hours is required within the major.

Advisement

A systematic advisement system assigns all declared Major students to a faculty advisor. Students are officially notified that they must be formally advised at least once a year with all contacts posted in their files which are maintained in the department. Undeclared Majors/Minors/BIS students and those with general questions should contact the Coordinator of Anthropology (Dr. Linda Eaton, phone: 801-626-6244).

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 and General Education 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 1000, ANTH 1020, ANTH 1040, ANTH 2010, and ANTH 2030.

Major Course Requirements for BS or BA Degree

Required Program Courses (12 credit hours)

- ANTH 1000 SS/DV - Introduction to Anthropology (3)
- ANTH 4200 - Anthropological Theory (3)
- ANTH 4300 - Anthropological Research Methods (3)
- SOC 3600 - Social Statistics (3) or equivalent as approved by the program coordinator

In addition, students must select one of the following two tracks to pursue.

Archaeology Track

Core Courses (21-24 credit hours)

- ANTH 1020 LS/DV - Biological Anthropology (3)
- ANTH 2030 SS - Principles of Archaeology (3)
- ANTH 3100 - Prehistory of North America (3)
- ANTH 3200 DV - Archaeology of Early Civilizations (3)
- ANTH 3300 - Archaeological Field Techniques (3-6)
- ANTH 3400 - Archaeological Laboratory Techniques (3)
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management (3)

Electives (3 hours)

Must select one of the following.

- ANTH 3600 DV - Culture Area Studies (1-3)
- ANTH 4890 - Internship in Anthropology (1-3)

Recommended

- ENGL 3100 - Professional and Technical Writing (3)
- GEO 1110 PS - Dynamic Earth: Physical Geology (3) and
- GEO 1115 - Physical Geology Lab (1)
- GEO 3150 - Geomorphology (4)
- HIST 4110 - History of the American West (3)

Strongly recommended additional skills for all majors: foreign language & computer skills.

Sociology (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.

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.

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 Enrollment 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).

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements. The following course will fulfill General Education, Diversity and program requirements: SOC 1010.

Major Course Requirements for BS Degree

Required Program Courses (18 credit hours)

- SOC 1010 SS/DV - Introduction to Sociology (3)
- SOC 3030 - Classical Sociological Theory (3)
- SOC 3600 - Social Statistics (3)
- SOC 3660 - Sociological Research (3)
- SOC 4030 - Contemporary Sociological Theory (3)
- SOC 4900 - Senior Capstone Course (3)

Sociology Electives (select 6 courses, 18 credit hours, only one of which can be lower division)

- SOC 1020 SS/DV - Social Problems (3)
- SOC 2810 - Experimental Course Offerings (2-3)
- SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- SOC 3000 - Social Psychology (3)
- SOC 3010 DV - Social Inequality (3)
- SOC 3110 - Sociology of Family (3)
- SOC 3120 DV - Sex/Gender Roles: Past, Present, Future (3)
- SOC 3130 - Sociology of Gender (3)
- SOC 3250 - Deviance and Social Control (3)
- SOC 3260 - Juvenile Delinquency (3)
- SOC 3270 - Criminology (3)
- SOC 3300 - Environment and Society (3)
- SOC 3400 - Social Change and Social Movements (3)
- SOC 3410 - Sociology of Religion (3)
- SOC 3420 - Sociology of Education (3)
- SOC 3430 - Medicine and Healthcare in Society (3)
- SOC 3540 - Small Groups & Leadership (3)
- SOC 3550 - Organizations in Society (3)
- SOC 3840 - Cities and Urban Life (3)
- SOC 3850 DV - American Minorities in Urban Settings (3)
- SOC 4120 - Socialization over the Life Course (3)
- SOC 4270 - Sociology of Law (3)
- SOC 4410 DV - Sociology of Globalization (3)
- SOC 4550 DV - Sociology of Work (3)
- SOC 4810 - Experimental Course Offerings (2-3)
- SOC 4830 - Readings and/or Projects (1-3)

- SOC 4890 - Internship (1-6)
- SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- SOC 4990 - Seminar in Sociology (3)

Deviance and Criminology Emphasis

If a student desires to have an emphasis of deviance and criminology within the sociology major, the student must take three courses (9 elective credit hours) from the following courses:

- SOC 3250 - Deviance and Social Control (3)
- SOC 3260 - Juvenile Delinquency (3)
- SOC 3270 - Criminology (3)
- SOC 4270 - Sociology of Law (3)

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.

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.

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.

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 Enrollment 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).

General Education

Refer to Degree and General Education Requirements for Bachelor of Science requirements. The following course will fulfill General Education, Diversity and program requirements: SOC 1010.

Major Course Requirements for BS Degree

Required Program Courses (18 credit hours)

- SOC 1010 SS/DV - Introduction to Sociology (3)
- SOC 3030 - Classical Sociological Theory (3)
- SOC 3600 - Social Statistics (3)
- SOC 3660 - Sociological Research (3)
- SOC 4030 - Contemporary Sociological Theory (3)
- SOC 4900 - Senior Capstone Course (3)

Sociology Electives (select 6 courses, 18 credit hours, only one of which can be lower division)

- SOC 1020 SS/DV - Social Problems (3)
- SOC 2810 - Experimental Course Offerings (2-3)
- SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- SOC 3000 - Social Psychology (3)
- SOC 3010 DV - Social Inequality (3)
- SOC 3110 - Sociology of Family (3)
- SOC 3120 DV - Sex/Gender Roles: Past, Present, Future (3)
- SOC 3130 - Sociology of Gender (3)
- SOC 3250 - Deviance and Social Control (3)
- SOC 3260 - Juvenile Delinquency (3)
- SOC 3270 - Criminology (3)
- SOC 3300 - Environment and Society (3)
- SOC 3400 - Social Change and Social Movements (3)
- SOC 3410 - Sociology of Religion (3)
- SOC 3420 - Sociology of Education (3)
- SOC 3430 - Medicine and Healthcare in Society (3)
- SOC 3540 - Small Groups & Leadership (3)
- SOC 3550 - Organizations in Society (3)
- SOC 3840 - Cities and Urban Life (3)
- SOC 3850 DV - American Minorities in Urban Settings (3)
- SOC 4120 - Socialization over the Life Course (3)
- SOC 4270 - Sociology of Law (3)
- SOC 4410 DV - Sociology of Globalization (3)
- SOC 4550 DV - Sociology of Work (3)
- SOC 4810 - Experimental Course Offerings (2-3)
- SOC 4830 - Readings and/or Projects (1-3)
- SOC 4890 - Internship (1-6)
- SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- SOC 4990 - Seminar in Sociology (3)

Deviance and Criminology Emphasis

If a student desires to have an emphasis of deviance and criminology within the sociology major, the student must take three courses (9 elective credit hours) from the following courses:

- SOC 3250 - Deviance and Social Control (3)
- SOC 3260 - Juvenile Delinquency (3)
- SOC 3270 - Criminology (3)
- SOC 4270 - Sociology of Law (3)

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.

Anthropology (BIS)

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.

Advisement

A systematic advisement system assigns all Anthropology Minors and BIS students to a faculty advisor. Students are officially notified that they must be formally advised at least once a year with all contacts posted in their files which are maintained in the department. Undeclared students and those with general questions should contact the Coordinator of Anthropology (Dr. Linda Eaton, phone: 801-626-6244).

Course Requirements for Minor and BIS Emphasis

Required Program Courses (6 credit hours)

- ANTH 1000 SS/DV - Introduction to Anthropology (3)
- ANTH 4200 - Anthropological Theory (3)

Four-Field Fundamentals Courses (6 credit hours)

Select two from the following

- ANTH 1020 LS/DV - Biological Anthropology (3)
- ANTH 1040 HU/DV - Language and Culture (3)
- ANTH 2010 SS/DV - Peoples and Cultures of the World (3)
- ANTH 2030 SS - Principles of Archaeology (3)

Electives (6 credit hours)

Select a minimum of 6 additional credit hours from the following

- ANTH 1020 LS/DV - Biological Anthropology (3) *
- ANTH 1040 HU/DV - Language and Culture (3) *
- ANTH 2010 SS/DV - Peoples and Cultures of the World (3) *
- ANTH 2030 SS - Principles of Archaeology (3) *
- ANTH 2810 - Experimental Courses (1-3)
- ANTH 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- ANTH 2950 - Elementary Anthropological Field Trip (1-3)
- ANTH 2990 - Special Topics in Anthropology (1-3)
- ANTH 3100 - Prehistory of North America (3)
- ANTH 3200 DV - Archaeology of Early Civilizations (3)
- ANTH 3300 - Archaeological Field Techniques (3-6)
- ANTH 3400 - Archaeological Laboratory Techniques (3)
- ANTH 3500 DV - Advanced Cultural Anthropology (3)
- ANTH 3600 DV - Culture Area Studies (1-3)
- ANTH 3700 DV - Sex Roles: Past, Present and Future (3)
- ANTH 3900 DV - Magic, Shamanism and Religion (3)
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management (3)
- ANTH 4300 - Anthropological Research Methods (3)

- ANTH 4810 - Experimental Courses (1-3)
- ANTH 4830 - Readings and/or Projects (1-3)
- ANTH 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- ANTH 4950 - Advanced Anthropological Field Trip (1-3)
- ANTH 4990 - Seminar in Anthropology (1-3)

*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)

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.

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).

Course Requirements for Minor

Sociology Courses Required (9 credit hours)

- SOC 1010 SS/DV - Introduction to Sociology (3)
- SOC 3030 - Classical Sociological Theory (3)
- SOC 3660 - Sociological Research (3)

Sociology Electives (select three courses, 9 credit hours, only one of which can be lower division)

- SOC 1020 SS/DV - Social Problems (3)
- SOC 2810 - Experimental Course Offerings (2-3)
- SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- SOC 3000 - Social Psychology (3)
- SOC 3010 DV - Social Inequality (3)
- SOC 3110 - Sociology of Family (3)
- SOC 3120 DV - Sex/Gender Roles: Past, Present, Future (3)
- SOC 3130 - Sociology of Gender (3)
- SOC 3250 - Deviance and Social Control (3)
- SOC 3260 - Juvenile Delinquency (3)
- SOC 3270 - Criminology (3)
- SOC 3300 - Environment and Society (3)
- SOC 3400 - Social Change and Social Movements (3)
- SOC 3410 - Sociology of Religion (3)
- SOC 3420 - Sociology of Education (3)
- SOC 3430 - Medicine and Healthcare in Society (3)
- SOC 3540 - Small Groups & Leadership (3)
- SOC 3550 - Organizations in Society (3)
- SOC 3600 - Social Statistics (3)
- SOC 3840 - Cities and Urban Life (3)
- SOC 3850 DV - American Minorities in Urban Settings (3)
- SOC 4030 - Contemporary Sociological Theory (3)
- SOC 4120 - Socialization over the Life Course (3)
- SOC 4270 - Sociology of Law (3)
- SOC 4410 DV - Sociology of Globalization (3)
- SOC 4550 DV - Sociology of Work (3)
- SOC 4810 - Experimental Course Offerings (2-3)

- SOC 4830 - Readings and/or Projects (1-3)
- SOC 4890 - Internship (1-6)
- SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- SOC 4990 - Seminar in Sociology (3)

Deviance and Criminology Emphasis

If a student desires to have an emphasis of Deviance and Criminology within the sociology minor/BIS, the student must take two courses (6 elective credit hours) from the following courses:

- SOC 3250 - Deviance and Social Control (3)
- SOC 3260 - Juvenile Delinquency (3)
- SOC 3270 - Criminology (3)
- SOC 4270 - Sociology of Law (3)

Sociology Teaching Minors are also required to take SOC 3420 and HIST 4500 in addition to the courses required by the Teacher Education Program.

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.

Advisement

A systematic advisement system assigns all Anthropology Minors and BIS students to a faculty advisor. Students are officially notified that they must be formally advised at least once a year with all contacts posted in their files which are maintained in the department. Undeclared students and those with general questions should contact the Coordinator of Anthropology (Dr. Linda Eaton, phone: 801-626-6244).

Course Requirements for Minor and BIS Emphasis

Required Program Courses (6 credit hours)

- ANTH 1000 SS/DV - Introduction to Anthropology (3)
- ANTH 4200 - Anthropological Theory (3)

Four-Field Fundamentals Courses (6 credit hours)

Select two from the following

- ANTH 1020 LS/DV - Biological Anthropology (3)
- ANTH 1040 HU/DV - Language and Culture (3)
- ANTH 2010 SS/DV - Peoples and Cultures of the World (3)
- ANTH 2030 SS - Principles of Archaeology (3)

Electives (6 credit hours)

Select a minimum of 6 additional credit hours from the following

- ANTH 1020 LS/DV - Biological Anthropology (3) *
- ANTH 1040 HU/DV - Language and Culture (3) *
- ANTH 2010 SS/DV - Peoples and Cultures of the World (3) *
- ANTH 2030 SS - Principles of Archaeology (3) *
- ANTH 2810 - Experimental Courses (1-3)
- ANTH 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- ANTH 2950 - Elementary Anthropological Field Trip (1-3)

- ANTH 2990 - Special Topics in Anthropology (1-3)
- ANTH 3100 - Prehistory of North America (3)
- ANTH 3200 DV - Archaeology of Early Civilizations (3)
- ANTH 3300 - Archaeological Field Techniques (3-6)
- ANTH 3400 - Archaeological Laboratory Techniques (3)
- ANTH 3500 DV - Advanced Cultural Anthropology (3)
- ANTH 3600 DV - Culture Area Studies (1-3)
- ANTH 3700 DV - Sex Roles: Past, Present and Future (3)
- ANTH 3900 DV - Magic, Shamanism and Religion (3)
- ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management (3)
- ANTH 4300 - Anthropological Research Methods (3)
- ANTH 4810 - Experimental Courses (1-3)
- ANTH 4830 - Readings and/or Projects (1-3)
- ANTH 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- ANTH 4950 - Advanced Anthropological Field Trip (1-3)
- ANTH 4990 - Seminar in Anthropology (1-3)

*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 Minor

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.

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).

Course Requirements for Minor

Sociology Courses Required (9 credit hours)

- SOC 1010 SS/DV - Introduction to Sociology (3)
- SOC 3030 - Classical Sociological Theory (3)
- SOC 3660 - Sociological Research (3)

Sociology Electives (select three courses, 9 credit hours, only one of which can be lower division)

- SOC 1020 SS/DV - Social Problems (3)
- SOC 2810 - Experimental Course Offerings (2-3)
- SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- SOC 3000 - Social Psychology (3)
- SOC 3010 DV - Social Inequality (3)
- SOC 3110 - Sociology of Family (3)
- SOC 3120 DV - Sex/Gender Roles: Past, Present, Future (3)
- SOC 3130 - Sociology of Gender (3)
- SOC 3250 - Deviance and Social Control (3)
- SOC 3260 - Juvenile Delinquency (3)
- SOC 3270 - Criminology (3)

- SOC 3300 - Environment and Society (3)
- SOC 3400 - Social Change and Social Movements (3)
- SOC 3410 - Sociology of Religion (3)
- SOC 3420 - Sociology of Education (3)
- SOC 3430 - Medicine and Healthcare in Society (3)
- SOC 3540 - Small Groups & Leadership (3)
- SOC 3550 - Organizations in Society (3)
- SOC 3600 - Social Statistics (3)
- SOC 3840 - Cities and Urban Life (3)
- SOC 3850 DV - American Minorities in Urban Settings (3)
- SOC 4030 - Contemporary Sociological Theory (3)
- SOC 4120 - Socialization over the Life Course (3)
- SOC 4270 - Sociology of Law (3)
- SOC 4410 DV - Sociology of Globalization (3)
- SOC 4550 DV - Sociology of Work (3)
- SOC 4810 - Experimental Course Offerings (2-3)
- SOC 4830 - Readings and/or Projects (1-3)
- SOC 4890 - Internship (1-6)
- SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- SOC 4990 - Seminar in Sociology (3)

Deviance and Criminology Emphasis

If a student desires to have an emphasis of Deviance and Criminology within the sociology minor/BIS, the student must take two courses (6 elective credit hours) from the following courses:

- SOC 3250 - Deviance and Social Control (3)
- SOC 3260 - Juvenile Delinquency (3)
- SOC 3270 - Criminology (3)
- SOC 4270 - Sociology of Law (3)

Sociology Teaching Minors are also required to take SOC 3420 and HIST 4500 in addition to the courses required by the Teacher Education Program.

Sociology Teaching Minor

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.

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).

Course Requirements for Minor

Sociology Courses Required (9 credit hours)

- SOC 1010 SS/DV - Introduction to Sociology (3)
- SOC 3030 - Classical Sociological Theory (3)
- SOC 3660 - Sociological Research (3)

Sociology Electives (select three courses, 9 credit hours, only one of which can be lower division)

- SOC 1020 SS/DV - Social Problems (3)
- SOC 2810 - Experimental Course Offerings (2-3)

- SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- SOC 3000 - Social Psychology (3)
- SOC 3010 DV - Social Inequality (3)
- SOC 3110 - Sociology of Family (3)
- SOC 3120 DV - Sex/Gender Roles: Past, Present, Future (3)
- SOC 3130 - Sociology of Gender (3)
- SOC 3250 - Deviance and Social Control (3)
- SOC 3260 - Juvenile Delinquency (3)
- SOC 3270 - Criminology (3)
- SOC 3300 - Environment and Society (3)
- SOC 3400 - Social Change and Social Movements (3)
- SOC 3410 - Sociology of Religion (3)
- SOC 3420 - Sociology of Education (3)
- SOC 3430 - Medicine and Healthcare in Society (3)
- SOC 3540 - Small Groups & Leadership (3)
- SOC 3550 - Organizations in Society (3)
- SOC 3600 - Social Statistics (3)
- SOC 3840 - Cities and Urban Life (3)
- SOC 3850 DV - American Minorities in Urban Settings (3)
- SOC 4030 - Contemporary Sociological Theory (3)
- SOC 4120 - Socialization over the Life Course (3)
- SOC 4270 - Sociology of Law (3)
- SOC 4410 DV - Sociology of Globalization (3)
- SOC 4550 DV - Sociology of Work (3)
- SOC 4810 - Experimental Course Offerings (2-3)
- SOC 4830 - Readings and/or Projects (1-3)
- SOC 4890 - Internship (1-6)
- SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)
- SOC 4990 - Seminar in Sociology (3)

Deviance and Criminology Emphasis

If a student desires to have an emphasis of Deviance and Criminology within the sociology minor/BIS, the student must take two courses (6 elective credit hours) from the following courses:

- SOC 3250 - Deviance and Social Control (3)
- SOC 3260 - Juvenile Delinquency (3)
- SOC 3270 - Criminology (3)
- SOC 4270 - Sociology of Law (3)

Sociology Teaching Minors are also required to take SOC 3420 and HIST 4500 in addition to the courses required by the Teacher Education Program.

Anthropology Departmental Honors

Please contact the Sociology & Anthropology Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Enroll in the General Honors Program and complete 6 hours of General Honors courses.

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Fulfill the requirements for the Anthropology departmental Major, of which at least 12 hours must be completed on an Honors basis. A student may receive Honors credit in any Anthropology course. In addition, take 3 hours in an Honors senior project, either ANTH 4300 or HNRS 4990.

Sociology Departmental Honors

Please contact the Sociology Department for advisement and permission prior to enrolling in Honors courses.

Program Prerequisite: Enroll in the General Honors Program and complete 6 hours of General Honors courses.

Grade Requirements: Maintain an overall GPA of 3.3.

Credit Hour Requirements: Fulfill the requirements for the Sociology major or the Sociology Teaching major, of which at least 12 hours must be completed on an Honors basis. A student may receive Honors credit in any upper division Sociology course with the exception of SOC 4830 and SOC 4890. In addition, complete the Sociology Honors Senior Project of 3 hours.

Military Science (Army ROTC)

Chair: Lieutenant Colonel Robert B. Bashein

Location: Annex 11/Mail Code 3103

Telephone Contact: Georgia Gilbert 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 30 (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.

Military Science Minor

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.

Required Courses (21 credit hours)

- MILS 3010 - Adaptive Team Leadership (4)
- MILS 3020 - Leadership in Changing Environments (4)
- MILS 4010 - Developing Adaptive Leaders (4)
- MILS 4020 - Leadership in a Complex World (4)
- MILS 4400 - Advanced Physical Readiness (2)
- HIST 3280 - American Military History to 1917 (3) or
- HIST 3290 - American Military History since 1917 (3)

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 Michael Eliason (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.

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.

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 (1)
- AERO 1011 - Foundations of USAF II (1)
- AERO 2010 - Airpower History I (1)
- AERO 2011 - Airpower History II (1)

Upper division courses: (C- or better)

- AERO 3010 - Leadership Studies I (3)
- AERO 3011 - Leadership Studies II (3)
- AERO 4010 - National Security Affairs I (3)
- AERO 4011 - National Security Affairs II (3)

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.

Engaged Learning 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, Community-Based Learning Program, 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-based and service 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.

Program Chairs/Directors/Coordinators

Undergraduate Research: Dr. John Cavitt	801-626-8541
CBL Program Dr. Brenda Marsteller Kowalewski	801-626-7737
Honors Program: Dr. Judy Elsley	801-626-7591
Bachelor of Integrated Studies (BIS):	801-626-7713
Library Science: Joan Hubbard	801-626-6403
Asian Studies: Dr. Greg Lewis	801-626-6781
Environmental Studies: Dr. Mikel Vause	801-626-6659
Ethnic Studies: Dr. Hal Elliott	801-626-6945
European Studies: Dr. Thomas Mathews	801-626-6345
Latin American Studies: Dr. Alicia Giralt	801-626-6726
Learning English for Academic Purposes (LEAP): Amy Reimann	801-626-7180
Legal Studies: Dr. Thom Kuehls	801-626-6696
Linguistics: Dr. Mark LeTourneau	801-626-6386
Neuroscience: Dr. Matt Schmolesky	801-626-8745
Urban and Regional Planning: Dr. Bryan Dorsey	801-626-6944
Women's Studies: Dr. Michelle Paustenbaugh	801-626-7810

Office of Undergraduate Research

Director: Dr. John Cavitt (801) 626-8541

Office Manager: Amy Douangdara

Location: Library, Suite 58

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
- ongoing 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. In addition, OUR publishes Ergo, WSU's undergraduate research journal, and sponsors an undergraduate research symposium each spring semester.

Community-Based Learning Program

Director: Dr. Brenda Marsteller Kowalewski (801) 626-7737

Office Manager: Carla Jones

Location: Community Involvement Center, Shepherd Union, Suite 327

Internet Address: weber.edu/CommunityInvolvement

The Community-Based Learning (CBL) Program at Weber State University consists of a collection of courses designed to provide students learning opportunities through real life experiences and application of knowledge in the community. These courses provide a structured approach to learning and teaching that connects meaningful community experience with intellectual development, personal growth, and active citizenship. Community-based learning enriches coursework by encouraging students to apply the knowledge and analytic tools gained in the classroom to the pressing issues affecting local communities.

Two particular forms of Community-Based Learning are practiced at Weber State University – service-learning and community-based research.

Service-Learning, conceptualized in broad terms, “is a teaching and learning approach that integrates community service with academic study to enrich learning, teach civic responsibility, and strengthen communities” (National Commission on Service Learning, 2002). Through assignments and class discussions, students reflect on their service in order to increase their understanding of course content, gain a broader appreciation of a discipline, and

enhance their sense of civic responsibility. Weber State University utilizes the following definition from the National Service-Learning Clearinghouse to define service-learning more specifically:

“Service-learning combines service objectives with learning objectives with the intent that the activity change both the recipient and the provider of the service. This is accomplished by combining service tasks with structured opportunities that link the task to self-reflection, self-discovery, and the acquisition and comprehension of values, skills, and knowledge content” (NSLC, 1994).

Community-based research involves students working with faculty members and community leaders to develop research projects, collect and analyze data, and share their results and conclusions with the organizations and agencies that need the information. Weber State University utilizes the following definition of community based research:

“Community-based research is a partnership of students, faculty and community members who collaboratively engage in research with the purpose of solving a pressing community problem or effecting social change” (Strand, et al, 2003).

Courses

Community-based learning is not specific to any one discipline; in fact, CBL 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-Based Learning courses are designated with a CBL prefix and are listed in the course schedule published online each semester. Additionally, a full list of CBL designated courses can be found on the Community Involvement Center website at weber.edu/CommunityInvolvement.

Honors Program

Director: Judy Elsley (801) 626-6186

Student Advisor: Marilyn Diamond (801) 626-7336

Office Manager: Leanna Riddle (801) 626-7591

Location: Library, Room 225

Internet Address: weber.edu/honors

Mission Statement

The Weber State University Honors Program aims to provide students with an enriched program of study through:

- small, challenging, and creative classes, many of which fulfill General Education requirements;
- a stimulating and supportive learning environment, both in classes and in the Honors Center;
- opportunities to examine one's own perspective in the light of differing values or points of view;
- an integrative approach to education, connecting disciplines and ideas;
- the availability of departmental Honors with most departments on campus.

Students who earn Honors will be well prepared for professional life and/or graduate school after Weber.

Entrance Requirements

A student may make application for entrance into the Honors Program at any time after formal acceptance by the Weber State Admissions Office. However, in order to take advantage of the many options available, early entrance is recommended. An application form is available in the Honors Center or on the Internet at weber.edu/honors. For entrance requirements please see the Honors Handbook located on the Honors Web site.

Retention Standards for the Honors Program

To continue in good standing in the Honors Program, students must maintain a cumulative 3.5 GPA and take an Honors class at least every semester until their general education requirements are completed; thereafter students will take at least one course every other semester. In order to be awarded an Honors designation, students must earn a 3.5 GPA in General Honors and an overall GPA of 3.5 for University Honors. For Departmental Honors requirements, check with the individual department or come to the Honors Center. The progress of Honors students is reviewed each semester.

The Honors Designations

There are three Honors designations in the Honors Program: University Honors, Departmental Honors, and General Honors.

- **General Honors** is available to students completing the requirements for an associate's degree and successfully completing 12 credit hours of Honors courses.
- **Departmental Honors** is available to students majoring in departments with designated Departmental Honors options. Please see the major department's Honors requirements in the WSU Catalog or come to the Honors Center, Library 225.
- **University Honors** is available to:
 1. students earning a bachelor's degree
 2. students who have completed **24 hours** of Honors courses and fulfilled the Honors Program core requirements (see University Honors Core Requirements below)

Students entering the Honors Program as Freshmen or Sophomores usually elect to graduate with University Honors after completing their associate degree with General Honors. Students entering the Honors Program as Juniors or Seniors usually elect to graduate with Departmental Honors. Students may elect to graduate with only one of the three Honors designations, or they may elect to graduate with all or a combination of Honors designations: General Honors, University Honors and Departmental Honors.

Official recognition for the completion of an Honors designation will be made on the graduating Honors student's transcript and diploma and will also be entered into the university's graduation program. In the event a student completes Departmental Honors in more than one department, notation of each will be made on the transcript.

BIS Honors Emphasis is also available to students who elect to graduate with a BIS degree. A student may design an individualized Honors curriculum to be used as one of the three areas of emphasis for the Bachelor of Integrated Studies degree. For information consult the BIS office.

University Honors Core Requirements

Students will complete three of the four classes listed below:

- HNRS 1110 HU - Introduction to Honors: The Construction of Knowledge **(3)**
- HNRS 2110 HU/SS - Intellectual Traditions: Great Ideas of the West in the Classical and Medieval Eras **(3)**
- HNRS 2120 HU/SS - Intellectual Traditions: Great Ideas of the West in the Modern Era **(3)**
- HNRS 2130 HU/SS/DV - Intellectual Traditions: Great Ideas of the East **(3)**

In addition, the following courses are required:

- HNRS 3900 - Honors Colloquium **(3)**
2 classes are required
- HNRS 4990 - Honors Senior Project **(3)**

Students may register for HNRS 4830 Directed Readings as preparation for Senior Project.

Students may need additional Honors credit hours to reach the 24 required hours for the University Honors designation.

See the *Honors Handbook* for suggested course sequence. The *Honors Handbook* is on the web at: weber.edu/honors.

Bachelor of Integrated Studies Program

Coordinator: TBD

Location: Stewart Library, Room 58

Telephone Contact: Jennybeth Thompson 801-626-7713

The Bachelor of Integrated Studies (BIS) Program 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

- The institution requires that every bachelor's degree candidate accumulates 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 5 hours for the capstone preparation and project, for a total of 59 credits in the BIS program.
- All contract courses and the capstone 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 and General Education Requirements for bachelor's degree requirements. Honors students may elect to fulfill this requirement through the Honors general education option.

Course Requirements for BIS Degree

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.

Upon request, any student who has completed, or who will complete, a technical associate degree at Weber State University or another regionally accredited institution may request to have one of three emphasis areas waived and fulfill the requirements for the Bachelor of Integrated Studies degree by completing two areas of emphasis in addition to the technical associate degree. Requests will be reviewed by the Director of the BIS program, and students will be expected to fulfill all other WSU and BIS program requirements.

BIS Capstone and Graduation Preparation Class (2 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 **(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 **(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 **(1-3)**

BIS Departmental Honors

A Departmental Honors designation is available through the BIS degree by completing the following requirements:

- The student must be admitted into the BIS program which includes a meeting with the BIS Coordinator to plan the course of study. The student must then ALSO be admitted to the Honors Program and meet with the Honors' advisor. Students who have not completed their General Education requirements are encouraged to take Honors General Education classes. The student must complete all the requirements for a BIS Degree, including completing a BIS Capstone Project or Paper with an "A" grade.
- The student must register with the Community Involvement Center and complete the following community service hours depending on his/her cumulative GPA in the three areas of emphases upon graduation.
 - 3.70 20 hours of community service
 - 3.60 30 hours of community service
 - 3.50 40 hours of community service
- All students completing the BIS degree are required to complete a BIS Capstone Project. Upon its completion and acceptance, a copy of the Capstone Project must be given to the Honors Center for inclusion in the student project file.

Learning English for Academic Purposes (LEAP)

Chair: Amy Reimann

Location: Elizabeth Hall, Room 207

Telephone Contact: Ada Rivera-Aponte (801) 626-6028

Instructors: Giana Curtis, Wendy Larson, Cody Lyon, Holly Nicholes, Mark Peterson, Amy Reimann, Deborah Sheridan

International Student Specialist: Ada Rivera-Aponte

The Weber State University LEAP (Learning English for Academic Purposes) Department provides intensive English language courses for students in the process of acquiring English as a second language for academic use. It is the mission of the Department to prepare these students to function effectively in mainstream academic classes where English is the language of instruction. In doing so, we also seek to familiarize students with American culture and the academic atmosphere of studying in an American university.

The program consists of seven levels of instruction (Novice Low through Advanced Plus), two levels per semester. Each level (with the exception of Advanced Plus) is 7.5 weeks in length. Advanced Plus is 15 weeks in length. Courses are competency based. Students must pass a proficiency final exam and receive a grade of C+ or better in order to progress to the next level.

Total Credit Hours per Level

Levels	1	2	3	4	5	6	7
Credits	6	6	9	9	9	9	6

The program curriculum uses an integrated skills, content-based approach. The goal of the department is to prepare non-native English speaking students to read, write and communicate effectively in mainstream academic courses.

Sequence of Courses

Initial Placement	1st Semester		2nd Semester		3rd Semester		4th Semester
	Block		Block		Block		Block
	7.5 wks		7.5 wks		7.5 wks		15 wks
	1	2	1	2	1	2	
Level 1 Novice Low	1	2	3	4	5	6	7
Level 2 Novice Mid	2	3	4	5	6	7	academic courses
Level 3 Novice-High/ Intermediate Low	3	4	5	6	7 and academic courses		
Level 4 Intermediate Mid	4	5	6	7	ENGL 1010		
Level 5 Intermediate High	5	6	7 and academic courses		ENGL 1010		
Level 6 Advanced	6	7	ENGL 1010		ENGL 2010		
Level 7 Advanced Plus	7 and academic courses		ENGL 1010		ENGL 2010		

Novice Low/Mid through Intermediate Low (Levels 1-3) are non-credit and do not count toward graduation. Courses in Intermediate Mid (Level 4) through Advanced Plus (Level 7) earn credit which can be applied to fulfill the foreign language requirement for a Bachelor of Arts degree and Associate of Arts degree or applied as elective credit toward the Bachelor of Science and Associate of Science degrees. This may be done by passing the LEAP Special Examination or by completing ESL 2510 and ESL 2520 with a grade of C+ or better.

Students who pass the LEAP Special Examination or who complete ESL 2510 and ESL 2520 with a grade of C+ or better will be able to receive 16 hours of credit for ESL 2310, ESL 2410, ESL 2420, ESL 2430, and ESL 2441 for a nominal fee. (Inquire in the LEAP Office EH 207.)

International Students

International students who meet the University's TOEFL or IELTS minimum requirements for placement in academic courses are cleared to register for ENGL 1010.

International students who **do not** meet the University's TOEFL or IELTS minimum requirements for placement in academic courses must take the LEAP Placement Test. Students are required to complete the appropriate ESL courses according to the test results before being cleared to take academic courses on campus.

Comments:

- The Placement Test should be taken as soon as the students arrive at the university to determine placement level for necessary ESL courses.
- All International students are also required to take the Math Accuplacer Test (see the Department of Mathematics section of this catalog).
- Students must complete Advanced (Level 6) before they can register for other university classes.

Resident Students

Resident students for whom English is their second language and who have ACT scores 16 or below or Accuplacer scores 89 or below are required to take the ESL Placement Test and complete appropriate ESL courses according to the test results before registering for ENGL 1010.

Library Science

University Librarian: Joan Hubbard

Location: Stewart Library, Room 108A

Telephone: Marie Richards 801-626-6403

Professor: Wade Kotter; **Associate Professors:** G. Arthur Carpenter, Joan Hubbard, Shaun Adamson Jackson, JaNae Kinikin, Ruby Licon, Kathryn Payne; **Assistant Professors:** Nicole Beatty, Megan Davis, Edward Hahn, Chris Hauser

To be successful in a global information society, students must understand how to identify, locate, and critically evaluate information. The Department of Library Science 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.

Asian Studies Minor Program

Coordinator: Dr. Greg Lewis

Location: Social Science, Room 256

Telephone: 801-626-6707 **Fax:** 801-626-7613

Asian Studies at Weber State offers a Minor in Asian Studies, supports the Foreign Language Department's Japanese Minor, oversees courses in the Middle East Track, and cooperates with the BIS Program to offer a Bachelor's degree "BIS Asian Studies Concentration." Asian Studies courses are offered through a number of cooperating departments including History, Political Science and Philosophy, Geography, Foreign Language, English, Honors, Sociology and Anthropology, Visual Arts, Health and Physical Education, and others.

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: Fifteen credit hours of courses must be taken from at least four of the areas listed under Course Requirements for Minor.

Courses taken which are part of the student's major will not count as fulfillment of the minor requirement.

Course Requirements for Minor

Required Courses (15 credit hours)

Select 15 credit hours from at least four of the following areas

- ARTH 2040 - Art and Architecture of Asia (4)
- ARTH 3060 - The Art and Architecture of India (4)
- ARTH 3070 - The Art and Architecture of China (4)
- ARTH 3080 - The Art and Architecture of Japan (4)
- ARTH 3100 - The Art and Architecture of the Islamic World (4)
- ENGL 3730 DV - Literatures of Cultures and Places (3) *
- ENGL 2710 HU /DV - Perspectives on Women's Literature (3) *

- FL 1000 - Proficiency Development (1-2) * (2 credit hours required)
- FL 1010 - First Year I (3) *
- FL 1020 - First Year II (3) *
- FL 2000 - Proficiency Development (1-2) * (2 credit hours required)
- FL 2010 - Second Year I (3) *
- FL 2020 HU - Second Year II (3) *
- FL 3060 - Grammar & Composition (3) *
- FL 3160 - Introduction to Literature (3) *
- FL 3190 - Foreign Language Journal (1) *
- FL 3220 - Phonetics and Phonology (3) *
- FL 3320 - Applied Language Studies (1-3) *
- FL 3550 DV - Cultural Heritage I (3) *
- FL 3630 - Literature Genres (3) *
- FL 3650 - Literature Periods (3) *
- FL 3670 - Literature Authors (3) *
- FL 3690 - Literature Special Topics in Literature (1-3) *
- FL 3710 - Business Language I (3) *
- FL 3850 - Study Abroad (1-6) *
- FL 4190 - Foreign Language Journal (1) *
- FL 4400 - Methods of Teaching a Foreign Language (3) *
- FL 4620 - Survey of Literature I (3) *
- FL 4630 - Survey of Literature II (3) *
- FL 4710 - Business Language II (3) *
- FL 4850 - Study Abroad (1-6) *
- FL 4960 - Senior Seminar and Thesis (3) *
- GEOG 3640 DV - Geography of Asia (3)
- GEOG 3660 DV - Geography of China and Japan (3)
- GEOG 3780 - Geographic Area Studies (1-3) *
- GEOG 4800 - Individual Research (1-3) *
- HIST 4530 DV - Far Eastern History (3)
- HIST 4550 DV - Southeast Asian History (3)
- HIST 4590 DV - Middle Eastern History (3)
- HIST 4730 - Special Issues & Topics in Global and Comparative History (3) *
- POLS 3220 - Politics and Governments of Asia (3)
- POLS 4830 - Directed Readings (1-3) *
- POLS 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3) *
- PHIL 3550 DV - Philosophy of Eastern Religion (3)
- PE 1410 - TaiChi, Level I (1)
- PE 1411 - TaiChi, Level II (1)
- PE 1412 - TaiChi, Level III (1)
- PE 1435 - Kempo, Level I (1)
- PE 1436 - Kempo, Level II (1)
- PE 1437 - Kempo, Level III (1)
- PE 1445 - Tae Kwon-do, Level I (1)
- PE 1446 - Tae Kwon-do, Level II (1)
- PE 1447 - Tae Kwon-do, Level III (1)
- SOC 4990 - Seminar in Sociology (3) *
- HNRS 2130 HU/SS/DV - Intellectual Traditions: Great Ideas of the East (3)
- WS 2900 - Topics in Women's Studies (1-3)
- WS 4900 - Topics in Women's Studies (1-3) *

**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.

Environmental Studies Minor Program

Coordinator: Dr. Mikel Vause

Location: EH 256

Telephone: 801-626-6659

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).

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 - Environmental Physics - Energy and Power (3)
- GEOG 3060 - World Environmental Issues (3) *
- BTNY 1403 LS - Environment Appreciation (3-4) (4 credit hours required) OR
- GEOG 1000 PS - Natural Environments of the Earth (3) AND
- GEOG 1001 - Natural Environments Field Studies (1) OR
- GEO 1060 PS - Environmental Geosciences (3) AND
- GEO 1065 - Environmental Geosciences Lab (1)
- ECON 1100 SS - Environmental Issues and Economic Policy (3) OR
- POLS 4940 - Topics in American Politics & Thought (1-3) (3 credit hours required)
- ENGL 3520 HU - Literature of the Natural World (3) OR
- HIST 3270 - American Environmental History (3)
- ARTH 3030 - Native American Art of the Southwest: From the Anasazi to the Present (4) * OR
- HNRS 3900 - Honors Colloquium (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 in Human Affairs (3)
- BTNY 2413 - Introduction to Natural Resource Management (3)
- BTNY 3454 - Plant Ecology (4) *
- CS 4830 - Advanced Topics in Computer Science (1-4) Social (and Environmental) Implications of Computing (1 credit hour required) *
- ENGL 3580 - Regional Literature in America (3)
- ENGL 3750 HU - Topics and Ideas in Literature (3)
- ENGL 4530 - American Literature: Realism and Naturalism (3)
- ENGL 4710 - Eminent Authors (3)
as approved by the Environmental Studies Advisor
- MENG 6030 - Studies in Literary Theory and Criticism (3)
- GEO 1130 PS - Introduction to Meteorology (3)
- GEO 3010 - Oceanography and Earth Systems (3) *
- GEOG 3050 - Weather and Climate (3) *
- GEOG 3070 - Wetland Environments (3) *
- GEOG 3080 - Arid Lands (3) *
- GEOG 3090 - Arctic and Alpine Environments (3) *
- HIM 3200 - Epidemiology and Biostatistics (3) *
- HNRS 1540 HU - Perspectives in the Humanities (3)
- HNRS 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)
as approved by the Environmental Studies Advisor
- MICR 3484 - Environmental Microbiology (4) *
- MICR 3502 - Environmental Health (2) *
- PHYS 3570 - Foundations of Science Education (3)
- REC 4550 - Outdoor Education Philosophies & Principles (2)
- SOC 3300 - Environment and Society (3)
- ZOOL 1010 LS - Animal Biology (3)
- ZOOL 3450 - Ecology (4) *
- ZOOL 3500 - Conservation Biology (3) *

* A prerequisite or consent of the instructor is required. Most prerequisites are in the core curriculum.

Ethnic Studies Program

Coordinator: Dr. Hal Elliott

Location: Social Science Building, Room 316

Telephone: 801-626-6945

The Ethnic Studies Emphasis at WSU examines the construction and context of ethnicity in the United States with a primary focus on Americans of African, Asian, Latino, and Native American descent. Other ethnic foci may be developed by the student to meet his or her particular interests. As an element of American identity that cuts across disciplinary categories, ethnicity requires a mode of study that draws on the humanities, the social sciences, and other related fields. Ethnicity also must be addressed 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 ethnicity in the United States and to help students learn about the opportunities and responsibilities they have as citizens in an increasingly multicultural nation.

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.

Course Requirements for Emphasis

Basic Core

(6 credit hours required of all students)

- ANTH 1000 SS/DV - Introduction to Anthropology **(3)**
- SOC 3850 DV - American Minorities in Urban Settings **(3)**

Select one of the following options or design a comparable one:

Option I: Hispanic Studies (12 credit hours)

- HIST 3050 DV - History of U.S. Latinos **(3)**
- HIST 4110 DV - History of the American West to 1900 **(3)**
- HIST 4670 DV - History of Mexico **(3)**
- HIST 4630 - History of Ancient and Colonial Latin America **(3)** or
- HIST 4650 DV - Modern Latin America **(3)**

Option II: Native American Studies (12 credit hours)

- ANTH 3600 DV - Culture Area Studies **(1-3)** (3 credit hours required)
- ARTH 3030 - Native American Art of the Southwest: From the Anasazi to the Present **(4)**
- HIST 3010 DV - American Indian History: 1300 to Present **(3)**
- HIST 4110 DV - History of the American West to 1900 **(3)**

Option III: African-American Studies (12 credit hours)

- HIST 3030 DV - African-American History **(3)**
- HIST 4040 - Era of the Civil War and Reconstruction: 1840-1877 **(3)**
- HIST 4610 - History of Africa **(3)**
- GEOG 3740 DV - Geography of Africa **(3)**

Option IV: Composite (12 credit hours)

Select a minimum of 12 credit hours from the following:

- HIST 3010 DV - American Indian History: 1300 to Present **(3)**
- HIST 3030 DV - African-American History **(3)**
- HIST 3050 DV - History of U.S. Latinos **(3)**
- ENGL 3550 DV - Multicultural and Ethnic Literature in America **(3)**
- GEOG 3540 DV - Geography of Latin America **(3)**
- GEOG 3640 DV - Geography of Asia **(3)**

Should other courses relating specifically to ethnic minorities, either of an experimental or of a permanent nature be added to the curriculum, these courses will be accepted as part of the Ethnic Studies emphasis; should such courses be part of an academic area not listed, the new academic area will be added to those presently constituting the Ethnic Studies emphasis.

European Studies Minor Program

Coordinator: Thomas Mathews

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.

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 (9 credit hours)

- FL 3320 - Applied Language Studies **(1-3)** **(3 credit hours required)**

Two courses (six credit hours) from the following; courses may not be from the same department:

- HIST 4220 - History of the Middle Ages 300-1300 **(3)**
- HIST 4230 - Renaissance and Reformation - Europe: 1300-1660 **(3)**
- HIST 4240 - Absolutism, Enlightenment and Revolution - Europe: 1660-1815 **(3)**
- HIST 4250 - Nineteenth-Century Europe **(3)**
- HIST 4260 - Twentieth-Century Europe **(3)**
- HIST 4280 - History of Christianity in Europe **(3)**
- GEOG 3590 DV - Geography of Europe **(3)**
- POLS 3210 - Politics and Governments of Europe **(3)**

Elective requirements (9 credit hours)

Select nine 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.

Latin American Studies Minor Program

Coordinator: Alicia Giralt

Location: Elizabeth Hall, Room 231

Telephone: 801-626-6726 **Fax:** 801-626-7588

The Latin American Studies Minor is an interdisciplinary program offered through a number of cooperating departments including Foreign Languages, History, Geography, Political Science and Philosophy, Psychology, Sociology and Anthropology.

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 15 credit hours in addition to two years of college Portuguese or Spanish or their equivalent.

Courses taken which are part of the student's major will not count as fulfillment of the minor requirement.

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

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.

Other Required Courses (15 credit hours)

Select 15 credit hours chosen from at least three of the following departments.

Child & Family Studies

- CHF 4300 - Latino Child and Family Development (3)

Foreign Languages

acceptable in Spanish or Portuguese

- FL 3060 - Grammar & Composition (3)
- FL 3160 - Introduction to Literature (3)
- FL 3320 - Applied Language Studies (1-3)
- FL 3360 - Advanced Grammar (3)
- FL 3550 DV - Cultural Heritage I (3)
- FL 3560 - Cultural Heritage II (3)
- FL 3570 - Special Topics in Culture (3)
- FL 3610 - Literature Survey I (3)
- FL 3620 - Literature Survey II (3)
- FL 3630 - Literature Genres (3)
- FL 3650 - Literature Periods (3)
- FL 3670 - Literature Authors (3)
- FL 3690 - Literature Special Topics in Literature (1-3)
- FL 3710 - Business Language I (3)
- FL 3720 - Language for Specific Purposes I (3)
- FL 3730 - Language for Specific Purposes II (3)
- FL 3740 - Translation/Interpreting I (3)

- FL 3850 - Study Abroad (1-6)
- FL 4620 - Survey of Literature I (3)
- FL 4630 - Survey of Literature II (3)
- FL 4690 - Special Topics in Literature (3)
- FL 4710 - Business Language II (3)
- FL 4740 - Translation/Interpreting II (3)
- FL 4830 - Directed Readings (1-3)
- FL 4850 - Study Abroad (1-6)

English

- ENGL 3730 DV - Literatures of Cultures and Places (3) **

History

- HIST 3050 DV - History of U.S. Latinos (3)
- HIST 4410 - History of Spain and Portugal (3)
- HIST 4630 - History of Ancient and Colonial Latin America (3)
- HIST 4650 DV - Modern Latin America (3)
- HIST 4670 DV - History of Mexico (3)
- HIST 4830 - Directed Readings (1-3) **
- HIST 4930 - History Workshop (1-5) **

Geography

- GEOG 3540 DV - Geography of Latin America (3)
- GEOG 4800 - Individual Research (1-3) **
- GEOG 4950 - Advanced Regional Field Studies (1-3) **

Political Science

- POLS 3290 - Introduction to Politics and Governments of Developing Nations (3) **
- POLS 4830 - Directed Readings (1-3) **
- POLS 4990 - Senior Seminar/Senior Thesis (3) **

Anthropology

- ANTH 3600 DV - Culture Area Studies (1-3) **
- ANTH 4830 - Readings and/or Projects (1-3) **

*** 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

Coordinator: Thom Kuehls

Location: Social Science, Room 296

Telephone: 801-626-6696

The Legal Studies Minor Program is an interdisciplinary program offered through a number of cooperating departments including Accounting, Business Administration, English, Communications, Computer Information Systems, MATH, Child and Family Studies, Criminal Justice, History, Sociology, Economics, Gerontology, Psychology, Social Work, and Political Science and Philosophy.

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 21 credit hours.

Course Requirements for Minor

Core Courses Required (9 credit hours)

- ENGL 3210 - Advanced College Writing (3)
- PHIL 1250 HU - Critical Thinking (3) or
- PHIL 2200 QL - Deductive Logic (3)
- POLS 4060 - Elements of Law (3)

Additional Courses Required (12 credit hours)

Students must take 12 additional hours from at least three of the following groups. No more than 6 hours (excluding the core requirements) may be lower division nor may be taken in any one discipline. The student's program must be approved by the program coordinator.

Skills Important to Law

- ACTG 2010 - Survey of Accounting I (3)
- ACTG 2020 - Survey of Accounting II (3)
- COMM 1020 HU - Principles of Public Speaking (3)
- COMM 2270 - Argumentation & Debate (3)
- COMM 4150 - Classical Rhetorical Theory & Criticism (3)
- ENGL 3030 - Structure of English (3)
- MATH 3410 - Probability and Statistics I (3)

Law Courses

- CHF 3150 - Consumer Rights and Responsibilities (3)
- COMM 3650 - Communication Law (3)
- CJ 1330 - Criminal Law (3)
- CJ 2350 - Laws of Evidence (3)
- POLS 4020 - American Constitutional Law I: Governmental Powers (3)
- POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)

Background of the Law

- HIST 3210 - U.S. Constitutional History (3)
- HIST 4330 - History of England to 1485 (3)
- POLS 1100 AI - American National Government (3)
- POLS 4600 - American Congress (3)
- POLS 4360 - Classical Political Thought (3)
- POLS 4380 - Modern Political Thought (3)
- POLS 4750 - Public Policy Analysis (3)
- PHIL 4250 - Philosophy of Law (3)
- SOC 4270 - Sociology of Law (3)

Correlative Courses

- ECON 1010 SS - Economics as a Social Science (3)
- PSY 3560 - Group Dynamics and Counseling (3)
- PSY 3460 - Social Psychology (3)
- SOC 3270 - Criminology (3) or
- CJ 3270 - Theories of Crime and Delinquency (3)

Other courses may be approved by the program director on an individual basis.

Linguistics Minor Program

Coordinator: Mark LeTourneau

Location: Elizabeth Hall, Room 243

Telephone: 801-626-6386

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 21 credit hours is required for this minor.

Course Requirements for Minor

1. Foundation Course (3 credit hours)

- ENGL 3010 - Introduction to Linguistics (3)

2. Language Structures Course (3-4 credit hours)

Select one of the following

- CS 4110 - Concepts of Formal Languages and Algorithms for Computing (4)
- ENGL 3030 - Structure of English (3)
- ENGL 3050 - Grammar, Style, and Usage for Advanced Writing (3)
- FL 3220 - Phonetics and Phonology (3)
- FL 3360 - Advanced Grammar (3)
- PHIL 2200 QL - Deductive Logic (3)

*In lieu of taking one of the above courses, students may satisfy the Language Structures requirement by presenting coursework in a foreign or second language as follows: Either [1] **12 hours** (or the equivalent for two years of study at another institution) in a modern Romance or Germanic language with an average grade of **B** or [2] **8 hours** (or the equivalent for one year of study at another institution) in another language (including American Sign Language) with an average grade of **C**.*

Non-native speakers of English may satisfy this requirement by demonstrating their proficiency in English through passing the LEAP Level 5 Challenge Test.

Students substituting language proficiency for the Language Structure requirement must take another three hours of elective credit to achieve 21 hours.

3. Sub-Disciplines and Applications of Linguistics Courses (6-7 credit hours)

Select two of the following

- ANTH 1040 HU/DV - Language and Culture (3)
- CS 4500 - Artificial Intelligence and Neural Networks (4)
- COMM 3000 - Communication Theory (3)
- COMM 3080 DV - Intercultural Communication (3)
- COMM 3090 DV - Gender and Communication (3)
- EDUC 4250 - Second Language Acquisition: Theories and Implementation (3)
- EDUC 4270 - Literacy Strategies for Teaching English Language Learners (3)
- ENGL 3040 - History of the English Language (3)

- ENGL 4410 - Strategies and Methodology of Teaching ESL/Bilingual (3)
- ENGL 4420 - English Phonology and Syntax for ESL/Bilingual Teachers (3)
- ENGL 4450 - ESL/Bilingual Assessment: Theory, Methods, and Practices (3)
- FL 3320 - Applied Language Studies (1-3) *
- FL 4340 - Foreign Language Acquisition and Teaching for Proficiency (3)
- PHIL 3100 - Philosophy of Language (3)
- PSY 3450 - Psychology of Language (3)

* *"Applied Language Studies" shall be understood to include any version of FL 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. Electives (4-9 credit hours)*

Select either courses from the preceding areas 2 and 3 not counted for those areas, or in combination with (either or both of) the following LING courses:

- LING 4830 - Directed Readings in Linguistics (1-3)
- LING 4900 - Variable Topics in Linguistics (1-3)

Other courses (seminars, etc.) may be accepted in the Electives group on an individual basis, as approved by the coordinator for the minor.

* *Students should select elective courses as appropriate to meet the 21 credit hour requirement. Nine hours of elective credit will be necessary if a student has substituted courses in a second or foreign language in the Language Structures requirement.*

5. Capstone Course (3 credit hours)

- LING 4830 - Directed Readings in Linguistics (1-3) (3 credit hours required) or
- LING 4990 - Centering Experience (3)

Up to three hours required for a student's major or another minor (excluding strands in the BIS degree) may be counted toward the 21 hours required for the linguistics minor, consistent with the policies and requirements of the department, minor or program in question.

Students may take no more than eight hours with the same prefix (beyond the Foundations course).

Neuroscience Minor Program

Coordinator: Dr. Matthew Schmolesky

Location: Social Science 356

Telephone: 801-626-8745

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 19 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).

Course Requirements for Minor

For advisement contact the Neuroscience Program Coordinator who will help you select courses which will compliment your major.

To complete the Neuroscience Minor, the student must at complete a minimum of 19 credit hours as follows: a) Introduction to Neuroscience (NEUR 2050), b) one course each from the three content areas (Cognitive/Behavioral, Cellular/Molecular, and Clinical/Medical), c) a Capstone Experience course, and d) 3 credits of electives. Students that have not already completed ZOO 1110 - Principles of Zoology I as part of their major will also need to complete this course before taking the Cellular and Molecular area requirement. Thus, completion of the Neuroscience Minor may require 23 credit hours for some students. With approval of the Neuroscience Director and the applicable Department Chair, students may apply a maximum of 4 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 2050 - Introduction to Neuroscience (3)

2. Cognitive and Behavioral Area: 1 of the below

- PSY 2730 - Biopsychology (3)
(Prereq: PSY 1010 or NEUR 2050)
- PSY 3730 - Perception (3)
(Prereq: PSY 1010 or NEUR 2050)
- PSY 3710 - Physiological Psychology (3)
(Prereq: PSY 2730 or NEUR 2050)

3. Cellular and Molecular Area: 1 of the below

- ZOO 3200 - Cell Biology (4) (Prereq: ZOO 1110)
- ZOO 3300 - Genetics (4) (Prereq: ZOO 1110)
- ZOO 4100 - Vertebrate Embryology (4) (Prereq: ZOO 1110 and ZOO 1120, or approval of instructor)

4. Clinical and Medical Area: 1 of the below

- HTHS 2240 - Introduction to Pharmacology (3) or
- HTHS 3240 - Introduction to Pharmacology (3)
- PSY 3740 - Drugs and Behavior (3)
- ZOO 2200 - Human Physiology (4)

5. Capstone Course/Integrative Experience:

3 credits from the options below

To satisfy the capstone requirement, the student must complete 3 credits of upper-division, a) Directed Readings, b) Research, or c) a senior-level seminar course. Regardless of which option is taken, the student must complete a ~20 page paper and an oral report that demonstrates integration of the many neuroscience disciplines and concepts (eg cellular/ molecular, neural circuits/systems, cognitive/behavioral, and clinical/ medical). Students must complete NEUR 2050 and two other required Minor courses before attempting to fulfill the Area 5 Capstone requirement. In addition, the Neuroscience Director and the faculty mentor must approve in writing in advance the course chosen by the student to complete this requirement for the minor.

Directed Readings Options

- PSY 4830 - Directed Readings **(1-3)** *
- ZOOL 4830 - Readings in Zoology **(1-4)** **

Projects and Research Options

- PSY 4800 - Projects and Research **(1-3)** *
- PSY 4910 - Capstone Research Project **(3)** *
- ZOOL 4800 - Problems in Zoology **(1-4)** **

Seminar Course Options

- PSY 4900 - Selected Topics in Psychology **(2-3)** (3 credit hours required)
- ZOOL 4900 - Topics in Zoology **(1-4)** *
- ZOOL 4920 - Short Courses, Workshops, Institutes and Special Programs **(1-4)**

* *Prerequisites: PSY 1010, PSY 3600 (Statistics), and PSY 3610 (Research Methods) or equivalent, and faculty mentor permission.*

** *Prerequisites: ZOOL 1110 and ZOOL 1120, and approval of instructor.*

Electives: 3 credits minimum from the electives listed below:

- ANTH 1020 LS/DV - Biological Anthropology **(3)**
- ANTH 1040 HU/DV - Language and Culture **(3)**
- BTNY 2303 DV - Ethnobotany **(3)**
- BTNY 2600 - Laboratory Safety **(1)**
- CEET 1110 - Basic Electronics **(2)**
- CEET 4040 - Signals and Systems **(4)**
- CHEM 1050 PS - Introduction to General, Organic & Biochemistry **(5)**
- CHEM 1120 - Elementary Organic Bio-Chemistry **(5)**
- CHEM 2310 - Organic Chemistry I **(4)**
- CHEM 2315 - Organic Chemistry I Lab **(1)**
- CHEM 2320 - Organic Chemistry II **(4)**
- CHEM 2325 - Organic Chemistry II Lab **(1)**
- CHEM 2600 - Laboratory Safety **(1)**
(cross-listed with all science departments)
- CHEM 3070 - Biochemistry I **(4)**
- CHEM 3080 - Biochemistry II **(3)**
- CHEM 3090 - Biochemical Techniques **(1)**
- CS 4500 - Artificial Intelligence and Neural Networks **(4)**
- HLTH 3100 - Applications of Technology in Health Promotion **(3)**
- HLTH 4013 - Health Promotion Research and Assessment **(3)**
- HLTH 3160 - Health Behavior and Special Populations **(3)**
- HTHS 1101 - Medical Terminology **(2)**
- HTHS 1110 LS - Biomedical Core **(4)** and
- HTHS 1111 - Biomedical Core (continued) **(4)**
- HTHS 2230 - Introductory Pathophysiology **(3)**
- HTHS 2240 - Introduction to Pharmacology **(3)** or
- HTHS 3240 - Introduction to Pharmacology **(3)**
- MICR 3254 - Immunology **(4)**
- MICR 3305 - Medical Microbiology **(5)**
- MICR 4154 - Microbial Genetics **(4)**
- MICR 4252 - Cell Culture **(2)**
(cross-listed with Botany)
- MICR 4554 - Virology **(4)**
- PHIL 3350 - Medical Ethics **(3)**
- PHYS 3190 - Applied Optics **(3)**
- PHYS 3410 - Electronics for Scientists **(4)**
- PHYS 3420 - Data Acquisition and Analysis **(3)**
- PSY 2730 - Biopsychology **(3)**
- PSY 2830 - Directed Readings **(1-3)**
(3 credit hours required)

- PSY 3010 - Abnormal Psychology **(3)**
- PSY 3710 - Physiological Psychology **(3)**
- PSY 3730 - Perception **(3)**
- PSY 3740 - Drugs and Behavior **(3)**
- ZOOL 1020 LS - Human Biology **(3)**
- ZOOL 2100 - Human Anatomy **(4)**
- ZOOL 2200 - Human Physiology **(4)**
- ZOOL 3200 - Cell Biology **(4)**
- ZOOL 3300 - Genetics **(4)**
- ZOOL 3600 - Comparative Physiology **(4)**
- ZOOL 4050 - Comparative Vertebrate Anatomy **(4)**
- ZOOL 4100 - Vertebrate Embryology **(4)**
- ZOOL 4120 - Histology **(4)**
- ZOOL 4220 - Endocrinology **(4)**
- ZOOL 4300 - Molecular Genetics **(4)**
- ZOOL 4350 - Animal Behavior **(4)**

Consult the WSU course catalog for prerequisites to the elective courses listed above.

Urban and Regional Planning Emphasis

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.

Course Requirements for Emphasis

Courses Required (6 credit hours)

- GEOG 4410 - Land Use Planning Techniques and Practices **(3)**
- GEOG 4420 - Advanced Planning Techniques **(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 - Environment Appreciation **(3-4)**
(3 credit hours required)
- GEOG 3450 - Cartography **(3)**
- GEOG 3460 - Advanced Cartography **(3)**
- GEOG 3210 - Urban Geography **(3)**
- GEOG 3360 - Economic Geography **(3)**
- GEO 4150 - Environmental Assessment **(3)**
- GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems **(4)**
- MICR 1153 LS - Elementary Public Health **(3)**
- POLS 3700 - Introduction to Public Administration **(3)**
- POLS 3750 - Urban Government and Politics **(3)**
- SOC 3840 - Cities and Urban Life **(3)**
- SOC 3850 DV - American Minorities in Urban Settings **(3)**
- SOC 3300 - Environment and Society **(3)**

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.

Women's Studies Minor Program

Coordinator: Michelle Paustenbaugh

Location: Social Sciences Building, Rooms 301/303

Telephone Contact: Belia Alvarado 801-626-7632

The Women's Studies minor is an interdisciplinary program which introduces students to the current scholarship in the study of women, past and present, from a variety of cultural, class, sexual preference, ethnic, and religious orientations.

Program Prerequisite: A student's program of study for the Women's Studies Minor must be approved by the Women's 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 20 credit hours is required for this minor.

Course Requirements for Minor

Women's Studies Courses Required (12 credit hours)

- WS 1500 SS/DV - Introduction to Women's Studies **(3)**
- WS 3050 DV - Introduction to Feminist Theories 1700 -- Present **(3)**
- WS 4050 - Research Methodologies **(2)**
- WS 4060 - Research Project **(2)** *
- WS 4860 - Internship in Women's Studies **(1-2)** *
- WS 4990 - Senior Seminar **(2)**

* WS 4060 (2) and WS 4860 (2) represent alternate tracks for students with interest in academic careers or community work, respectively. Either one may be taken as an elective by students choosing the alternate course as a requirement. As an elective, WS 4860 may be taken for 1 or 2 credit hours.

Electives (8 credit hours)

A total of 8 credit hours of electives chosen in consultation with the Women's Studies Coordinator. Electives may include up to 3 credit hours of Directed Readings.

- ANTH 3700 DV - Sex Roles: Past, Present and Future **(3)**
- COMM 3090 DV - Gender and Communication **(3)**
- ECON 3410 - Women in the World Economy **(3)**
- ENGL 2710 HU /DV - Perspectives on Women's Literature **(3)**
- FL 3670 - Literature Authors **(3)**
- GERT 3320 DV - Ethnicity and Older Women in the American Society **(3)**
- HIST 3070 DV - Women in American History: 1600 to Present **(3)**
- HLTH 4220 - Women's Health Issues **(3)**
- HNRS 3900 - Honors Colloquium **(3)**
- POLS 4940 - Topics in American Politics & Thought **(1-3)**
- POLS 4070 DV - Sex Roles and the Law **(3)**
- PSY 2370 DV - Psychology of Women and Gender **(3)**
- PSY 3100 DV - Psychology of Diversity **(3)**
- SOC 3120 DV - Sex/Gender Roles: Past, Present, Future **(3)**

- SOC 3130 - Sociology of Gender **(3)**
- WS 2900 - Topics in Women's Studies **(1-3)** or
- WS 4900 - Topics in Women's Studies **(1-3)**
- WS 4830 - Directed Readings **(1-3)**

WSU Davis

Bruce Davis, Vice Provost

Telephone: 801-395-3536
 Email: brucedavis@weber.edu

Christopher C. Rivera, Campus Director

Telephone: 801-395-3570
 Email: ccrivera@weber.edu

Location: 2750 North University Park Boulevard,
 Layton, UT 84041 (Directions) (Map)

Telephone Contact: Rachel Cox 801-395-3542

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 300,000 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 approximately 36 percent of the student body at Weber State University. In addition to providing learning opportunities close to where these students live and work, the Davis Campus is an important part of the larger community, enriching the social, cultural and economic lives of the citizens of Davis County.

From its 106 acre campus in Layton, WSU Davis Campus 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 on the web at weber.edu/wsudavis. Students may take classes at both the Davis Campus 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.

The Davis Campus 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 a 68 workstation computer lab, a library, bookstore, testing center, enrollment services, academic advisement, academic support, financial aid counseling, tutoring, student activities, a health center, counseling services, and a wide range of other student services.

The Davis Campus 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

Master Degrees	Bachelor Degrees	Associate Degrees
Accounting	Criminal Justice	Computer Science
Business Administration	English	Criminal Justice
English	Health Administrative Services	General Studies
Healthcare Administration	Information Systems Technologies	Health Sciences
Joint MBA/MHA		Information Systems Technologies
Taxation		Nursing
		Respiratory Therapy

Graduate Certificates

- Environmental Sustainability for Business
- Information Systems Technologies: Information Assurance
- Health Services Administration

Enrollment Services

Telephone: 801-395-3480
Location: Room 241

Enrollment Services at the Davis Campus offers a one stop shop that provides assistance in the following areas:

- Admissions Advisement
- General Studies Academic Advisement
- Financial Aid/ Scholarships
- Records
- Registration
- Residency

Library

Telephone: 801-395-3472
Location: 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.

Bookstore and Convenience Store

Telephone: 801-395-3487
Location: Room 201

- Textbooks
- Cashier services
- Computers and technology

- General books & gifts
- Campus apparel and memorabilia
- Classroom supplies
- Snack foods

Student Programs and Services

Telephone: 801-395-3460

Location: Room 262

Web Site: weber.edu/DavisStudentServices

WSU Davis offers a comprehensive range of programs and services for the growth and development of all students. Assuring the academic success as well as fostering a spirit of campus community and inclusivity through collaborative campus relationships, is an integral part of the Student Affairs Mission. Through the utilization of the offered programs and services, students will be prepared for active, life-long learning and participation.

Advising/Counseling Services

- Career Services
- Counseling & Psychological Services
- International Student & Scholar Center
- Multicultural Student Center
- Nontraditional Student Center
- Women's Center
- Student Advocate and Appeals
- Student Code Information
- Veterans Services
- Veterans Upward Bound

Student Leadership Development

Web Site: weber.edu/DavisCouncil

- 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
- Student Council - Plan and implement social, service, cultural and educational programs
- Leadership opportunities

Student Health Center

Provides quality, cost-effective health services for students that includes:

- Disease prevention activities
- Health information
- Outpatient medical care for common illnesses and injuries

For further information, check the website at weber.edu/healthcenter

Davis Learning Center

Telephone: 801-395-3539

Location: Room 213 (Information Commons)

Web Site: weber.edu/DavisASSP

Davis Learning Center 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)

Services for Students with Disabilities (SSD)

- Professional staff is available to discuss all disability issues and arrange accommodations for qualified students
- Services include accommodations such as textbooks on tape, adaptive technology, test accommodations, and registration assistance

Supplemental Instruction

- Supplemental Instruction (SI) provides study groups for historically difficult courses
- See the online course schedule for particular courses with SI at WSU Davis
- Facilitators are trained student leaders who have successfully completed the course
- SI stresses how to learn as well as what to learn

Testing Center

- Administers chi-tester and paper-and-pencil course work tests
- The Testing Center also offers testing for English/math placement, career and personal counseling, on-line and independent study courses, Police Officer Selection Test (POST)

Computer Lab

- The computer lab consists of 68 computer workstations, a LaserJet printer, a scanner, and various software platforms
- Laptop computers can be borrowed for use within the building

Northern Utah Academy for Math, Engineering, and Sciences (NUAMES)

Telephone: 801-402-5920

Location: Weber State University Davis Campus

Web Site: NUAMES.net

NUAMES is an early college high school that offers students the opportunity for early university access. This program focuses on math, engineering, and science. NUAMES is a public state charter school composed of grades 10-12.

- 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

Continuing Education & Community Services

Dr. Bruce Davis, Vice Provost and Dean of Continuing Education

Continuing Education and Community Services seeks to extend lifelong learning opportunities beyond the traditional campus using innovative, collaborative, and flexible approaches to meet the needs of students and other stakeholders. Continuing Education works collaboratively with colleges and departments from throughout the University to deliver courses at the Ogden and Davis campuses, through WSU Online, and in evening, weekend, and at several off-campus sites. Continuing Education operates off-campus continuing education centers in Roy, Kaysville, Morgan, and at Salt Lake Community College.

In addition to serving regular university students, Continuing Education also provides a wide range of programs for early and lifetime learners, including Early College and Concurrent Enrollment programs for area high school students, Distance Learning and Independent Study opportunities, workforce education and training programs for business and industry, and professional development opportunities for teachers, health care professionals, and others. Continuing Education also shares responsibility for International Services and administers several international learning programs, including the Learning English for Academic Purposes (LEAP) department, the Study Abroad program, and other international programs throughout the university.

Location: 4006 University Circle Ogden, UT 84408-4006

Telephone: 801-626-6600

or toll-free 800-848-7770, option 4

Web Site: weber.edu/ce

Continuing Education Programs

Associate Dean: Brian Stecklein, 801-626-6787

Continuing Education offers both credit and non-credit programs. Credit programs focus on courses related to degree attainment while non-credit programs provide professional training and certification.

The Credit Programs team focuses on maintaining clear relationships with academic units leading to the strategic development of continuing education programs and activities. Professional staff members are assigned as liaisons to each academic college, providing expanded educational options for nontraditional students that bridge gaps and eliminate barriers in achieving each student's educational goals.

This group also manages several off-campus centers for Weber State University.

WSU-West Center
5627 South 3500 West
Roy, Utah 84067
801-626-8900

WSU Kaysville Center
325 South Main (at Davis High School)
Kaysville, Utah 84037
801-402-8800

WSU-Morgan Center
241 East Young Street
Morgan, Utah 84050
801-829-3136

Salt Lake Community College
4600 Redwood Road
Salt Lake City, Utah 84130
801-957-4735

The Professional Development team focuses on connecting organizations and individuals with comprehensive training and education programs to improve performance, increase productivity, decrease costs, and get bottom-line results. Team members work individually with organizations to understand their vision and identify subsequent training and education needs and objectives. The team provides both customized training and open enrollment programs that focus on certifications, performance improvement and measurable results. As part of Continuing Education, the Professional Development Team extends the resources of the university to the community to achieve an organization's performance goals. This group manages and occupies the Center for Continuing Education, which is located adjacent to the WSU Davis campus.

WSU Center for Continuing Education
775 South University Park Blvd
Clearfield, UT 84015
801-626-8570

WSU Online

Director: Andrea Jensen, 801-626-6091

The WSU Online team provides administration and support of online, hybrid, and web-enhanced learning. This team of administrators, instructional designers, and programmer/developers provide faculty and student support for the university course management and Chi Tester systems. The team is also responsible for management and development within these systems.

Course and assessment development needs for faculty are accommodated through training and one-on-one assistance. Student support of online systems is provided through the Online Help Desk. Long term, this team focuses on the appropriate use of new technologies and their ability to enhance teaching and learning.

International Services

Executive Director: Cynthia Gibson, 801-626-7521

International Services is a joint function shared by Continuing Education and the Division of Student Affairs. This office is responsible for the International Students and Scholars Center, processing international student applications, issuing SEVIS I-20's and letters of admissions to qualified students, providing student advocacy and support, and coordinating a wide range of international programs and efforts across campus. Further details can be found at weber.edu/international.

Learning English for Academic Purposes (LEAP)

Chair: Amy Reimann, 801-626-6028

The LEAP department provides intensive English language courses for students in the process of acquiring English as a second language for academic use. LEAP courses are taught in Elizabeth Hall on the WSU Ogden Campus. See the full program description in the Interdisciplinary Programs section or visit weber.edu/leap.

Continuing Education Administrative and Enrollment Services

Executive Director: Clayton Anderson, 801-626-7310

Continuing Education Administrative and Enrollment Services staff provides information systems/technical support, financial services, employee support services, and facilities support for continuing education courses, conferences, and workshops. This team also provides student enrollment support including registration, fee payment, basic advising, orientation and other forms of support.

Continuing Education Marketing and Communication Services

Director: Kristie Nielsen, 801-626-6774

The Marketing and Communication team provides marketing support to a wide range of Continuing Education programs. Services include graphic design, writing, Web site development, online registration, social media, advertising, and other support for print and web-based communications. The team also coordinates services with the University Communications department.

Major Program Areas

Programs for High School Students

Concurrent Enrollment

The Weber State University Concurrent Enrollment Program allows eligible high school juniors and seniors to fulfill both high school and university graduation requirements at the same time by attending WSU-approved high school classes taught by WSU-approved teachers. These classes match the WSU course content and student performance criteria. These students, though not officially matriculated at WSU, still create a WSU official permanent transcript. WSU academic department representatives work closely with these teachers to provide professional development opportunities as well as to assure WSU standards are maintained. The state of Utah provides a funding allocation that enables students to participate without having to pay tuition. For updated information about this program, visit weber.edu/concurrent.

Credit Programs

Off-Campus, Evening & Weekend Classes

After 4:00 p.m. and on weekends, classes may be taken on campus or at a number of convenient Northern Utah locations. WSU students can pursue bachelor and associate of science degrees through evening and off-campus credit programs facilitated by WSU Continuing Education. Sites include the WSU-Ogden Campus, WSU-Davis, the WSU West Center in Roy, the WSU- Morgan Center, the WSU Kaysville Center at Davis High School, and articulation agreements with Salt Lake Community College. Degree programs in the health professions are offered by special arrangement with selected health care facilities in Utah and surrounding states.

For more information about these courses, see FinishatWeber.com.

WSU Online

WSU Online, Weber State University's virtual campus, offers classes that conform to the academic calendar but can be attended anytime and anywhere via the internet. Several degree programs and courses to meet general education requirements are offered via WSU Online. Go to weber.edu/distancelearning.

Hybrid Courses

Continuing Education currently provides several seven-week hybrid courses to meet nontraditional student needs. Hybrids are accelerated courses that combine the benefits of classroom instruction with the convenience of online courses. With WSU seven-week hybrid classes, students finish course work twice as fast with half the time in class. It is a unique way for students to complete their general education requirements. Learn more at weber.edu/hybrids.

Independent Study/Self-Paced Courses

Independent Study/Self-Paced online courses are offered from a wide range of academic disciplines for students who cannot attend regularly scheduled classes. This allows students to complete course work at home (or anywhere) at their own convenience, beginning at any time during the year and having six months to complete a course. A few bachelor-degree completion programs in the health professions are available in this format. Learn more about the Independent Study/Self-Paced programs at weber.edu/distancelearning.

Travel Study/Study Abroad

Students who have experienced living and learning in the social and educational environment of another culture will be broadened in ways impossible to achieve on an American campus. International travel experiences have been shown to improve the student's performance in the classroom. For more information, see weber.edu/studyabroad.

Professional and Non-Credit Opportunities

Conferences and Workshops

The CE Conference staff plan and facilitate seminars, workshops and conferences for business, government, public education, and community organizations. For updated information about upcoming events, see weber.edu/ce/conferences.

Customized Training Programs

Continuing Education links the University's internal and external resources to business and industry education needs by providing customized training programs for organizations to improve performance, increase productivity, decrease costs and get bottom line results. See weber.edu/businessstraining for course schedule and registration information.

Certificate Programs

Weber State University partners with APICS – The Association for Operations Management and the American Society for Quality (ASQ) to deliver preparatory courses for certification examinations. Courses, which may carry college credit, are designed for individuals who wish to receive professional recognition or expand their skills in these fields. Additional professional certification programs may be offered. Visit the Web site for the latest information at weber.edu/businessstraining.

Utah Law Enforcement Academy

WSU Continuing Education is a sanctioned provider of the Utah Law Enforcement Academy, the basic training program for certification of law enforcement officers. The academy provides both day and night sessions. The daytime academy is 19 weeks long. It is an 8 a.m. to 5 p.m. Monday through Friday academy. When the student graduates they are certifiable as a special functions officer, basic corrections officer and law enforcement officer. The night academy is divided into two modules. The first, or core, provides training required for certification as a special function officer and basic corrections officer. The second module continues with training for certification as a law enforcement officer. The night session is part-time and is held Monday –Thursday, 6 p.m. to 10 p.m. and on Saturdays, 8 a.m. to 12:00 p.m. The night academy is approximately eight and one half months long. Both day and night sessions provide the students with certification that allows them full corrections and police powers after being appointed by a corrections or law enforcement agency (police, deputy sheriff, Utah Highway Patrol, Utah Department of Corrections, etc.). For more information see weber.edu/policeacademy.

Teacher Professional Development

Continuing Education partners with various school districts, Utah State Office of Education, our campus departments, and other organizations to provide courses and programs to meet the endorsement and professional development needs of educators throughout northern Utah. Courses are offered at WSU sites and at various school district sites. Among the subject areas included in our offerings are math education, ESL endorsement, science, special education, reading, and writing. For contact and program information, visit weber.edu/TeacherTraining.

HAFB and Governmental Training and Development Programs

Weber State University Continuing Education partners with Hill Air Force Base to offer a variety of training and education programs to its employees. These programs include: Microsoft Certification, Computer languages, APICS Certification, ASQ Certification, Lean Manufacturing, Certified Process Improvement, ISO and other customized/ professional programs.

Career and Technical Education Programs

Director: Julie Snowball 801-626-7432

Career and technical education includes programs that focus on job preparation. These programs, listed below, prepare students with a technical skill, license, certificate, or associate's degree upon completion of the program. The type of degree and the specific requirements for each program are outlined in departmental listings.

Applied Science & Technology

- Apprenticeship (AAS)
- Automotive Service Technology (AAS)
- Business/Multimedia Technologies (AAS)
- Computer Science (AAS)
- Construction Management Technology (AAS)
- Design Engineering Technology (AAS)
- Electronics Engineering Technology (AAS)
- General Technology (AAS)

- Interior Design Technology (AAS)
- Manufacturing Engineering Technology (AAS)
- Mechanical Engineering Technology (AAS)
- Network Management Technology (AAS)
- Pre-Engineering (APE)
- Sales and Merchandising (AAS)

Business & Economics

- Information Systems & Technologies (AS)

Education

- Early Childhood (AAS)

Health Professions

- Dental Hygiene (AS)
- Paramedic Studies (AAS)
- Emergency Medical Technician EMT Basic and Intermediate Certification
- Healthcare Coding & Classification Institutional Certificate
- Health Information Technology (AAS)
- Health Sciences (AS)
- Medical Laboratory Sciences (AAS)
- Nursing (AS)
- Diagnostic Medical Sonography (BS)
- Nuclear Medicine (BS)
- Radiation Therapy (BS)
- Radiography (AAS)
- Respiratory Therapy, Pre-Professional (AAS)

Science

- Biotechnician (AS)
- Chemical Technician (AAS)
- Geomatics (Applied Mapping Sciences) Institutional Certificate

Social & Behavioral Sciences

- Archaeological Technician (AAS)
- Criminal Justice (AS)

Course Descriptions

ACTG-Accounting Courses

ACTG 1010 - Practical Accounting & Taxes (3)

A pragmatic look at financial accounting and federal taxes as they relate to the individual's personal life. Designed for non-accounting majors.

ACTG 2010 - Survey of Accounting I (3) F, Sp

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 (3) F, Sp

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. Prerequisite: ACTG 2010.

ACTG 2891 - Coop Work Experience (1, 2, 3) F, Sp

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. Prerequisite: Instructor Approval.

ACTG 2892 - Coop Work Experience (1, 2, 3) F, Sp

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. Prerequisite: Instructor Approval.

ACTG 2893 - Coop Work Experience (1, 2, 3) F, Sp

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. Prerequisite: Instructor Approval.

ACTG 2921 - Short Courses, Workshops, Institutes, & Special Programs (1, 2, 3) F, Sp

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 (1, 2, 3) F, Sp

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 (1, 2, 3) F, Sp

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 (3) F, Sp

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. Prerequisite: ACTG 2020.

ACTG 3120 - Intermediate Financial Accounting II (3) F, Sp

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. Prerequisite: BSAD 2899, ACTG 3110, Business Foundations.

ACTG 3300 - Cost Accounting (3) F, Sp

Cost determination for budgeting, product costing, process costing, cost assignment and allocation, standard costing, and decision making in manufacturing and service organizations. Prerequisite: BSAD 2899, ACTG 2020, Business Foundations.

ACTG 3400 - Taxation of Individuals (3) F, Sp

Basic concepts of gross income, deductions, credits, special computations, and property transactions for individual taxpayers. Prerequisite: ACTG 2020.

ACTG 3500 - International Accounting (3) F, Sp

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. Prerequisite: ACTG 2020.

ACTG 3750 - Accounting & Information Systems (3) F, Sp

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. Prerequisite: BSAD 2899, ACTG 3110, Business Foundations.

ACTG 4510 - Auditing (3) F, Sp

Generally-accepted auditing standards, professional responsibilities, evidence, internal control, sampling, audit tests, and audit reports. Prerequisite: BSAD 2899, ACTG 3120 or concurrent enrollment in ACTG 3120; Business Foundations.

ACTG 4801 - Individual Study (1, 2, 3) F, Sp

Individual work or work in small groups by arrangement on special topics. Prerequisite: Instructor Approval.

ACTG 4802 - Individual Study (1, 2, 3) F, Sp

Individual work or work in small groups by arrangement on special topics. Prerequisite: Instructor Approval.

ACTG 4803 - Individual Study (1, 2, 3) F, Sp

Individual work or work in small groups by arrangement on special topics. Prerequisite: Instructor Approval.

ACTG 4810 - Experimental Courses (1-3)

Experimental or one-time courses designed to fill a need in the community or investigate interesting and unusual topics.

ACTG 4850 - Accounting Study Abroad (1-3)

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). Prerequisite: BSAD 2899. Can be repeated once up to 6 credits.

ACTG 4891 - Coop Work Experience (1, 2, 3) F, Sp

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. Prerequisite: Instructor Approval.

ACTG 4892 - Coop Work Experience (1, 2, 3) F, Sp

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. Prerequisite: Instructor Approval.

ACTG 4893 - Coop Work Experience (1, 2, 3) F, Sp

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. Prerequisite: Instructor Approval.

ACTG 4921 - Short Courses, Workshops, Institutes, & Special Programs (1, 2, 3) F, Sp

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 (1, 2, 3) F, Sp

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 (1, 2, 3) F, Sp

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 5130 - Advanced Accounting (3) F, Sp

A study of business combination accounting. The course will also include an introduction to government and fund accounting. Prerequisite: BSAD 2899, ACTG 3120, Business Foundations.

ACTG 5140 - Accounting for Global and Complex Entities (3)

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, including governmental and not-for-profit entities, consolidated entities and partnerships. Prerequisite: ACTG 3120 and BSAD 2899.

ACTG 5440 - Taxation of Business Entities (3) F, Sp

A study of the income taxation of corporations (including S corporations), limited liability companies, and partnerships. Prerequisite: BSAD 2899, ACTG 3400, Business Foundations.

AERO-Aerospace Studies Courses

AERO 1010 - Foundations of USAF I (1)

Development, organization, and doctrine of the United States Air Force, emphasizing Strategic Force Requirements.

AERO 1010L - General Military Leadership Lab I (0)

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 (1)

Development and organization of United States Air Force Defensive Forces, General Purpose Forces and Tactical Air Forces.

AERO 1011L - General Military Leadership Lab II (0)

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 (1)

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 (1)

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 (1)

Development of various concepts of air power employment, emphasizing factors that have prompted research and technological change.

AERO 2010L - General Military Leadership Lab III (0)

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 (1)

Development of various concepts of air power employment, emphasizing factors that have prompted research and technological change.

AERO 2011L - General Military Leadership Lab IV (0)

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 (1)

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 (1)

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 (1-3)

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 for credit.

AERO 3000 - Field Training (1-4)

The course is normally conducted in the summer between the sophomore and junior years.

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.

AERO 3010 - Leadership Studies I (3)

Writing, speaking, and listening as communication skills; management concepts; responsibilities and ethics for an Air Force junior officer.

AERO 3010L - POC Leadership Lab I (0)

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 (3)

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 (0)

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 (1)

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 (1)

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 (3)

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 (0)

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 (3)

Examines conflict management, arms control, military law and Air Force issues and policies.

AERO 4011L - POC Leadership Lab III (0)

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 (1)

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 III (1)

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 (1-5)

Individual study with a professor from Aerospace Studies. Provides added leadership/management skill development opportunities to develop more competitive officer candidates. May be repeated for credit.

ANTH-Anthropology Courses**ANTH 1000 SS/DV - Introduction to Anthropology (3) Su, F, Sp**

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/DV - Biological Anthropology (3) F, Sp

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/DV - Language and Culture (3) F, Sp

Explores the nature of human language and its role in socio-cultural 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/DV - Peoples and Cultures of the World (3) Su, F, Sp

A survey of cultures around the world, exploring their similarities and differences as observed by anthropologists.

ANTH 2030 SS - Principles of Archaeology (3) F

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 2810 - Experimental Courses (1-3)

ANTH 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ANTH 2950 - Elementary Anthropological Field Trip (1-3)

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. Prerequisite: Consent of instructor. A maximum of three credit hours of Anthropology 2950 can be applied toward graduation.

ANTH 2990 - Special Topics in Anthropology (1-3)

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.

ANTH 3100 - Prehistory of North America (3)

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 3200 DV - Archaeology of Early Civilizations (3)

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 3300 - Archaeological Field Techniques (3-6)

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. Prerequisite: ANTH 2030 and consent of instructor.

ANTH 3400 - Archaeological Laboratory Techniques (3)

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. Prerequisite: ANTH 2030, or consent of instructor.

ANTH 3500 DV - Advanced Cultural Anthropology (3)

The nature of culture, its structure and function in the variety of human activities. Prerequisite: ANTH 1000 or ANTH 2010, or consent of instructor.

ANTH 3600 DV - Culture Area Studies (1-3)

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. Prerequisite: ANTH 1000 or ANTH 2010, or consent of instructor.

ANTH 3700 DV - Sex Roles: Past, Present and Future (3)

An overview of the differences and similarities in human sex roles, cross-culturally and over time, with special emphasis on the influences of biology, socialization, and ecology in their origin, perpetuation, and change. (Cross-listed with SOC 3120.)

ANTH 3900 DV - Magic, Shamanism and Religion (3)

A comparative study of the origins, development, and social functions of magic, shamanism, and religion within cultural systems around the world.

ANTH 4100 - Archaeological Method, Theory, and Cultural Resource Management (3)

Explores means by which archaeological inferences are made to decipher the material record of past human behavior. Includes the history of archaeological thought from the beginnings of scientific archaeology through the new profession of cultural resource management. Prerequisite: ANTH 2030.

ANTH 4200 - Anthropological Theory (3)

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. Prerequisite: ANTH 1000 or consent of instructor.

ANTH 4300 - Anthropological Research Methods (3)

Students will learn and apply the scientific methods of inquiry used in anthropological research. Required for majors and recommended for minors. Prerequisite: ANTH 1000 or a 2000-level course; ANTH 4200 and SOC 3600, or consent of instructor.

ANTH 4810 - Experimental Courses (1-3)

ANTH 4830 - Readings and/or Projects (1-3)

Individual readings and/or projects for anthropology students. (Maximum of 6 hours may be applied toward graduation.) Prerequisite: ANTH 1000, permission of instructor and approval of program coordinator.

ANTH 4890 - Internship in Anthropology (1-3)

Anthropology majors may apply for internship opportunities that provide the student with both practical and research experiences. 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. Prerequisite: 6 hours of upper-division anthropology courses, Anthropology major status, approval of Program Coordinator.

ANTH 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ANTH 4950 - Advanced Anthropological Field Trip (1-3)

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. A maximum of three credit hours of Anthropology 4950 can be applied toward graduation. Prerequisite: ANTH 1000 or ANTH 2030 and consent of instructor.

ANTH 4990 - Seminar in Anthropology (1-3)

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. Prerequisite: ANTH 1000 or consent of instructor.

ART-Art Courses

ART 1010 CA - Introduction to the Visual Arts (3) Su, F, Sp

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 (3) Su, F, Sp

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 (3) F, Sp

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 studio projects designed to establish a context for expanded study in the visual arts. Includes curriculum planning for art majors, introduction to programs and faculty, and professional opportunities.

ART 1110 - Drawing I (3) Su, F, Sp

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: 2D (3) Su, F, Sp

Introduction to visual language using two-dimensional media. This course examines the structure of images and

helps the student develop strategies for interpreting and constructing ones which communicate effectively. Theory and application of color is included.

ART 1130 - Design: 3D (3) F, Sp

The study of fundamental design principles and techniques including working knowledge of various design methods and their relationship to the conceptualization, development, and completion of three-dimensional design projects.

ART 1140 - Color Theory (3) F, Sp

This is an incorporated lecture and studio course that provides a basis for understanding the history, concepts, and practice of color theory as a pivotal area of Visual Arts. Studio projects will investigate both additive and subtractive color theory, and include instruction in digital media-based color, using Photoshop.

ART 2015 - Drawing on the Land (3) Variable Title

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. This course is repeatable under different titles. Some travel is required. Camping may be required.

ART 2050 - Photographing Artwork (1) TBA

Photographing artwork for portfolios: photographing of two- and three-dimensional artwork. Emphasis on reproduction of quality slides, including masking and labeling of slides for juried activities, career and graduate school application. Credit/No Credit. Prerequisite: ART 2250 or consent of instructor.

ART 2200 - Introduction to Printmaking (3) F, Sp

An introduction to all printmaking classes covering the processes of intaglio, screenprinting, relief, lithography, and monotype. Students are provided with the fundamentals of each process and experience with each one. This class is a prerequisite for all printmaking classes.

ART 2250 - Foundations of Photography: Black & White/Analog (3) Su, F, Sp

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 - Introduction to Ceramic Art (3) F, Sp

Introduction to clay and glaze, ceramic design, handbuilt and wheelthrown forming techniques, and traditional and contemporary firing processes.

ART 2350 - Small Metals/Jewelry I (3) F, Sp

Introduction to tools, materials, and basic techniques of fabrication and casting, with an emphasis on design.

ART 2450 - Foundations of Photography: Color/Digital (3) F, Sp

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 (3) F, Sp

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 (3) F, Sp

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 (3)

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. Prerequisite: Either ART 2250 or ART 2450 or consent of instructor.

ART 2830 - Directed Readings (1-3) F, Sp

Individually chosen readings on specialized topics supervised by a faculty member. Prerequisite: Consent of faculty supervisor prior to registration.

ART 2890 - Cooperative Work Experience (1-2, 6 maximum) F, Sp

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. Prerequisite: Instructor approval (before enrollment) and previous or concurrent enrollment in art classes as specified by each area of emphasis.

ART 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will be determined by the department.

ART 3120 - Figure Drawing (3) F, Sp

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. Prerequisite: ART 1110 and ART 1120; or consent of instructor.

ART 3150 - Photography Seminar (3) F, Sp

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. Prerequisite: ART 2250 and ART 2450.

ART 3200 - Intermediate Printmaking (3) Sp

An intermediate level class with emphasis on screenprinting, relief, and intaglio with further exploration into print processes that include photographic stencils and multicolor printing. Prerequisite: ART 1120 and ART 2200; or consent of instructor.

ART 3310 - Intermediate Handbuilt Ceramics (3) F

Intermediate problems in handbuilt ceramics with emphasis on functional and sculptural form. Various firing techniques explored. Prerequisite: ART 1130 and ART 2310; or consent of instructor.

ART 3320 - Intermediate Wheelthrown Ceramics (3) Sp

Intermediate problems in wheelthrowing with emphasis on functional form and surface decoration. Kilns and various firing techniques explored. Prerequisite: ART 1130 and ART 2310; or consent of instructor.

ART 3350 - Small Metals/Jewelry II (3) F, Sp

Development of design concepts and procedures with emphasis on basic techniques and concept development in fabrication, casting, enameling, cold connectors, surface enrichment. Prerequisite: ART 2350 or consent of instructor.

ART 3420A - Bitmap Imaging (1) Su

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. Prerequisite: ART 1120 or consent of instructor.

ART 3420B - Vector Drawing (1) Su

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. Prerequisite: ART 1120 or consent of instructor.

ART 3420C - Digital Page Composition (1) Su

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. Prerequisite: ART 1120 or consent of instructor.

ART 3420D - Design for the Internet (1) F, Sp

Emphasis on the principles of web design 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 digital media and web design. Primary software: Macromedia Dreamweaver. Prerequisite: ART 1120 or consent of instructor.

ART 3430 - Typography and Publication Design (3) F

Orientation to typographic communications including methods and processes, aesthetics, readability, typographic systems, grids, layout, and digital page composition. Class meets 2 times/week for 3-hour sessions. Prerequisite: ART 1120 or consent of instructor.

ART 3435 - Experimental Typography (3) Sp

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. Prerequisite: ART 1120

ART 3440 - Visual Communication (3) Sp

Studies in perception, visual organization, media, design process, and integrated message formulation with word and image. Emphasis is placed on the application of visual language skills to communication problems. Class meets 2 times/week for 3-hour sessions. Prerequisite: ART 3430 or ART 3435 or consent of instructor.

ART 3450 - Design History and Theory (3) F

Historical and theoretical perspectives for the visual communication majors including a survey of critical historical movements and figures, practical studies in semiotics and rhetoric, and contemporary theory and media. Course contents are explored through reading, writing, lecture, discussion, and studio projects. Prerequisite: ART 3430 or ART 3435 or consent of instructor.

ART 3460 - Illustration (3) F, Sp

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. Prerequisite: ART 1110 and ART 1120 or consent of instructor.

ART 3500 - Advanced Time-Based Media/Video Art (3)

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. Prerequisite: ART 2750.

ART 3515 - Art Methods and Resources for Secondary Teachers I [Art Methods I] (3) F

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. Prerequisite: (Recommended) Professional Core Level, College of Education, or permission of instructor. This course is required for secondary certification and is designed to be taken prior to student teaching.

ART 3520 - Art Methods and Resources for Secondary Teachers II [Art Methods II] (3) Sp

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. Prerequisite: ART 3515, or by consent of instructor. This course is required for secondary certification and is designed to be taken prior to student teaching.

ART 3525 - Practicum: WSU ArtsBridge Service-Learning (1-6)

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.

ART 3550 - Photography: View Camera Techniques (3) F(odd years)

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. Prerequisite: ART 3150 or consent of instructor.

ART 3600 - Painting II (3) F, Sp

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. Prerequisite: ART 1120 and ART 2600; or consent of instructor.

ART 3700 - Sculpture II (3) Sp

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. Prerequisite: ART 1130 and ART 2700; or consent of instructor.

ART 3720 - Public Art (3) TBA

Public Art focuses on contemporary public art and includes an historical overview. Successful examples of public art proposals will be presented and analyzed. Students will learn the steps necessary to research, collaborate and implement a public art commission. Each student will research a current national public art "call for proposals". The student will then prepare and submit a completed public art research project to the national venue. In addition, a three-dimensional fabricated, architectural model will be required as a final project. Course activity may include an actual public art commission in the region. Students will receive a letter grade and can repeat the course for additional credit a maximum for 2 times (6 credit hours total). Prerequisite: ART 1120, ART 1130 and on of the following: ART 2200, ART 2310, ART 2600, ART 2700.

ART 3800 - Travel-Study Studio (1-3) Variable title course

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. Prerequisite: ART 1040 or Instructor's Approval. *Can be repeated up to 4 times and up to 12 credit hours.*

ART 3995 - BFA Seminar (3) F, Sp

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. Prerequisite: BFA students who have completed second-level course in their studio area only.

ART 4010 - Museum Methods (3)

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. Prerequisite: Consent of instructor.

ART 4110 - Advanced Drawing (3) Sp

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. Prerequisite: ART 3120 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4120 - Advanced Figure Drawing (3) F

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. Prerequisite: ART 3120 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4150 - Photography: Alternative Processes (3) Sp

Studio assignments are based on photographic alternatives to the silverprint. Historical references and perspectives provide the context for supervised studio/computer/assignments. Prerequisite: ART 3150 and ART 1140 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4200 - Advanced Printmaking (3) Sp

An advanced level class in printmaking with emphasis on screenprinting, relief, intaglio, and/or lithography. Emphasis on individual portfolio production. Prerequisite: ART 3200 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4300 - Ceramic Glaze Formulation (3) Sp (even years)

Using natural and manufactured raw materials to create ceramic glazes. Understanding traditional glaze chemistry and calculations (using atomic symbols and weights). Exploring sources of glaze color and texture, and the effects of temperature and kiln atmosphere on ceramic glazes. Prerequisite: ART 3310 or ART 3320 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4310 - Advanced Handbuilt Ceramics (3) F, Sp

Advanced problems in ceramic design and construction using traditional and contemporary handbuilding (nonwheel) techniques with an emphasis on aesthetics. Individual projects to be determined by consultation with instructor. Kiln operation. Prerequisite: ART 3310 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4320 - Advanced Wheelthrown Ceramics (3) F, Sp

Advanced problems in ceramic design creating wheelthrown forms with an emphasis on aesthetics. Individual project to be determined by consultation with instructor. Kiln operation. with an emphasis on aesthetics. Individual project to be determined by consultation with instructor. Kiln operation. Prerequisite: ART 3320 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4350 - Small Metals/Jewelry III (3) F, Sp

Development of advanced design concepts and procedures with emphasis on basic techniques and concept development in fabrication, casting, enameling, cold connectors, and surface enrichment. Prerequisite: ART 3350 or consent of

instructor. May be repeated for credit – consult with faculty advisor.

ART 4400 - Advanced Graphic Design (3) F, Sp

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. Prerequisite: ART 3430, ART 3435 and ART 3440 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4410 - Design Seminar (3) Sp

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. Prerequisite: ART 4400 or consent of instructor.

ART 4415 - Design Production (3)

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. Prerequisite: ART 3430 and ART 3435 or consent of instructor.

ART 4420 - Advanced Digital Media (3) Sp

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. Prerequisite: ART 3420A, ART 3420B, ART 3420C, ART 3420D, or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4440 - Interactive Media (3) F

Students in this class will create interactive media products using the computer. Topics covered include the exploration of aesthetics of using animation, hypertext, graphics, 3D rendering and video in conjunction with sound to develop effective interactive visual communication. Prerequisite: ART 3420A, ART 3420B, ART 3420D or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4460 - Advanced Illustration (3) F, Sp

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. Prerequisite: ART 3460 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4550 - Photography: Studio Lighting (3) Sp

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. Prerequisite: ART 3150 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4600 - Painting III (3) F, Sp

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. Prerequisite: ART 3600 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4660 - Special Topics in Photography (3) Sp (even years)

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," "Video Art," and "Directed Visions." Prerequisite: ART 3150 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4700 - Sculpture III (3) Sp

Advanced individual problems in selected areas of concentration; research and development of conceptual, technical, and methodological concerns. Prerequisite: ART 3700 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4750 - Experimental Photography (3) F (even years)

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. Prerequisite: ART 3150. May be repeated for credit – consult with faculty advisor.

ART 4830 - Directed Readings (1-3) F, Sp

Individually chosen readings on specialized topic supervised by a faculty member. Prerequisite: Consent of faculty supervisor prior to registration.

ART 4890 - Cooperative Work Experience (1-2, 6 maximum) F, Sp

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. Prerequisite: By instructor approval only and previous or concurrent enrollment in art classes as specified by each area of emphasis.

ART 4900 - Individual Studies (1-3) F, Sp

Individual studies in selected areas of emphasis. Open to juniors and seniors by instructor approval only.

ART 4910 - Photography: Internship (1-3)

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. Prerequisite: ART 3150 or consent of instructor. May be repeated for credit – consult with faculty advisor.

ART 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)

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 for credit – consult with faculty advisor.

ART 4930 - Teaching Assistantship Experience (2) F, Sp

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. Prerequisite: Student must be in the BFA program and have instructor consent.

ART 4990 - BFA Thesis (3) F, Sp

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. Prerequisite: 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 – consult with faculty advisor.

ARTH-Art History Courses**ARTH 1090 CA - Art and Architecture of the World: Paleolithic-AD 1000 (4) F**

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.

ARTH 1100 CA - Art and Architecture of the World: AD 1000-Present (4) Sp

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.

ARTH 2040 - Art and Architecture of Asia (4) F, Sp

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 3030 - Native American Art of the Southwest: From the Anasazi to the Present (4) Sp (odd years)

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 - Modern Art (4) F

The history of the visual arts (including painting, sculpture, architecture and photography) from 1850 to the 1950s. Study of issues in European and American Modernism; multicultural perspectives; the political, social, and intellectual history informing the arts of that period. Prerequisite: ARTH 1100 or consent of instructor.

ARTH 3050 - Contemporary Art (4) Sp (even years)

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. Prerequisite: ARTH 1100 or consent of instructor.

ARTH 3060 - The Art and Architecture of India (4) Sp (even years)

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 (4) F (odd years)

An historical account of the architecture, sculpture and painting of China including the political, religious, and intellectual history informing the arts of different regions.

ARTH 3080 - The Art and Architecture of Japan (4) F (odd years)

An historical account of the architecture, sculpture and painting of Japan, including the political, religious, and intellectual history informing the arts of different regions.

ARTH 3100 - The Art and Architecture of the Islamic World (4) F (even years)

An historical survey of the architecture, sculpture, and painting of the Islamic world, including the political, religious, and intellectual history informing the arts of different countries: Iran, Iraq, Egypt, Turkey, North Africa, India, Spain, and Indonesia.

ARTH 3850 - Travel-Study Art History (1-4) Variable title course

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. Prerequisite: ARTH 1090 or ARTH 1100 or ARTH 2040.

ARTH 3950 - Photography: History, Theory and Criticism (4) Sp (odd years)

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. Prerequisite: ARTH 1100 or consent of instructor.

ASTR-Astronomy Courses**ASTR 1040 PS - Elementary Astronomy (3) Su, F, Sp**

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 - Principles of Observational Astronomy (3)

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 PHYS 2040.* Prerequisite: MATH 1060 (minimum grade of C).

ASTR 2800 - Introductory Individual Research Problems (1-3) Su, F, Sp

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. Prerequisite: Consent of instructor. Cross-listed with PHYS 2800.

ASTR 2830 - Introductory Readings in Physics/Astronomy (1-3) Su, F, Sp

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. Prerequisite: Consent of instructor. Cross-listed with PHYS 2830.

ASTR 3160 - Stellar and Planetary Astrophysics (3) F

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. Prerequisite: PHYS 2220 and MATH 1200. Cross-listed with PHYS 3160.

ASTR 3170 - Galaxies and Cosmology (3)

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. Prerequisite: PHYS 2220 and MATH 1200. *Cross-listed with PHYS 3170.*

ASTR 4800 - Individual Research Problems (1-3) Su, F, Sp

Time and credit to be arranged. Open to qualified students for one or more semesters. Prerequisite: consent of instructor. Cross-listed with PHYS 4800.

ASTR 4830 - Readings in Physics/Astronomy (1-3) Su, F, Sp

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. May be repeated. Prerequisite: consent of instructor. Cross-listed with PHYS 4830.

AT-Athletic Training Courses**AT 1300 - First Aid: Responding to Emergencies (2) Su, F, Sp**

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 HLTH 1300.

AT 1500 - Introduction to Athletic Training (First Semester) (2) F

Provides an opportunity for students to observe the function of an athletic training facility and become aware

of the various duties performed by a Certified Athletic Trainer. Students who wish to apply for admission to the Undergraduate Athletic Training major must take this course. Required 5 hours (outside of class) clinical observation in approved athletic training rotation settings. Two lecture hours per week.

AT 1501 - Clinical Application of Athletic Training I (1) Sp

Provides an opportunity for students to receive skill proficiency testing in the areas of acute care of injury and illnesses. Two lab hours per week. Prerequisite: AT 1500, HLTH 2300/AT 2300.

AT 2175 - Introduction to Sports Medicine (3) F

Presents the duties and functions of the certified athletic trainer and their relationship to other allied health care and sports medicine professionals. The course will focus on the fundamental causes, prevention, recognition, care, reconditioning of musculoskeletal injuries/illnesses, and program organization and administration. The course will include the planning, preparation, and presentation of group projects on assigned topics related to athletic training. For non-majors.

AT 2300 - Emergency Response (3) F, Sp

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.

AT 2430 - Prevention and Care of Musculoskeletal Injuries (3) F, Sp

This course is designed to give a basic understanding of athletic training principles. Recognition, cause, prevention, and treatment of musculoskeletal injuries.

AT 2431 - Taping, Wrapping, Bracing, Padding, and Splinting (3) Sp

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. Prerequisite: AT 1500.

AT 2500 - Clinical Application of Athletic Training II (2) F

Provides an opportunity for students to receive skill proficiency testing in the areas of risk management and injury prevention, psychosocial development, taping, wrapping, bracing and padding. Prerequisite: AT 1501 and AT 2431.

AT 2501 - Clinical Application of Athletic Training III (2) Sp

Provides an opportunity for students to receive skill proficiency testing in the areas of musculoskeletal injury assessment (lower extremity) and basic nutrition. Prerequisite: AT 2500, AT 3300 and NUTR 1020.

AT 3200 - Psychology of Sport, Injury & Rehabilitation (3) Su, F, Sp

This course is designed to provide a basic understanding of the psychology of sport, injury, and rehabilitation. Topics covered include: emotion, motivation, mental skills training and use, psychological antecedents of injury, psychology of injury and rehabilitation, 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. Prerequisite: PSY 1010 or HLTH 1110. Cross-listed with PSY 3200.

AT 3300 - Evaluation and Care of Musculoskeletal Injuries: Lower Extremities (3) Su, F

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. Prerequisite: ZOO 2100 or HTHS 1110 and HTHS 1111.

AT 3301 - Evaluation and Care of Musculoskeletal Injuries: Upper Extremities (3) Su, Sp

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. Prerequisite: AT 3300.

AT 3500 - Clinical Application of Athletic Training IV (3) F

Provides an opportunity for students to receive skill proficiency testing in the areas of musculoskeletal injury assessment (upper body), risk management, and pharmacology. Prerequisite: AT 2501, AT 3200, AT 3301 and HTHS 2240.

AT 3501 - Clinical Application of Athletic Training V (3) Sp

Provides an opportunity for students to receive skill proficiency testing in the areas of basic therapeutic exercise, basic therapeutic modalities, risk management and injury prevention, and assessment and evaluation. Prerequisite: PEP 3280, AT 3500, AT 4100, AT 4200.

AT 3550 - Clinical Application of Athletic Training-Supplement (3) Su

Provides an opportunity for students to gain clinical experience with varied patient populations in the areas of assessment, evaluation, modalities and rehabilitation. Prerequisite: AT 3500.

AT 3600 - Ergonomics for Health and Safety (2) Sp

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. Prerequisite: PEP 3500 or consent of instructor.

AT 4100 - Basic Therapeutic Modalities for Musculoskeletal Injuries (3) F

Through lecture, discussion, and laboratory experience, the scientific basis of musculoskeletal rehabilitation involving therapeutic modalities will be examined. This course is designed to introduce students to the contemporary usage and basic foundation of therapeutic modalities, transmission of energy, infrared, and mechanical therapy. Prerequisite: AT 3300 and ZOO 2200 or HTHS 1110 and HTHS 1111.

AT 4101 - Advanced Therapeutic Modalities for Musculoskeletal Injuries (3) Sp

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 basic foundations of therapeutic modalities established in AT 4100. Topics for discussion

include the application of electrotherapy devices, ultrasound, light therapy, and short-wave diathermy. Prerequisite: AT 4100.

AT 4200 - Basic Rehabilitation of Musculoskeletal Injuries (3) F

Content of this course provides basic understanding of therapeutic exercise as it relates to the rehabilitation process of musculoskeletal injuries. Course provides basic concepts and hands on techniques used in the rehabilitation of the athlete/patient from an injury state to a highly competitive state. Prerequisite: AT 3300 and AT 3301.

AT 4201 - Advanced Rehabilitation of Musculoskeletal Injuries (3) Sp

Content of this course provides advanced understanding of therapeutic exercise as it relates to the rehabilitation process of musculoskeletal injuries. This course provides advanced instruction and hands on techniques in the rehabilitation of an athlete/patient from an injury state to a highly competitive state. Prerequisite: AT 4200.

AT 4500 - Clinical Application of Athletic Training VI (3) F

Provides an opportunity for students to receive skill proficiency testing in the areas of advanced therapeutic exercise, advanced therapeutic modalities, and general medical conditions and disabilities. Prerequisite: AT 3501, AT 4101, AT 4201, AT 4550.

AT 4550 - General Medical Conditions and Advances in Athletic Training (3) Sp

Discuss general medical disorders and conditions pertaining to sports medicine and inquire into newest research of related issues. Prerequisite: AT 3300 and AT 3301.

AT 4600 - Administration & Management in Athletic Training (3) F, Sp

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.

AT 4700 - Introduction to Radiology for the Athletic Training Profession (1) F

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. Prerequisite: AT 4200.

AT 4800 - Individual Projects (1-4) Su, F, Sp

A comprehensive study or project in the field of Athletic Training. Hours to be arranged for seniors only.

AT 4990 - Senior Seminar (1) F, Sp

For Seniors only. Structured seminar focuses on synthesis of ideas and portfolio preparation.

AT 4998 - Preparation for the Board of Certification (BOC) Exam (1) F, Sp

This is an optional course for Athletic Training Majors in the Clinical Track who are preparing for the Board of Certification (BOC) Exam.

AT 4999 - Critical Thinking for Musculoskeletal Injury Management (1) F

Content of this course addresses evaluation techniques, rehabilitation processes and return to play guidelines for specific injuries to the upper and lower extremities. The student must integrate anatomical structures, physiology principles, rehabilitation principles, and evaluative techniques to provide a basis for critical decision-making and care in an athletic injury management environment. Prerequisite: AT 4101 and AT 4201.

ATHL-Athletics Courses

ATHL 1080 - Strength Training Level I (1)

-For Club Hockey Players Only

ATHL 1081 - Strength Training Level II (1)

-For Club Hockey Players Only

ATHL 1510 - Varsity Volleyball (1)

ATHL 1520 - Varsity Soccer (1)

ATHL 1570 - Varsity Basketball (1)

ATHL 1575 - Rodeo I (1)

ATHL 1580 - Varsity Cross Country (1)

ATHL 1590 - Varsity Football (1)

ATHL 1600 - Varsity Golf (1)

ATHL 1630 - Varsity Tennis (1)

ATHL 1640 - Varsity Track and Field (1)

ATHL 1680 - Varsity Indoor Track (1)

ATHL 1760 - Dance Promotion (1)

ATTC-Automotive Technology Courses

ATTC 3000 - Introduction to Automotive Technology (1)

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.) Prerequisite: 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 (3)

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. Prerequisite: ATTC 3000.

ATTC 3260 - Advanced Electrical Systems (3)

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. Prerequisites/Co-requisites: ATTC 3000 and previous automotive electrical training.

ATTC 3280 - Advanced Painting and Refinishing (3)

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. Prerequisite/ Co-requisite: ATTC 3000.

ATTC 3480 - Advanced Structural Analysis and Damage Repair (3)

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. Prerequisite: ATTC 3280.

ATTC 3520 - Fleet Management (3)

Study of fleet standards, fixed operations, inventory and personnel management, financial policies and procedures. Includes financial statement analysis. Prerequisites or Co-requisites: ATTC 3000 and SST 3203.

ATTC 3620 - Automotive Business Practices (3)

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. Prerequisite: ATTC 3000.

ATTC 3680 - Automotive Damage Analysis and Estimating (3)

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. Prerequisite: ATTC 3480.

ATTC 3760 - Advanced Automotive Technologies (3)

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. Prerequisite/ Co-requisite: ATTC 3000.

ATTC 3880 - Cooperative Practicum (3)

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. Prerequisite: ATTC 3000.

ATTC 4380 - Advanced Non-Structural Analysis and Damage Repair (3)

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. Prerequisite: ATTC 3480.

ATTC 4560 - Advanced Propulsion Systems (3)

A study of advanced propulsion systems including those used on hybrid-electric vehicles, plug-in hybrids, electric vehicles, and other propulsion technologies. Advanced transmissions/transaxles, wheel motors, drive motors, etc. are included. Prerequisite: ATTC 3760.

ATTC 4720 - Capstone Project (2)

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. Prerequisite: ATTC 3760.

ATTC 4760 - Alternate Fuel Systems (3)

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. Prerequisite: ATTC 3760.

ATTC 4780 - Insurance Industry Business Practices (3)

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. Prerequisites/Co-requisites: ATTC 3680 and SST 3203.

ATTC 4830 - Directed Readings (1-3)

Individual readings supervised by a faculty member. Prerequisite: Approval of instructor.

ATTC 4860 - Automotive Standards, Laws, and Regulations (3)

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. Prerequisite: ATTC 3000.

ATTC 5920 - Short Courses and Workshops (1-4)

Consult the semester class schedule for the current offerings under this number.

AUSV-Automotive Service Technology Courses

AUSV 1000 - Introduction to Automotive Service (3)

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. (This course is a prerequisite for all automotive service courses.)

AUSV 1001 - Collision Repair Fundamentals and Estimating (2)

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.

AUSV 1020 - Braking, Steering, Suspension, and Climate Control Systems (8)

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. Prerequisite: AUSV 1000, AUSV

1325. (AUSV 1020 is equivalent to AUSV 1021, AUSV 1022, and AUSV 2320.)

AUSV 1021 - Automotive Braking Systems (3)

Theory, operation, diagnosis, and repair of braking systems. (AUSV 1021, AUSV 1022, and AUSV 2320 are equivalent to AUSV 1000, AUSV 1020.)

AUSV 1022 - Steering and Suspension Systems (2)

Theory, operation, diagnosis, and repair of steering and suspension systems. (AUSV 1021, AUSV 1022, and AUSV 2320 are equivalent to AUSV 1000, AUSV 1020.)

AUSV 1030 - Honda Braking, Steering, Suspension, and Climate Control Systems (8) not currently offered

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. Prerequisite: AUSV 1000, AUSV 1335. (AUSV 1030 is comprised of AUSV 1031, AUSV 1032 and AUSV 2330.)

AUSV 1031 - Honda Braking Systems (3) not currently offered

Theory, operation, diagnosis, and repair of Honda braking systems. Prerequisite: AUSV 1000. (AUSV 1030 is equivalent to AUSV 1031, AUSV 1032, and AUSV 2330.)

AUSV 1032 - Honda Steering and Suspension Systems (2) not currently offered

Theory, operation, diagnosis, and repair of Honda steering and suspension systems. (AUSV 1031, AUSV 1032, and AUSV 2330 are equivalent to AUSV 1000, AUSV 1030.)

AUSV 1040 - General Motors Braking, Steering, Suspension and Climate Control Systems (8)

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. Prerequisite: AUSV 1000, AUSV 1345. (AUSV 1040 is comprised of AUSV 1041, AUSV 1042 and AUSV 2340.)

AUSV 1041 - General Motors Braking Systems (3)

Theory, operation, diagnosis, and repair of General Motors braking systems. (AUSV 1040 is equivalent to AUSV 1041, AUSV 1042, and AUSV 2340). Prerequisite: AUSV 1000, AUSV 1345.

AUSV 1042 - General Motors Steering and Suspension Systems (2)

Theory, operation, diagnosis, and repair of General Motors steering and suspension systems. Prerequisite: AUSV 1000, AUSV 1345. (AUSV 1041, AUSV 1042, and AUSV 2340 are equivalent to AUSV 1000, AUSV 1040.)

AUSV 1050 - Chrysler Braking, Steering, Suspension and Climate Control Systems (8)

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. Prerequisite: AUSV 1000, AUSV 1355. (AUSV 1050 is comprised of AUSV 1051, AUSV 1052 and AUSV 2350.)

AUSV 1051 - Chrysler Braking Systems (3)

Theory, operation, diagnosis, and repair of Chrysler braking systems. Prerequisite: AUSV 1000, AUSV 1355. (AUSV 1050 is equivalent to AUSV 1051, AUSV 1052, and AUSV 2350.)

AUSV 1052 - Chrysler Steering and Suspension Systems (2)

Theory, operation, diagnosis, and repair of Chrysler steering and suspension systems. Prerequisite: AUSV 1000, AUSV 1355. (AUSV 1051, AUSV 1052, and AUSV 2350 are equivalent to AUSV 1000, AUSV 1050.)

AUSV 1060 - Toyota Braking, Steering, Suspension, and Climate Control Systems (8)

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. Prerequisite: AUSV 1000, AUSV 1365. (AUSV 1060 is comprised of AUSV 1061, AUSV 1062 and AUSV 2360.)

AUSV 1061 - Toyota Braking Systems (3)

Theory, operation, diagnosis, and repair of Toyota braking systems. Prerequisite: AUSV 1000, AUSV 1365. (AUSV 1060 is equivalent to 1061, AUSV 1062 and AUSV 2360.)

AUSV 1062 - Toyota Steering and Suspension Systems (3)

Theory, operation, diagnosis, and repair of Toyota steering and suspension systems. Prerequisite/Co-requisite: AUSV 1000. (AUSV 1061, AUSV 1062, and AUSV 2360 are equivalent to AUSV 1000, AUSV 1060.)

AUSV 1071 - H D Truck Brakes (2)

Operation, diagnosis, inspection, and repair of air brake systems. Equivalent to DATC proficiency #48530, 48601.

AUSV 1072 - H D Truck Steering & Suspension (3)

Operation, diagnosis, and repair of heavy duty steering and suspension systems. Equivalent to DATC proficiency #48540, 48550.

AUSV 1080 - Non-Structural Analysis and Damage Repair 1 (4)

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. Prerequisite: AUSV 1001 or instructor approval.

AUSV 1085 - Painting and Refinishing 1 (4)

Introductory course on modern automotive paint application processes. Emphasis will be placed on Panel and part preparation as well as spray and application techniques. Prerequisite: AUSV 1001 or instructor approval.

AUSV 1100 - Principles of Technology I (2)

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.

AUSV 1120 - Automotive Engines (3)

Theory, operation, diagnosis, repair, and overhaul of automotive engines. Prerequisite: AUSV 1000.

AUSV 1130 - Honda Engines (3) not currently offered

Theory, operation, diagnosis, repair, and overhaul of Honda engines. Prerequisite: AUSV 1000.

AUSV 1140 - General Motors Engines (3)

Theory, operation, diagnosis, repair, and overhaul of General Motors engines. Prerequisite: AUSV 1000.

AUSV 1150 - Chrysler Engines (3)

Theory, operation, diagnosis, repair, and overhaul of Chrysler engines. Prerequisite: AUSV 1000.

AUSV 1160 - Toyota Engines (4)

Theory, operation, diagnosis, repair, and overhaul of Toyota engines. Prerequisite: AUSV 1000.

AUSV 1170 - H D Truck Engines (5)

Operational principles, diagnosis and complete overhaul of diesel engines. Equivalent to DATC proficiency #48140, 48141, 48142, 48143, 48160, 48162, 48163.

AUSV 1180 - Structural Analysis and Damage Repair 1 (4)

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. Prerequisite: AUSV 1001 or instructor approval.

AUSV 1200 - Principles of Technology II (2)

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. Prerequisite: AUSV 1000.

AUSV 1220 - Automotive Manual Drivetrain Systems (3)

Theory, operation, diagnosis, maintenance, and overhaul of manual transmissions and transaxles, front and rear drive axles and differentials, drivelines, and transfer cases. Prerequisite: AUSV 1000.

AUSV 1230 - Honda Manual Drivetrain Systems (3) not currently offered

Theory, operation, diagnosis, maintenance, and overhaul of Honda manual transmissions and transaxles, drive axles and differentials, drivelines, and transfer units. Prerequisite: AUSV 1000.

AUSV 1240 - General Motors Manual Drivetrain Systems (3)

Theory, operation, diagnosis, maintenance, and overhaul of General Motors manual transmissions and transaxles, front and rear drive axles and differentials, drivelines, and transfer cases. Prerequisite: AUSV 1000.

AUSV 1250 - Chrysler Manual Drivetrain Systems (3)

Theory, operation, diagnosis, maintenance, and overhaul of Chrysler manual transmissions and transaxles, front and rear drive axles and differentials, drivelines, and transfer cases. Prerequisite: AUSV 1000.

AUSV 1260 - Toyota Manual Drivetrain Systems (3)

Theory, operation, diagnosis, maintenance, and overhaul of Toyota manual transmissions and transaxles, front and rear drive axles and differentials, drivelines, and transfer cases. Prerequisite: AUSV 1000.

AUSV 1270 - H D Truck Drive Mechanisms (8)

Theory, operation, diagnosis, and overhaul of the clutch, transmission, drive lines, differentials, and wheel bearings. Equivalent to DATC proficiency #48401, 48403, 48603.

AUSV 1300 - Technical Mathematics (3)

Measurements, common and decimal fractions, square roots, surfaces, columns, capacities. Principles of algebra and geometry.

AUSV 1320 - Automotive Electronics (4)

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. Prerequisite: (Recommended) AUSV 1000.

AUSV 1325 - Automotive Electronics, Electrical and Body Control Systems (7)

Electrical fundamentals, use of meters and wiring diagrams, wiring repair. Theory, diagnosis, and repair of computer inputs, outputs, and communication systems, 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 service tools is emphasized. (AUSV 1320, AUSV 2120 are equivalent to AUSV 1325.)

AUSV 1330 - Honda Automotive Electronics (4) not currently offered

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. Prerequisite: (Recommended) AUSV 1000.

AUSV 1335 - Honda Electronics, Electrical and Body Control Systems (7) not currently offered

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.)

AUSV 1340 - General Motors Automotive Electronics (4)

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. Prerequisite: (Recommended) AUSV 1000.

AUSV 1345 - General Motors Electronics, Electrical and Body Control Systems (7)

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 (4)

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. Prerequisite: (Recommended) AUSV 1000.

AUSV 1355 - Chrysler Electronics, Electrical and Body Control Systems (7)

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.)

AUSV 1360 - Toyota Automotive Electronics (4)

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. Prerequisite: (Recommended) AUSV 1000.

AUSV 1365 - Toyota Electronics, Electrical and Body Control Systems (7)

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.)

AUSV 1400 - Automotive Fundamentals (2)

Operation, diagnosis and repair of selected automotive systems, as well as general auto shop orientation for beginners and non-automotive majors.

AUSV 1890 - Cooperative Work Experience (1-6)

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 Control Systems (3)

Theory, operation, diagnosis, and repair of automotive fuel systems, OBD-II and Tier-2 emission control systems, and ignition systems. (AUSV 1120, AUSV 2020 are equivalent to AUSV 2625.) Prerequisite: AUSV 1000, AUSV 1325.

AUSV 2030 - Honda Engine Control Systems (3) not currently offered

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.) Prerequisite: AUSV 1000, AUSV 1335.

AUSV 2040 - General Motors Engine Control Systems (3)

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.) Prerequisite: AUSV 1000, AUSV 1345.

AUSV 2050 - Chrysler Engine Control Systems (3)

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.) Prerequisite: AUSV 1000, AUSV 1355.

AUSV 2060 - Toyota Engine Control Systems (6)

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.) Prerequisite: AUSV 1000, AUSV 1365.

AUSV 2080 - Painting and Refinishing 2 (4)

Advanced surface preparation and application of modern paint system. Color matching, blending and complete vehicle refinishing. I-CAR training modules are included. Prerequisite: AUSV 1085 or instructor approval.

AUSV 2085 - Non-Structural Analysis and Damage Repair 2 (4)

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. Prerequisite: AUSV 1080 or instructor approval.

AUSV 2120 - Automotive Electrical and Body Control Systems (3)

Theory, diagnosis, and repair of 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 1320, AUSV 2120 are equivalent to AUSV 1325.) Prerequisite: (Recommended) AUSV 1000. Prerequisite: AUSV 1320.

AUSV 2130 - Honda Electrical and Body Control Systems (3) not currently offered

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.) Prerequisite: (Recommended) AUSV 1000. Prerequisite: AUSV 1330.

AUSV 2140 - General Motors Electrical and Body Control Systems (3)

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.) Prerequisite: (Recommended) AUSV 1000. Prerequisite: AUSV 1340.

AUSV 2150 - Chrysler Electrical and Body Control Systems (3)

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.) Prerequisite: (Recommended) AUSV 1000. Prerequisite: AUSV 1350.

AUSV 2160 - Toyota Electrical and Body Control Systems (3)

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.) Prerequisite: (Recommended) AUSV 1000. Prerequisite: AUSV 1360.

AUSV 2170 - H D Truck Electrical Systems (3)

Theory, operation, diagnosis and repair of batteries, starting, charging and electrical accessories. Equivalent to DATC proficiency #48304, 48305.

AUSV 2180 - Structural Analysis and Damage Repair 2 (3)

Expands on techniques and skills learned in AUSV 1180. Emphasis will be placed on advanced frame and unibody repair techniques and methods. Prerequisite: AUSV 1180 or instructor approval.

AUSV 2270 - H D Truck Engine Diagnosis (3)

Engine starting, diagnosis, fuel pump timing, compression and cylinder leakage testing, and tune-up. Equivalent to DATC proficiency #48144, 48164, 48302.

AUSV 2320 - Automotive Climate Control Systems (3)

Theory, operation, diagnosis and repair of climate control systems. (AUSV 1020 is equivalent to AUSV 1021, AUSV 1022, and AUSV 2320). Prerequisite: AUSV 1000, AUSV 1320.

AUSV 2330 - Honda Climate Control Systems (3) not currently offered

Theory, operation, diagnosis and repair of Honda climate control systems. (AUSV 1030 is equivalent to AUSV 1031, AUSV 1032 and AUSV 2330.) Prerequisite: AUSV 1000, AUSV 1330.

AUSV 2340 - General Motors Climate Control Systems (3)

Theory, operation, diagnosis and repair of General Motors climate control systems. (AUSV 1040 is equivalent to AUSV 1041, AUSV 1042 and AUSV 2340.) Prerequisite: AUSV 1000, AUSV 1340.

AUSV 2350 - Chrysler Climate Control Systems (3)

Theory, operation, diagnosis and repair of Chrysler climate control systems. (AUSV 1050 is equivalent to AUSV 1051, AUSV 1052 and AUSV 2350.) Prerequisite: AUSV 1000, AUSV 1350.

AUSV 2360 - Toyota Climate Control Systems (3)

Theory, operation, diagnosis and repair of Toyota climate control systems. (AUSV 1060 is equivalent to AUSV 1061, AUSV 1062 and AUSV 2360.) Prerequisite: AUSV 1000, AUSV 1360.

AUSV 2370 - H D Truck Air Conditioning (2)

Operation, environmental concerns, diagnosis and repair of air conditioning and heating systems and components. Equivalent to DATC proficiency #48800, 48801.

AUSV 2480 - Auto Body Business Practices (2)

Estimating, scheduling work, purchasing, inventory, insurance practices and applied customer relations.

AUSV 2520 - Automatic Transmissions (4)

Theory, operation, diagnosis and overhaul procedures of automatic transmissions. Prerequisite: AUSV 1000, AUSV 1325.

AUSV 2530 - Honda Automatic Transmissions (4) not currently offered

Theory, operation, diagnosis and overhaul procedures of Honda automatic transmissions. Prerequisite: AUSV 1000, AUSV 1335.

AUSV 2540 - General Motors Automatic Transmissions (4)

Theory, operation, diagnosis and overhaul procedures of General Motors automatic transmissions. Prerequisite: AUSV 1000, AUSV 1345.

AUSV 2550 - Chrysler Automatic Transmissions (4)

Theory, operation, diagnosis and overhaul procedures of Chrysler automatic transmissions. Prerequisite: AUSV 1000, AUSV 1355.

AUSV 2560 - Toyota Automatic Transmissions (4)

Theory, operation, diagnosis and overhaul procedures of Toyota automatic transmissions. Prerequisite: AUSV 1000, AUSV 1365.

AUSV 2625 - Engine Mechanical and Engine Control Systems (6)

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.) Prerequisite: AUSV 1000, AUSV 1325.

AUSV 2635 - Honda Engine Mechanical and Engine Control Systems (6) not currently offered

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.) Prerequisite: AUSV 1000, AUSV 1335.

AUSV 2645 - General Motors Engine Mechanical and Engine Control Systems (6)

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.) Prerequisite: AUSV 1000, AUSV 1345.

AUSV 2655 - Chrysler Engine Mechanical and Engine Control Systems (6)

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.) Prerequisite: AUSV 1000, AUSV 1355.

AUSV 2665 - Toyota Engine Mechanical and Engine Control Systems (6)

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.) Prerequisite: AUSV 1000, AUSV 1365.

AUSV 2860 - Automotive Shop Practice (3-8)

Provides an opportunity to practice skills needed by Automotive Service technicians derived from classroom and shop experience. Simulates line mechanic work. Prerequisite: Instructor approval required.

AUSV 2880 - Cooperative Practicum (3-8)

Supervised work experience, at the sponsoring dealership, which applies directly to previous academic courses. Full-time employment and approval of faculty supervisor required.

AUSV 2890 - Cooperative Work Experience (1-6)

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 (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

BIS-Bachelor of Integrated Studies Courses

BIS 3800 - BIS Capstone and Graduation Preparation (2)

This course provides BIS students with a foundation for the capstone project, as well as helping them to professionalize themselves in preparation for life after graduation. BIS 3800 is a required prerequisite for BIS 4800.

BIS 3850 - BIS Internship (1-3)

The Bachelor of Integrated Studies Program (BIS) offers BIS students the opportunity to earn 1 to 3 elective credit/no credit credits for a work internship. Prerequisite: For requirements and guidelines, contact the BIS office.

BIS 4800 - Bachelor of Integrated Studies Senior Capstone (3)

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. Prerequisite: BIS 3800.

BSAD-Business Administration Courses

BSAD 1010 - Introduction to Business (3) Su, F, Sp

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 2704 TD - Information Resources in the Business Disciplines (1)

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. Completion of this course meets part D of the WSU Computer and Information Literacy requirement. Cross listed with LIBS 2704.

BSAD 2899 - Business Foundations and Admission Assessment (0) Su, F, Sp

Completion of BSAD 2899 is required of all students pursuing any major, minor, emphasis or certificate awarded by the John B. Goddard School of Business & Economics. The course objectives are: 1) assessment of Business Foundation knowledge, and 2) admittance to the Goddard School. Students must have an overall GPA of 2.5 or higher and a Business Foundation GPA of 2.5 or higher and a minimum grade of "C-" in each of the five Business Foundation courses. *Credit/No credit*. Pre/Co-requisite: ACTG 2010, ECON 2010, ECON 2020, IST 2010, QUAN 2600. Department registration approval is required. Students should register for this course concurrent with (same semester as) their last Business Foundation course (ACTG 2010, ECON 2010, ECON 2020, IST 2010 and QUAN 2600) or after the required Business Foundation courses have been completed.

BSAD 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-6)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

BSAD 3000 - Small Business Management (3) Su, F, Sp

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 (3) Su, F, Sp

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 (3) Su, F, Sp

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. Prerequisite: Business Foundations; BSAD 2899, BSAD 3200.

BSAD 3500 - Introduction to Business Research (3) F

Introduces students to gathering and analyzing primary and secondary data for a wide range of business applications, such as assessing customer or employee satisfaction. Students are introduced to CD ROM databases, other library resources, questionnaire development and administration, basic data analysis, and research report writing. Prerequisite: Business Foundations; BSAD 2899, QUAN 3610.

BSAD 3600 - [World Region] Business and Society (3)

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. Prerequisite: (Recommended) 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 (3) F, Sp

An overview of sales, negotiable instruments, property, and debtor/ creditor relations and other selected legal topics. Prerequisite: Business Foundations; BSAD 2899, BSAD 3200.

BSAD 4401 - E-Commerce (3)

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. Prerequisite: MKTG 3010 or concurrent enrollment in MKTG 3010.

BSAD 4500 - Entrepreneurship (3) Sp

Integration of various functional areas of business as they relate to evaluating, creating, planning, and managing new business ventures. Prerequisite: Business Foundations; BSAD 2899; MKTG 3010; MGMT 3010, MGMT 3200.

BSAD 4620 - Executive Lectures (1) F, Sp

This course is designed to acquaint the students with successful executives, their personal styles and philosophies as leaders, and the keys to their effectiveness. The course may be repeated for credit to a maximum of two credit hours. *Credit/No credit.* The format is a series of weekly one-hour lectures delivered by guest executives.

BSAD 4680 - Small Business Diagnostics (3) F, Sp

Senior level class. Diagnostic analysis of small business issues through the use of case studies. 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. Prerequisite: Business Foundations; BSAD 2899; Senior-level student; Instructor approval.

BSAD 4780 - Strategic Management (3) F, Sp

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. Prerequisite: Business Foundations; BSAD 2899, BSAD 3200, SCM 3050, FIN 3200, MGMT 3010, MGMT 3200 or NTM 3250, MKTG 3010, Senior standing.

BSAD 4800 - Independent Research (1-3) Su, F, Sp

Directed research and study on an individual basis. May be repeated until a total of 4 hours credit is accumulated. Prerequisite: Business Foundations; BSAD 2899; Senior Standing; Written Instructor Approval.

BSAD 4850 - Business Administration Study Abroad (1-3)

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). Prerequisite: BSAD 2899. Can be repeated once up to 6 credits.

BSAD 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

BTNY-Botany Courses

BTNY 1203 LS - Plant Biology (3) Su, F, Sp

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 in Human Affairs (3) Su, F, Sp

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 (3) Sp

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 - Environment Appreciation (3-4) Su, F, Sp

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. This course can be taken for 3 or 4 credits with the fourth credit based on a major research paper or project on an environmental issue. This class cannot be repeated for upper division credit (BTNY 3403). Three hours of lecture per week.

BTNY 2104 - Plant Form and Function (4) F, Sp

A study of the structure, function, and reproduction of seed plants. 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.

Botany majors are advised to take BTNY 2121 prior to or concurrently with this course.

BTNY 2114 - Evolutionary Survey of Plants (4) F, Sp

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. Botany majors are advised to take BTNY 2121 prior to or concurrently with this course.

BTNY 2121 - Career Planning for Botanists (1) F, Sp

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. Botany majors are advised to take this course concurrently with BTNY 2104 or BTNY 2114.

BTNY 2203 - Home and Garden Plants (3) Sp

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 DV - Ethnobotany (3) F, Sp

A global study of how plants are used by indigenous peoples for food, fiber, fabric, shelter, medicine, weapons, and tools. Plants that are well known to science as well as those with purported uses by villagers, shamans, curanderos and medicine men/women will be studied. 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 (3) F

Introduces students, especially those interested in forestry and range management, to concepts and ideologies in the utilization and preservation of forests, range, soils, wild-life, water and fisheries, and the human impact on these resources. Three hours of lecture per week.

BTNY 2600 - Laboratory Safety (1) F, Sp

An interdisciplinary, team-taught 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.

BTNY 2830 - Readings in Botany (1) F, Sp

Cannot be repeated.

BTNY 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-4)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

BTNY 2950 - Elementary Field Botany (1-2) Sp

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.

BTNY 3105 - Anatomy and Morphology of Vascular Plants (5) F

The development of cell types, tissues, organs, and reproductive structures in higher plants. Variations in the development and morphology of plant organs will be examined. Three hours of lecture and two 2-hour labs per week. Prerequisite: BTNY 2104.

BTNY 3153 - Biology of the Plant Cell (3) Sp (odd numbered years)

A study of plant cell structure and function, including biogenesis and activities of organelles, signal transduction, cell-cell interactions, and molecular processes involved in cellular development and responses. Three hours of lecture per week. Prerequisite: BTNY 2104, CHEM 1050 or CHEM 1120 or CHEM 2310.

BTNY 3204 - Plant Physiology (4) Sp (even numbered years)

A study of the physiological processes of plants, including carbon metabolism, mineral assimilation, water relations, and phytohormones. Two hours of lecture and two 3-hour labs per week. Prerequisite: BTNY 2104, CHEM 1050 or CHEM 1120 or CHEM 2310, and MATH 1050 or MATH 1080.

BTNY 3214 - Soils (4) F

Fundamentals of soils as related to agriculture, natural resource management, and horticulture. Three hours of lecture and one 3-hour lab per week. Prerequisite: BTNY 2104, or GEO 1110, and CHEM 1050 or CHEM 1110 or CHEM 1210.

BTNY 3303 - Plant Genetics (3) F

The principles of classical (Mendelian) and molecular genetics as applied to plants. Two hours of lecture and one 2-hour lab/discussion per week. Prerequisite: BTNY 2104 or MICR 2054, and CHEM 1050 or CHEM 1120 or CHEM 2310, and MATH 1050 or MATH 1080.

BTNY 3403 - Environment Appreciation (3) Su, F, Sp

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 of 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 per week. An in-depth research paper on an environmental issue and an in-class lecture are required. Prerequisite: BTNY 2104 or BTNY 2114. Cannot be repeated for lower division credit (BTNY 1403).

BTNY 3454 - Plant Ecology (4) F

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. Prerequisite: BTNY 2114, and MATH 1050 or MATH 1080.

BTNY 3473 - Plant Geography (3) Sp (odd numbered years)

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. Prerequisite: BTNY 2114.

BTNY 3504 - Mycology (4) F (odd numbered years)

Structure, taxonomy, biology, and physiology of the fungi. Two hours of lecture and two 2-hour labs per week. Prerequisite: BTNY 2104 and BTNY 2114, or MICR 2054.

BTNY 3514 - Algology (4) F (even numbered years)

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. Prerequisite: BTNY 2104 and BTNY 2114, or MICR 2054, or ZOO 4480.

BTNY 3523 - Marine Biology (3) Sp

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. Prerequisite: BTNY 2114, or ZOO 1110, or MICR 2054, or GEO 3010.

BTNY 3570 - Foundations of Science Education (3)

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 - Herbal Medicines (3) Sp (even numbered years)

A study of the most widely used herbal preparations for use in maintaining health and treating disease. Modern use, contraindications, side effects and drug interactions will be studied. Students will also learn how to make some extractions and preparations from plant materials. This course is especially useful for students interested in careers in Ethnobotany, Natural Medicine, Nursing and Medicine. Three hours of lecture per week. Prerequisite: BTNY 2303.

BTNY 3624 - Taxonomy of Vascular Plants (4) Sp

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. Prerequisite: BTNY 2114.

BTNY 3643 - Intermountain Flora (3) F

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. Prerequisite: BTNY 3624.

BTNY 4113 - Plant Evolution (3)

An exploration of fundamentals and issues of evolution through natural selection as it relates to plants including reproduction strategies, co-evolution, evolution of ecosystems, biochemical evolution and genomic evolution. Prerequisite: BTNY 2104, BTNY 2114, BTNY 3105, and BTNY 3303 or ZOO 3300.

BTNY 4252 - Cell Culture (2)

Basic methods and applications for culturing plant and animal cells in vitro. Two 2-hour combined lecture and laboratory sessions per week. Prerequisite: BTNY 2104, or MICR 2054. cross-listed with Microbiology

BTNY 4570 - Secondary School Science Teaching Methods (3)

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. Prerequisite: Admission to the Teacher Education Program.

BTNY 4750 - Topics in Botany (1-5)

An intensive exploration of selected issues in the discipline. The specific title and credit authorized will appear on the student transcript. Prerequisite: BTNY 2104 and BTNY 2114, and any specified courses selected by the instructor.

BTNY 4800 - Individual Research (2) F, Sp

Course may be repeated. Prerequisite: BTNY 2104 and BTNY 2114 and BTNY 2121, two upper division Botany courses, and approval of instructor.

BTNY 4830 - Readings in Botany (2) F, Sp

Course may be repeated. Prerequisite: BTNY 2104 and BTNY 2114 and BTNY 2121, two upper division Botany courses, and approval of instructor.

BTNY 4840 - Thesis Readings (2) F, Sp

Literature search and evaluation, culminating in the writing of a thesis proposal. Prerequisite: BTNY 2104 and BTNY 2114 and BTNY 2121, two upper division Botany courses, and approval of thesis advisor.

BTNY 4850 - Thesis Research (2) F, Sp

Independent research related to a student's approved thesis proposal. May be repeated as long as satisfactory progress is being made on the thesis topic. Prerequisite: BTNY 4840 and approval of thesis advisor.

BTNY 4890 - Cooperative Work Experience (1-6)

Open to all students in the Botany 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. Prerequisite: Two upper-division Botany courses.

BTNY 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-4)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. Prerequisite: BTNY 2104 and BTNY 2114 and BTNY 2121, and any specified courses selected by the instructor.

BTNY 4950 - Advanced Field Botany (1-5) Sp

A concentrated study of the flora of a specific geographical region or an extended, organized field trip under supervision. The course involves extensive pre- and post-trip exercises and evaluation. Prerequisite: At least one upper division Botany course and specified courses selected by the instructor for a specific field trip as indicated in the schedule, and with consent of the instructor.

BTNY 4970 - Botany Thesis (2) F, Sp

Written and oral presentation of thesis research results and evaluation. Also includes final evaluation of the student's portfolio and taking of Botany graduation assessment examination. Prerequisite: BTNY 4850 and approval of thesis advisor.

BTNY 4980 - Portfolio Summative Assessment (3) F, Sp

Final evaluation of the Botany Student Portfolio. Prerequisite: Completion of or concurrent enrollment in courses needed to meet the minimum requirements for a degree in Botany.

BTNY 4990 - Seminar in Botany (1) F, Sp

Oral presentation of either library research or individual research. Final evaluation of the student's portfolio and taking of Botany graduation assessment examination. The

course is to be taken the last semester of the senior year. Prerequisite: Completion of or concurrent enrollment in courses needed to meet the minimum requirements for a degree in Botany.

BTNY 5030 - Botany for Teachers (2-5)

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. Course may be repeated. Contract must be approved by instructor, department chair, and Director of the Master of Education Program.

CEET-Electronics Engineering Technology Courses

CEET 1110 - Basic Electronics (2) F, Sp

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. Prerequisite: Credit for or concurrent enrollment in MATH 1010 or higher.

CEET 1130 - Digital Systems (4) F, Sp

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. Prerequisite: Credit for or concurrent enrollment in MATH 1010 or higher.

CEET 1140 - AC and DC Circuits (4) F, Sp

Introduction to AC and DC circuit fundamentals, analysis, theorems, laws, components, measuring devices, and equipment. The introduction and use of measuring instruments, power supplies, and signal generators. Lecture and lab combination. Laboratory activities to include circuit design, construction, and analysis of AC/DC circuits. Prerequisite: CEET 1110 and credit for or concurrent enrollment in MATH 1060 or MATH 1080.

CEET 1850 - Industrial Electronics (4) Sp

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. Prerequisite: MATH 1010.

CEET 2110 - Semiconductor Circuits (4) F

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. Prerequisite: CEET 1140.

CEET 2120 - Power and Motors (4) F

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. Prerequisite: CEET 1140.

CEET 2130 - PC Board Design (3) Sp

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. Prerequisite: CEET 2110.

CEET 2140 - Communications Systems (4) Sp

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. Prerequisite: CEET 2110.

CEET 2150 - Embedded Controllers (4) F, Sp

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. Prerequisite: CEET 1130.

CEET 2160 - Troubleshooting (3) Sp

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. Prerequisite: CEET 2110 and CEET 2150.

CEET 2170 - Industrial Controls (3) F

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. Prerequisite: CEET 1140.

CEET 3010 - Circuit Analysis (4) F

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. CEET 2110 and MATH 1210.

CEET 3020 - Active Filters (4) Sp

Continuation of Circuit Analysis, CEET 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. Prerequisite: CEET 3010.

CEET 3030 - FPGA and ASIC Design (4) F

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. Prerequisite: CEET 2150.

CEET 3040 - Instrumentation and Measurements (4) F

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. Prerequisite: CEET 2110.

CEET 3050 - Assembly Language & Device Drivers (4) Sp

Small computer architecture, computer I/O, graphics, assembly language fundamentals, BIOS, device drivers, advanced assembly language techniques. Lecture and lab combination. Laboratory activities to include design, simulation, computer programming, analysis, and troubleshooting. Prerequisite: CEET 2150.

CEET 3060 - Real-Time Embedded Controllers (4) Sp

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. Prerequisite: CEET 2150.

CEET 3070 - Engineering Technology Research (3) F, Sp

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. Prerequisite: AAS degree in CET or EET.

CEET 3080 - Embedded Networks (4) Sp

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. Prerequisite: CEET 2150.

CEET 3090 - Project Management (2) Sp

An introduction to project management. The course prepares students for Senior Projects. Course will include the writing of contracts, goal setting, project leadership and team building principles of engineering economics, team work, quality, statistics, and continuous improvement will be discussed. Other topics include project life cycles, organization, and risk management. Project scheduling and performance will be discussed. The course will be taught as a seminar.

CEET 4010 - Senior Project I (2) F

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. Prerequisite: CEET 3090.

CEET 4020 - Senior Project II (2) Sp

A continuation of CEET 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. Prerequisite: CEET 4010.

CEET 4030 - Controls & Systems (4) F

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. Prerequisite: CEET 3010.

CEET 4040 - Signals and Systems (4) Sp

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. Prerequisite: CEET 3010.

CEET 4060 - Advanced Communications (4)

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. Prerequisite: CEET 3010.

CEET 4090 - Systems Design and Integration (3) F

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. Example systems from biomedical, aerospace, and manufacturing will be explored. Prerequisite: CEET 3010

CEET 4800 - Individual Studies (1-4) F, Sp

The student will receive credit for approved studies in an area not covered in the CEET program. A maximum of four credits can be counted as electives for CEET majors.

CEET 4890 - Cooperative Work Experience (2) F, Sp

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. Two credits are required for the BS CET and EET major. The course can be taken a maximum of three times for a total of 6 credits.

CEET 4900 - Special Topics (1-4) F, Sp

A one-time special study course designed to introduce a new relevant topic that is not covered in the CEET program. Lecture and lab combination. Laboratory activities to support the selected course topic. A maximum of four credits can be counted for CEET majors.

CHEM-Chemistry Courses

CHEM 1010 PS - Introductory Chemistry (3) Su, F, Sp

A lecture-demonstration course for students with no previous chemistry background who are not majoring in areas requiring further chemistry. Three hours of lecture-demonstration a week.

CHEM 1050 PS - Introduction to General, Organic & Biochemistry (5) Su, F, Sp

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. Four hours of lecture and one 3-hour lab a week.

CHEM 1055 - Introduction to General, Organic & Biochemistry Lab (1)

CHEM 1055 is a stand-alone lab course designed to accommodate transfer students from other universities. CHEM 1055 registration will be allowed only by special permission from the Chemistry Department Chair. Transfer students who have taken the CHEM 1050 lecture or equivalent without the lab should petition the Chemistry Department Chair for permission to take this course. Prerequisite: Must have completed or be currently enrolled in CHEM 1050 lecture or equivalent.

CHEM 1110 PS - Elementary Chemistry (5) Su, F, Sp

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 will take no more than one year of chemistry. Four hours of lecture and one 3-hour lab a week.

CHEM 1115 - Elementary Chemistry Lab (1)

CHEM 1115 is a stand-alone lab course designed to accommodate transfer students from other Universities. CHEM 1115 registration will be allowed only by special permission from the Chair of Chemistry. Transfer students who have taken the CHEM lecture without the lab should petition the Chair of the Chemistry Department for permission to take this course. Prerequisite: Must have completed or currently be enrolled in CHEM 1110 lecture.

CHEM 1120 - Elementary Organic Bio-Chemistry (5) Sp

Elementary study of the compounds of carbon and chemical compounds and reactions of biological systems. Four hours of lecture and one 3-hour lab a week. Prerequisite: CHEM 1110 or equivalent.

CHEM 1125 - Elementary Organic Bio-Chemistry Lab (1)

CHEM 1125 is a stand-alone lab course designed to accommodate transfer students from other Universities. CHEM 1125 registration will be allowed only by special permission from the Chair of Chemistry. Transfer students who have taken the CHEM 1120 lecture without the lab should petition the Chair of the Chemistry Department for permission to take this course. Prerequisite: Must have completed or currently be enrolled in CHEM 1120 lecture.

CHEM 1200 - Preparation for College Chemistry (3) Su, F, Sp

A course designed to provide the minimal prerequisite skills needed for entry into CHEM 1210. Three hours of lecture per week.

CHEM 1210 PS - Principles of Chemistry I (5) Su, F, Sp

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. The fundamental principles of chemistry with laboratory emphasis upon qualitative and quantitative methods of analysis. Four hours of lecture and one 3-hour lab a week. Prerequisite: MATH 1010 or equivalent and a chemistry course equivalent to high school chemistry or CHEM 1200.

CHEM 1215 - Principles of Chemistry I Lab (1)

CHEM 1215 is a stand-alone lab course designed to accommodate transfer students from other Universities. CHEM 1215 registration will be allowed only by special permission from the Chair of Chemistry. Transfer students who have taken the CHEM 1210 lecture without the lab or High School AP students should petition the Chair of the Chemistry Department for permission to take this course. Prerequisite: Must have completed or currently be enrolled in CHEM 1210.

CHEM 1220 - Principles of Chemistry II (5) Su, F, Sp

Second semester of principles of chemistry. Four hours of lecture and one 3-hour lab a week. Prerequisite: CHEM 1210.

CHEM 1225 - Principles of Chemistry II Lab (1)

CHEM 1225 is a stand-alone lab course designed to accommodate transfer students from other Universities. CHEM 1225 registration will be allowed only by special permission from the Chair of Chemistry. Transfer students who have taken the CHEM 1220 lecture without the lab, or High School AP students should petition the Chair of the Chemistry Department for permission to take this course. Prerequisite: Must have completed or currently be enrolled in CHEM 1220 lecture.

CHEM 1360 PS - Principles of Physical Science (3) F

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 (4) Su, F, Sp

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. Prerequisite: CHEM 1220. Co-Requisite: Must have completed or currently be enrolled in CHEM 2315 lab.

CHEM 2315 - Organic Chemistry I Lab (1)

Lab course designed to be taken with CHEM 2310. Includes organic laboratory techniques, synthesis, product isolation, spectroscopy and analysis. Prerequisite: CHEM 1220. Co-Requisite: Must have completed or currently be enrolled in CHEM 2310 lecture.

CHEM 2320 - Organic Chemistry II (4) Su, F, Sp

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. Prerequisite: CHEM 2310 and CHEM 2315. Co-Requisite: Must have completed or currently be enrolled in CHEM 2325 lab.

CHEM 2325 - Organic Chemistry II Lab (1)

Lab course designed to be taken with CHEM 2320. Includes organic laboratory techniques, synthesis, product isolation, spectroscopy and analysis. Prerequisite: CHEM 2310 and CHEM 2315. Co-Requisite: Must have completed or currently be enrolled in CHEM 2320 lecture.

CHEM 2600 - Laboratory Safety (1)

An interdisciplinary, team-taught 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.

CHEM 2890 - Cooperative Work Experience (1-6)

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.

CHEM 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the class schedule for the current offering under this number. The specific title with the credit authorized will appear on the student transcript.

CHEM 2990 - Chemical Technician Seminar (1) Sp

A course designed to provide the skills necessary to enter the job market as a Chemical Technician. One hour of lecture/discussion a week. Prerequisite: CHEM 1220.

CHEM 3000 - Quantitative Analysis (4) F, Sp

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. Prerequisite: CHEM 1220. Prerequisite or co-requisite: CHEM 3020.

CHEM 3005 - Quantitative Analysis Lab (1)

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. Prerequisite: Must have completed or currently be enrolled in CHEM 3000 lecture.

CHEM 3020 - Computer Applications in Chemistry (1) F, Sp

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. Prerequisite: CHEM 1210.

CHEM 3050 - Instrumental Analysis (4) F, Sp

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. Prerequisite: CHEM 3000.

CHEM 3060 - Applied Analysis (1) F, Sp

Applied Analysis using modern methods of analysis with an emphasis on speed and accuracy. One 3-hour lab per week. Prerequisite: CHEM 3000. Prerequisite or co-requisite: CHEM 3050.

CHEM 3070 - Biochemistry I (4) F, Sp

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 and one three hour lab a week. Prerequisite: CHEM 2310.

CHEM 3075 - Biochemistry I Lab (1)

Stand-alone biochemistry laboratory course designed to accommodate transfer students from other universities that have taken the equivalent of CHEM 3070, Biochemistry, without the laboratory component. CHEM 3075 registration will be allowed only by special permission from the Chair of Chemistry. Prerequisite: CHEM 2310, CHEM 2315, and CHEM 3070 without laboratory.

CHEM 3080 - Biochemistry II (3) Sp

A detailed study of the molecular basis of life: nucleic acids, biosynthetic pathways, molecular aspects of disease and pharmacology. Three lectures a week. Prerequisite: CHEM 2320, CHEM 3070.

CHEM 3090 - Biochemical Techniques (1) Sp

Advanced techniques including instrumentation for biochemistry. One 3-hour lab per week. Prerequisite: CHEM 2320 and CHEM 3070. To be taken concurrently with CHEM 3080.

CHEM 3400 - Molecular Symmetry and Applied Math for Physical Chemistry (3)

An introduction to molecular symmetry, experimental error analysis, and physical chemistry applications of algebra, linear algebra, and differential equations. Prerequisite: MATH 1220. Co-Requisite: CHEM 3410.

CHEM 3410 - Physical Chemistry I (4) F

The first semester course of Physical Chemistry covering chemical thermodynamics and kinetics. Three hours of lecture and one 3-hour lab a week. Prerequisite: CHEM 3000 and PHYS 2220. Co-Requisite: CHEM 3400.

CHEM 3420 - Physical Chemistry II (4) Sp

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. Prerequisite: CHEM 3410.

CHEM 3570 - Foundations of Science Education (3)

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 4540 - Spectrometric and Separation Methods (4) Sp

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. Prerequisite: CHEM 3420 or permission of instructor.

CHEM 4550 - Geochemistry (3)

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. Prerequisite: CHEM 1220 and GEO 2050 or consent of instructor.

CHEM 4570 - Secondary School Science Teaching Methods (3)

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. Prerequisite: Admission to the Teacher Education Program.

CHEM 4600 - Inorganic Chemistry (4) Sp

A study of the elements and their compounds based on the periodic table, current theories and laboratory work. Three hours of lecture and one 3-hour lab a week. Prerequisite: CHEM 3420 or permission of instructor.

CHEM 4700 - Special Topics in Chemistry (1-3) variable title F, Sp

This course may be repeated for credit. Prerequisite: CHEM 3420 or permission of instructor.

CHEM 4710 - Chemical Preparations (1-3)

Synthesis and determination of the properties of selected chemical compounds. Three to nine hours of lab a week. Prerequisite: Permission of the instructor.

CHEM 4800 - Research and Independent Study in Chemistry (1-3) Su, F, Sp

Open to qualified students for one or more semesters. May be repeated for credit with instructor approval.

CHEM 4890 - Cooperative Work Experience (1-6)

A continuation of CHEM 2890. Open to all students.

CHEM 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

CHEM 4990 - Senior Seminar (1)

A seminar course where students will share their research results with fellow students and faculty in written and oral formats. Prerequisite: CHEM 4800 or permission of instructor.

CHEM 5030 - Chemistry for Teachers (3-5)

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. Course may be repeated. Contract must be approved by instructor, department chair, and Director of the Master of Education Program.

CHF-Child & Family Studies**CHF 1400 - Marriage as an Interpersonal Process (3)**

An introductory survey course which addresses individual, interpersonal, and developmental dynamics essential for sustaining interpersonal and marital relationships.

CHF 1500 SS - Human Development (3)

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 2100 - Family Resource Management (3)

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.

CHF 2400 - Family Relations (3)

Examines dynamics of the healthy family using family theory, individual life span development, research, and active learning experiences.

CHF 2500 - Development of the Child: Birth Through Eight (3)

Focuses on developmental characteristics, developmental processes, and events and circumstances that influence the development of a child from birth through eight years of age. Prerequisite: CHF 1500.

CHF 2570 - Middle Childhood Development (3)

Focuses on the developmental characteristics, processes, and events that influence the growth of the child during the middle childhood development period. Examines the interactive efforts that the culture, family, school and peers have on development during this period. Prerequisite: CHF 1500.

CHF 2600 - Introduction to Early Childhood Education (3)

An overview of the historical roots of early childhood education; theoretical approaches, developmentally appropriate practice, types and efficacy of early childhood programs; and political issues and ethical conduct within the early childhood profession. Two hours lecture and two hours of lab per week. Prerequisite: CHF 1500. Students enrolling in CHF 2600, CHF 2610 and CHF 2620 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. A handout available from the department secretary explains the procedure and nominal expenses. If the background check reveals misconduct, you will not be allowed to enroll in these courses or any others that include field experience, practica or student teaching. Background checks require up to eight weeks and should be completed, or in progress, prior to enrolling in CHF 2600, CHF 2610, and CHF 2620 courses. See the department secretary for further details.

CHF 2610 - Guidance Based on Developmental Theory (3)

The development of a philosophy and a plan of action for guiding the child based on theories of development. Lectures combine with laboratory experiences to provide opportunity for building relationships with young children. Students complete a minimum of 24 hours practicum arranged by the instructor. Prerequisite: CHF 1500. May be taken concurrently with CHF 2600. Students enrolling in CHF 2600, 2610 and CHF 2620 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. A handout available from the department secretary explains the procedure and nominal expenses. If the background check reveals misconduct, you will not be allowed to enroll in these courses or any others that include field experience, practica or student teaching. Background checks require up to eight weeks and should be completed, or in progress, prior to enrolling in CHF 2600, 2610, and CHF 2620 courses. See the department secretary for further details.

CHF 2620 - Planning Creative Experiences for Young Children (3)

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. Prerequisite: CHF 1500 and CHF 2610. Students enrolling in CHF 2600, CHF 2610 and 2620 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. A handout available from the department secretary explains the procedure and nominal expenses. If the background check reveals misconduct, you will not be allowed to enroll in these courses or any others that include field experience, practica or student teaching. Background checks require up to eight weeks and should be completed, or in progress, prior to enrolling in CHF 2600, CHF 2610, and 2620 courses. See the department secretary for further details.

CHF 2830 - Directed Readings (1-3) (when needed)

Individually chosen readings on specialized topics supervised by a faculty member. Prerequisite: consent of faculty supervisor prior to registration.

CHF 2850 - Child Development Associate Training (2)

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.

CHF 2860 - Practicum (2-6) (when needed)

Work experience which applies prior academic learning in a supervised setting. Prerequisite: Consent of faculty supervisor prior to registration.

CHF 2890 - Cooperative Work Experience (1-6)

Open to all students in the Child and Family Studies 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.

CHF 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4) (when needed)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

CHF 2990A - Seminar in Child Development (1)

Discussion and analysis of readings and selected topics in growth, development, and education of the young child.

CHF 2990B - Seminar in Family Studies (3)

Discussion and analysis of special topics for Family Studies majors including professional skills, professional credentials, and the development of professional ethics.

CHF 3150 - Consumer Rights and Responsibilities (3)

The role and responsibilities of the family and its members as consumers. An exploration of marketplace fact and fraud and identification of consumer resources.

CHF 3350 DV - Diverse Families (3)

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.

CHF 3450 - Adult Development (3)

Growth and development through young, middle, and late adulthood within a developmental and family system context.

CHF 3500 - Young Children at Risk (3)

Focuses on the elements of the child's history, status, biological traits, and social circumstances that have the potential of placing the child in a position of risk in early childhood settings during the early childhood period. Prerequisite: CHF 1500 or equivalent.

CHF 3550 - Parenting Education (3)

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. Prerequisite: CHF 1400, CHF 1500, and CHF 2400, or consent of instructor.

CHF 3640 - Working with Parents (3)

Prepares students to be advocates and practitioners of parent involvement by exploring philosophies, processes, and methods for working with parents and involving them in their child's learning process. Components of family structure, economics, cultural diversity, second-language learners, communication skills, community resources, and a model for parent involvement are integrated into the student experience.

CHF 3650 - Family Processes (3)

An examination of family internal dynamics and family systems for the purpose of enrichment, problem prevention and education. Prerequisite: CHF 2400.

CHF 3680 - Teaching Experience in the Preschool (3)

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. Prerequisite: CHF 1500, CHF 2610 and CHF 2620, or consent of instructor.

CHF 3850 - Current Research Methods in Child and Family Studies (3)

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. Prerequisite: CHF 1500, CHF 2400.

CHF 4300 - Latino Child and Family Development (3)

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.

CHF 4400 - The Family in Stress (3)

Examining causes of stress in the family and developing strategies for coping with stress.

CHF 4500 - Comparative Study of Childhood and Adolescent Development (3)

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. Prerequisite: CHF 1500 and CHF 2400.

CHF 4510 - Contemporary Issues in Planning for Children (1-3) Variable Title

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. Repeatable for a maximum of 6 hours.

CHF 4520 - Basic Mediation Training (3) (when needed)

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.)

CHF 4600 - Family Studies Field Experiences (1-8) (when needed)

Six to eight weeks internship, which may require off-campus residence. Credit and hours as arranged with instructor. Prerequisite: consent of instructor.

CHF 4650 - Family Life Education Methods (3)

Preparing students to be Family Life Educators by exploring philosophies, methods, and skills for teaching and working with parents and family members. Prerequisite: CHF 3350, CHF 3550, CHF 3650, and CHF 3850, or consent of instructor.

CHF 4710 - Advanced Guidance and Planning for Early Childhood Education (3)

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. 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 CHF 4720. Teacher Education majors who are K-6 candidates and not taking an early childhood specialization will register for the full semester section. Prerequisite: CHF 2610 and CHF 2620. Minors take it concurrently with CHF 4860.

CHF 4711 - Advanced Guidance and Planning for Teacher Education (3)

A synthesis of guidance and planning with an emphasis on assessment, appropriate learning objectives and strategies for individuals and specific groups of children in early learning settings. Requires both lecture and lab time. This course is intended for teacher education majors who are K-6 candidates not completing an early childhood specialization. Students majoring in EC, ECE, or taking an early childhood specialization with their K-6 license should enroll in CHF 4710 instead of 4711. Prerequisite: CHF 2610 and CHF 2620.

CHF 4720 - Student Teaching in the Children's School (3-6)

Experience in application of generalizations regarding growth, guidance, and development of children in the Children's School. For juniors and seniors. Prerequisite: EC and ECE majors: CHF 2500, CHF 2600, CHF 2610, CHF 2620 and CHF 3640. K-6 Candidates: CHF 2610 and CHF 2620. To be taken concurrently with CHF 4710. (Will be taken the last 10 weeks of the semester.)

CHF 4800 - Individual Research (1-6)

Supervised projects and primary research in various areas of Child and Family Studies. Limited to advanced students upon consent of faculty supervisor.

CHF 4830 - Directed Readings (1-3) (when needed)

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. Prerequisite: Consent of faculty supervisor prior to registration.

CHF 4860 - Practicum (2-6) (when needed)

Work or volunteer experience which applies prior academic learning in a supervised setting. Consent of faculty supervisor is required prior to registration. Prerequisite: for Family Studies Majors include CHF 3350, CHF 3550, CHF 3650, and completed background clearance.

CHF 4890 - Cooperative Work Experience (1-6) (when needed)

A continuation of CHF 2890. Consent of Instructor.

CHF 4900 - Career Strategy Seminar (1)

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.

CHF 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4) (when needed)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

CHF 4980 - Early Childhood Senior Synthesis Seminar (1)

Synthesis of Early Childhood/Elementary Education program of study with specific emphasis on beginning a professional career in teaching. Senior project not required. To be taken concurrently with student teaching.

CHF 4990A - Seminar in Child Development (1)

Discussion and analysis of special topics for advanced Early Childhood and Early Childhood Education majors. Prerequisite: Concurrent or prior enrollment in CHF 4710 and CHF 4720.

CHF 4990B - Senior Seminar in Family Studies (3)

Discussion and analysis of special topics for seniors in Family Studies major. Prerequisite: CHF 3350, CHF 3550, CHF 3650, CHF 3850, or consent of instructor.

CJ-Criminal Justice Courses

CJ 1010 SS - Introduction to Criminal Justice (3)

An introduction to the history, processes and functions of the American criminal justice system and its primary components, law enforcement, courts, and corrections.

CJ 1070 - Law Enforcement/Corrections Academy, Part I (3)

Core curriculum to provide students the basic training required to certify as a reserve or special function officer. P.O.S.T. certification only. Register through the Division of Continuing Education. Does not count for CJ credit toward major, minor or BIS.

CJ 1080 - Law Enforcement/Corrections Academy, Part II (3)

Police officer curriculum required to certify as a peace officer with full police powers. (A student must have completed the Core curriculum, CJ 1070, to register for this course.) P.O.S.T. certification only. Register through the Division of Continuing Education. Does not count for CJ credit toward major, minor or BIS.

CJ 1300 - Introduction to Corrections (3)

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 (3)

Surveys the American criminal justice system. Elements of crime, defenses, historical foundation, limits, purposes and functions of criminal law.

CJ 1340 - Criminal Investigation (3)

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 (3)

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 2110 - Introduction to Security (3)

Examination of the diverse components which make up the security function. Principles and concepts in physical security, loss control and crime prevention.

CJ 2330 - Juvenile Justice (3)

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 - Scientific Crime Scene Investigation (3)

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. Prerequisite: CJ 1350.

CJ 2350 - Laws of Evidence (3)

Deals with the principles and rules of law emphasizing evidentiary problems related to criminal cases.

CJ 2360 - Juvenile Law and Procedure (3)

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 2810 - Experimental Course (1-3)

This number is used for newly developed experimental courses.

CJ 2860 - Criminal Justice Field Experience (3)

Field experience in an internship with city, county, and state criminal justice agencies.

CJ 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

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.

CJ 3020 - Criminal Justice Management (3)

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 DV - Community Policing (3)

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 (3)

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 3080 - Criminal Courts (3)

Study of the American criminal trial-level court. Students shall examine the theory and reality of criminal court processing including an in-depth look at the roles and practices of prosecutors, defense attorneys, and judges. Special attention will be paid to the relationships among these actors, the system's dependency on plea bargaining, and jury behavior.

CJ 3110 - Issues in Security and Loss Prevention (3)

Analytical evaluation of the major types and causes of internal and external crimes occurring in business enterprises.

Examination of motives and methods of those committing profit-draining crimes.

CJ 3130 - Investigation of Computer Crime (3)

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.

CJ 3140 - Corrections Law (3)

This course studies the law as it pertains to the corrections field. It includes an examination of the 8th Amendment rights and law effecting probation, incarceration, and parole.

CJ 3270 - Theories of Crime and Delinquency (3)

Study of the nature, extent, causes, and treatment of crime.

CJ 3300 - Victimology (3)

The problems and dilemmas faced by crime victims. Victimization risk factors. The systemic and societal creation of victims. Relationships between victims and offenders. Crime victim compensation and reparations. The historic treatment and emerging roles of the crime victim in the criminal justice process.

CJ 3350 - The American Jail (3)

Course critically examines the American jail with particular emphasis on history, management, operations and contemporary issues.

CJ 3360 DV - Prisons - Contemporary Issues and Dilemmas (3)

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 3400 - Drugs and Crime (3)

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 (3)

An introduction to descriptive and inferential statistics and data analysis for use in criminal justice and the social sciences. Prerequisite: WSU Math Competency.

CJ 4000 - Critical Legal Studies (3)

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.

CJ 4060 - Special Problems in Criminal Justice (3)

Causes and prevention of white collar, organized crime, gangs and other current interest topics selected by the instructor. May be taken multiple times under new topic.

CJ 4100 - Laws of Arrest, Search and Seizure (3)

Critically exams case law and statutes dealing with arrest, search and seizure and liability concerns for officers in this area.

CJ 4110 - Physical Methods in Forensic Science (4)

Basic principles for forensic experts (reporting, testimony, etc.) and physical methods for evidence analysis including microscopy and pattern recovery and analysis. (3 hr lecture, 1 hr lab) Prerequisite: CJ 2340 and either CHEM 1120 or CHEM 1220; or instructor approval.

CJ 4115 - Friction Ridge Analysis (4)

Legal and scientific methodology behind detection, identification, development, recovery, preservation, analysis and comparison of fingerprints. (3 hr lecture, 1 hr lab) Prerequisite: CJ 4110 or instructor approval.

CJ 4120 - Advanced Methods in Forensic Science (4)

Topics in forensic instrumentation, trace evidence, pattern evidence, biological and chemical evidence. (3 hr lecture, 1 hr lab) Prerequisite: CJ 4110 or instructor approval.

CJ 4160 - Constitutional Rights and Responsibilities (3)

This course critically examines the 5th and 6th Amendments to the United States Constitution, emphasizing the right to counsel, right to silence and right against self-incrimination. It examines citizens rights and officer's responsibility and liability in connection with those rights.

CJ 4200 - Ethical Issues in Criminal Justice (3)

Critically examines selected criminal justice ethical issues such as capital punishment, official corruption, use of deadly force, discretion and deception by the police. Prerequisite: CJ 1010.

CJ 4300 - History of Law Enforcement (3)

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.

CJ 4700 - Comparative Criminal Justice Systems (3)

Compares United States criminal justice system with other international systems from throughout the world. Prerequisite: CJ 1010.

CJ 4810 - Experimental Course (1-3)

This number is used for newly developed experimental courses.

CJ 4830 - Directed Readings and Special Projects (1-3)

Assigned reading or project with evaluation by faculty member. Requires approval of the Department Chair.

CJ 4860 - Criminal Justice Field Experience (3)

Field experience with city, county, and state criminal justice agencies. Junior or Senior standing and CJ majors only. Students may take this course for a combined total of six (6) credit hours, with consent of instructor.

CJ 4900 - Current Issues in Criminal Justice (3)

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 taken multiple times under new topic.

CJ 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

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.

CJ 4950 - Field Trips/Travel Study (1-6)

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.

CJ 4980 - Research Methods in Criminal Justice (3)

Emphasis on the practical application of basic research practices to law enforcement and corrections problems. Prerequisite: CJ 1010, either CJ 3600 or SOC 3600 or PSY 3600 or GERT 3600, and junior or senior standing.

CJ 4990 - Criminal Justice Seminar (3)

An in-depth exploration of selected issues and dilemmas surrounding the criminal justice field. Prerequisite: Criminal Justice major core course requirements and senior standing.

CMT-Parson Construction Management Technology Courses**CMT 1100 - Construction Management Orientation (1) F**

This course provides an overview of the history of the U.S. construction industry with particular focus on the social, cultural, and economic trends, issues and events that impact and shape the industry and its occupations. The role of facilities management will be discussed. The course is also designed to help students develop a clearer focus on their educational and occupational goals. (Available online)

CMT 1150 - Construction Graphics (3) F

Students will gain knowledge of and experience graphical communications as used in the construction industry. Includes print reading and interpretation of all architectural, electrical, and mechanical systems diagrams. Residential and commercial plans will be used. Prerequisite: CMT 1210 (can be taken concurrent). (Available online)

CMT 1210 - Residential Construction Materials and Methods (3) F

The purpose of this course is to provide 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. Applicable building codes are also discussed as they relate to various materials and the methods of construction. The residential construction process will be analyzed from site planning to finish construction. The course also includes editing related specifications. (Available online)

CMT 1310 - Commercial Construction Materials & Methods (3) Sp

The purpose of this course is to provide students with knowledge of commercial building techniques and materials. Basic materials and installation methods for commercial construction are studied; which include site-work, concrete, masonry, metals, curtain-walls, and finishes. The practice of sustainable materials will be discussed. Applicable building codes and written specifications will be discussed as they relate to these various construction methods. (Available online)

CMT 1500 - Computer Applications in Construction (3) Sp

Computer applications used in the construction field will be examined in areas of cost estimating, project scheduling, CAD design, and construction management. Various software packages will be introduced and examined specifically to their application in the construction industry. Prerequisite: NTM 1700.

CMT 2220 - Construction Contracts and Specifications (3) Sp

Students will gain knowledge in the legal aspects of contracts and bidding; types of construction documents including bonds; interpretation of technical building specifications and their application to selection and installation of materials, equipment and systems; and how sustainable construction affects the contract documents. The Construction Specification Institute Index System (CSI) database will be used. Students will study contracts and specifications as supplied by architects, government agencies, and professional contracting organizations such as the AGC (Association of General Contractors), ABC (Associated Building Contractors), and the NAHB (National Association of Home Builders).

CMT 2330 - Concrete Technology (3) Sp

The student will obtain knowledge of concrete, its physical and mechanical properties, and the design and control of the concrete mixes. They will also obtain knowledge in the various forming systems used in residential and commercial construction.

CMT 2340 - Construction Surveying (2) Sp

The student will perform basic surveying operations necessary for the location, layout, and construction of a building. Interpretation of site plans and topographic maps is included. Prerequisite: MATH 1080. (Hybrid)

CMT 2360 - Building Codes and Inspection (2) F

Familiarizes students with current building codes and zoning ordinances as they apply to the construction and use of buildings. Inspection procedures used to enforce codes are also discussed. Prerequisite: ENGL 2010. (Available online)

CMT 2640 - Architectural Estimating (2) Sp

Developing material estimates of a building project. Involves manual and computer applications in working with architectural drawings and reference materials. Prerequisite: MATH 1010 or higher, CMT 1150, CMT 1310, and CMT 1500. (Available online)

CMT 2880 - Internship (3) Su, F, Sp

Supervised work experience in the construction industry with placement and course objectives approved by the faculty supervisor. (online)

CMT 3115 - Construction Cost Estimating (3) F

The student will learn the methods and procedures for estimating and bidding construction projects. Actual working drawings and specifications are used. The course will

emphasize computer estimating, development of unit costs, and advanced estimating principles. Ethics as it relates to bidding will be discussed. Prerequisite: MATH 1080, CMT 1150, CMT 1210, CMT 1310, CMT 1500, and CMT 2640.

CMT 3130 - Construction Planning & Scheduling (3) Sp

This course will provide students with the fundamental skills necessary to plan and schedule the entire construction process and familiarize them with computer scheduling software packages. Students will learn to mix and match available resources in the most efficient combinations to complete projects on time and within budget. Prerequisite: MATH 1080 and CMT 1500.

CMT 3210 - Construction Management (3) F

This course focuses on the processes and tasks required for management of building projects. Students will study the skills necessary to successfully manage construction projects, including: record keeping and documentation, interpreting contracts and specifications, and other duties necessary for efficient project operation and successful completion. Ethics as it relates to project management and customer relations will be discussed. The management of sustainable construction projects will be discussed. Prerequisite: CMT 2220.

CMT 3260 - Mechanical and Electrical Systems (4) F

This course is designed to provide basic knowledge of electrical, plumbing, and HVAC systems used in residential and light commercial buildings. Emphasis is placed on advantages and disadvantages of various systems, and how their design and installation integrates into the management of the building process. (Available online)

CMT 3350 - Applied Structures (4) Sp

Students will evaluate the structural behavior of buildings and other engineered structures. Includes properties of materials and mechanics as it relates to the structural behavior of load resisting components. Students will learn how loads and stresses are determined and apply this information to the design and selection of structural components in residential and commercial buildings. Prerequisite: MATH 1080 and PHYS 2010.

CMT 3510 - Building Mechanical & Electrical Systems (3)

Practical application of mechanical and electrical system design, operation and maintenance principles pertinent to commercial buildings and emphasizing a designer's perspective on mechanical and electrical power equipment and distribution systems, energy management, fire protection, communication, control and signal systems, lighting, and security systems. Prerequisite: CMT 1310 and CMT 2360.

CMT 3540 - Facilities Management Administration (3)

Practical applications of the administrative principles and skills required of a successful facility manager focusing on administration, management, and leadership of the facility function, finance and accounting, repair, alterations and maintenance, planning, programming, budgeting and execution. Prerequisite: CMT 1310 and CMT 2360.

CMT 3630 - Environmental Issues in FM (3)

Practical application of environmental practices and procedures pertinent to preservation, protection, compliance and conservation issues related to facilities management with emphasis on the regulatory and permitting process, environmental planning, auditing and assessment, recycling, indoor air quality (IAQ) and ozone level depleting substances (OLDS), Environmental Protection Agency (EPA)

programs and permitting procedures, Occupational Health and Safety Act (OSHA) programs, and sustainable practices. Prerequisite: BTNY 1403.

CMT 3660 - Energy Management (3)

The course addresses the methodologies of estimating annual energy consumption, undertaking energy audits, and monitoring and targeting energy consumption of fossil fuels. The material covered is for building services engineering, building engineering, and environmental engineering in facilities management. Prerequisite: CMT 3510.

CMT 3680 - FM Operations (3)

Practical applications of the operational principles and skills required to be a successful facilities manager focusing on touching on leasing and real-estate, programming, planning, maintenance, and services. Prerequisite: MGMT 3010.

CMT 4120 - Construction Accounting and Finance (3) F

Construction finance and accounting familiarizes students with construction finance, accounting, and cost control concepts, including: developing an overhead budget, analyzing financial statements, projecting cash flows, profit center analysis, taxes, depreciation, and pro forma development. Prerequisite: ACTG 2010, MATH 1080, and CMT 1500.

CMT 4150 - Construction Equipment and Methods (3) F

An overview of different types of equipment used in highway/heavy construction projects. Includes applications, performance criteria, selection, and economics. Prerequisite: MATH 1080.

CMT 4210 - Facility Planning and Layout (3)

Practical aspects of facilities planning as a function of location and design with specific application to the following facilities: manufacturing and production, warehousing, and other commercial uses. Prerequisite: DET 1340, CMT 1150, and CMT 2360.

CMT 4270 - Computer Aided FM (3)

A study of the availability, capabilities, analysis, selection, justification, acquisition, installation and operation of computerized systems designed to enhance facilities management. Prerequisite: CMT 1500.

CMT 4310 - Long-term Facility Planning (3)

A study of the life cycle of a building including strategic planning of facilities; design, construction, and decommission of facilities; and assessment of facility performance. Prerequisite: ACTG 2010, ECON 2010, CMT 4210.

CMT 4350 - Design of Construction Systems (2) F

This course is to provide basic knowledge of the structural design of building systems including concrete forms, engineered-wood floor/ roof systems, metal-joint floor-roof systems, and trusses. Load tracing of the forces in wood, concrete, and steel framed buildings will be covered. Prerequisite: CMT 3350.

CMT 4550 - Construction Safety (2) Sp

This course is designed to explain the Occupational Safety and Health Act and other federal/state legislation that applies to safety requirements and responsibilities of the construction management industry. Includes the development of a construction site safety program, analysis of costs and impact of accidents, standards for accident prevention, and responsibility for compliance.

CMT 4610 - Senior Experience (2) F, Sp

Students must apply the semester before they plan to take Senior Experience. The application of skills, knowledge, techniques and concepts to the business operations of a construction company. Emphasis on integrated project management, including: estimating and bidding, project organization and control, and documentation. CMT 4610 should be taken the last semester before graduation. Faculty must approve each student's application. Students must apply for Senior Experience the semester before they plan to take CMT 4610. Prerequisite: At a minimum the following courses must have been taken: CMT 3115, CMT 3130, CMT 3210, and CMT 4120. CMT 4150 may be taken concurrently with approval of instructor. CMT 4610 and CMT 4620 should be taken concurrently.

CMT 4620 - Senior Project (2) F, Sp

Students must apply the semester before they plan to take Senior Project. The application of skills, knowledge, techniques and concepts to an actual project. Emphasis on integrated project management, including: estimating and bidding, project organization and control, and documentation. CMT 4620 should be taken the last semester before graduation. Faculty must approve each student's application. Students must apply for Senior Project the semester before they plan to take CMT 4620. Prerequisite: At a minimum the following courses must have been taken: CMT 3115, CMT 3130, CMT 3210, and CMT 4120. CMT 4150 may be taken concurrently with approval of instructor. CMT 4610 and CMT 4620 should be taken concurrently.

CMT 4650 - FM Senior Project (2)

The application of skills, knowledge, techniques and concepts to an actual facility's management project. Emphasis on integrating the concepts taught in the facilities management classes. Students must apply for Senior Project the semester before they plan to take CMT 4650. Prerequisite: CMT 3115, CMT 3130, CMT 3540, CMT 3630, CMT 3660, CMT 3680, CMT 4210, CMT 4270 and CMT 4310, or instructor approval. CMT 4310 may be taken concurrently.

CMT 4800 - Individual Projects and Research (1-3) Su, F, Sp

Individual research or projects in Construction Management Technology. Credit and time determined by the student and faculty advisor. Prerequisite: Junior or Senior standing and consent of instructor.

CMT 4830 - Directed Studies (1-3) Su, F, Sp

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. Prerequisite: Junior or Senior standing and consent of instructor.

CMT 4890 - Practicum (2) Su, F, Sp

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. Should be taken during the final two semesters. Prerequisite: Senior standing and consent of instructor. (Available online)

CMT 4920 - Short Courses, Workshops, Institutes, and Special Programs (.5-4) Su, F, Sp

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. Can be repeated for credit. Prerequisite: Junior or Senior standing and consent of instructor.

CMT 5100 - Civil Engineering and Architecture (5)

CEA is designed to help students understand the fields and career possibilities in civil engineering and architecture. Students gain an understanding of the process of developing land into a viable building as they explore the role and skills used by architects and civil engineers during the process of planning a site and designing a building. 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. This course carries graduate credit for those teachers who would use it for recertification.

COMM-Communication Courses**COMM 1020 HU - Principles of Public Speaking (3)**

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 (1)

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 for maximum of six credits.

COMM 1130 - Media Writing (3)

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. Prerequisite: Proficiency in word processing.

COMM 1500 - Introduction to Mass Communication (3)

Examines mass media development and impact upon society. Considers newspapers, magazines, film, radio, TV and multi-media. 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 & Performance (3)

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 & Society (3)

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 - Interpersonal & Small Group Communication (3)

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 - In-studio Video Production and Performance (3)

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 - Intercollegiate Debate (1)

Preparation and competition on the national debate resolutions and participation in individual events. Course may be repeated for credit four times. Prerequisite: Permission of instructor.

COMM 2250 - Essentials fo Digital Media (3)

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 & Debate (3)

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 2350 - Communication Graphic Design (3)

An introduction into the design of communication projects with special emphasis on creative typography, paper, computer-assisted layout and design as well as publication techniques. Working familiarity with desktop publishing required. Prerequisite: COMM 1130.

COMM 2730 - Radio Production Workshop (1)

Students meet once a week and work as contributors to the Weber State student radio station, KWCR. Work may include such things as station management, announcing, production, news, sales or engineering. At least one shift of 4 hours per week is required. Specific hours to be arranged. May be repeated for a maximum of 4 credit hours. Prerequisite: Instructor permission.

COMM 2751 - Field Video Production & Performance (3)

Remote video production and performance. Skills include performance, program planning and writing, use of field cameras and post-production. May be taken in same semester as COMM 2200.

COMM 2890 - Cooperative Work Experience for The Signpost (1)

Newspaper lab experience at The Signpost for all majors in the Journalism and the Public Relations & Advertising concentrations. Journalism students should register for 1 credit for three consecutive semesters. Public Relations & Advertising students should register for 1 credit for two consecutive semesters. Students will learn facets of producing a print and/or on-line publication. Skills include news reporting and writing, advertising, design and photography. May be repeated for a maximum of 4 credit hours. A maximum of 3 credit hours may be counted for the major. Prerequisite: COMM 1130.

COMM 2920 - Short Courses, Workshops, Institutes and Special Programs (1-6)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

COMM 3000 - Communication Theory (3)

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. Prerequisite: COMM 2110 or permission of instructor.

COMM 3050 - Interpersonal Communication and Conflict Management (3)

The purpose of this course is to provide students an opportunity to explore interpersonal communication concepts in depth. Upon successful completion of this course, students will have a greater understanding of interpersonal communication theories and strategies and will be able to enrich their relationships with personal application of this material. A special emphasis will be given to conflict management as an interpersonal communication skill. Students will be provided the analytical and communication tools to understand, evaluate, and respond effectively to conflicts. Prerequisite: COMM 3000 or permission of instructor.

COMM 3060 - Listening and Interviewing (3)

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. Prerequisite: COMM 3000 or permission of instructor.

COMM 3070 - Performance Studies (3)

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. Prerequisite: COMM 1020 or permission of instructor.

COMM 3080 DV - Intercultural Communication (3)

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. Prerequisite: COMM 2110 or permission of instructor.

COMM 3085 - Family Communication (3)

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. Prerequisite: COMM 2110 or permission of instructor.

COMM 3090 DV - Gender and Communication (3)

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. Prerequisite: COMM 2110 or permission of instructor. Cross listed in WS 3090.

COMM 3100 - Small Group Facilitation & Leadership (3)

Theories and practical communication processes are examined and applied to develop fundamental attitudes and skills for facilitating and leading effective groups. Prerequisite: COMM 2110 or permission of instructor.

COMM 3120 - Advanced Public Speaking (3)

Study and application of the elements of rhetorical style to manuscript speaking. A close examination of figures of speech and thought applied to speech writing. Prerequisite: COMM 1020 or permission of instructor.

COMM 3130 - News Reporting and Writing (3)

Develops journalism skills relevant to newspapers and online news services. Emphasizes news gathering, interviewing and news writing. Prerequisite: COMM 1130 or permission of instructor.

COMM 3150 - Communication Research Methods (3)

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. Prerequisite: COMM 3000 or permission of instructor.

COMM 3200 - Live Event Production (1-3)

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. Prerequisite: COMM 2200 or permission of instructor. Can be repeated once for up to 6 credit hours.

COMM 3220 - Editing (3)

Develops editing knowledge and skills for print and online publications. Covers copy editing, content editing and page editing. Prerequisite: COMM 1130 or permission of instructor.

COMM 3230 - Health Communication (3)

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.

COMM 3400 - Public Relations (3)

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. Prerequisite: COMM 1130 or permission of instructor.

COMM 3440 - Public Relations Writing (3)

Explores principles and practices of a variety of public relations writing formats ranging from news releases to websites. Prerequisite: COMM 3400 or permission of instructor.

COMM 3460 - Public Relations and Social Media (3)

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. Prerequisite: COMM 3400 or permission of instructor.

COMM 3550 - Organizational Communication (3)

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. Prerequisite: COMM 3000 or permission of instructor.

COMM 3650 - Communication Law (3)

First Amendment origins, interpretations and philosophy underlying regulation of the mass media. Prerequisite: COMM 3000 or permission of instructor.

COMM 3730 - Media Programming and Audiences (3)

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. Prerequisite: Permission of instructor.

COMM 3740 - Copy Writing for Audio and Video (3)

Specialized concepts and techniques required to write effectively for radio, television, advertising, and other new media technologies. Prerequisite: COMM 1130.

COMM 3780 - Broadcast News Writing & Production (3)

Classroom instruction and practical experience in writing, reporting, performing, producing, and editing for television news. Students will produce newscasts for a local cable channel. Prerequisite: COMM 1130 or permission of instructor.

COMM 3810 - Persuasive Communication (3)

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. Prerequisite: COMM 3000 or permission of instructor.

COMM 3850 - Advertising (3)

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. Prerequisite: COMM 1130 or permission of instructor.

COMM 3890a - Advanced Cooperative Work Experience - Signpost (1-3)

Open to students who are Signpost editors and managers. Prerequisite: COMM 1130 or permission of instructor. (A maximum of 6 credit hours total from COMM 3890a, COMM 3890b, COMM 3890c and COMM 3890d may be counted for the major.)

COMM 3890b - Advanced Cooperative Work Experience with KWCR (1-3)

Open to students who are KWCR senior staff. Prerequisite: COMM 2730 or permission of instructor. (A maximum of 6 credit hours total from COMM 3890a, COMM 3890b, COMM 3890c and COMM 3890d may be counted for the major.)

COMM 3890c - Advanced Cooperative Work Experience with Public Relations (1-3)

Prerequisite: COMM 3400 and permission of instructor. (A maximum of 6 credit hours total from COMM 3890a, COMM 3890b, COMM 3890c and COMM 3890d may be counted for the major.)

COMM 3890d - Advanced Cooperative Work Experience with Television Broadcasting (1-3)

Open to students who are members of Weber State News' crew or staff and/or crew members of other student produced television programs. Prerequisite: COMM 1130 or permission of instructor. (A maximum of 6 credit hours total from COMM 3890a, COMM 3890b, COMM 3890c and COMM 3890d may be counted for the major.)

COMM 4130 - In-depth and Investigative Journalism (3)

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. Prerequisite: COMM 1130 or permission of instructor.

COMM 4150 - Classical Rhetorical Theory & Criticism (3)

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. Prerequisite: COMM 3810.

COMM 4160 - Contemporary Rhetorical and Communication Theories (3)

Study of contemporary rhetorical and communication theories. Prerequisite: COMM 3000 and COMM 4150 or permission of instructor.

COMM 4210 - Intercollegiate Debate (1)

Preparation and competition on the national debate resolutions and participation in individual events. Course may be repeated for credit four times. Prerequisite: COMM 2270 or permission of instructor.

COMM 4400 - Public Relations Media and Campaigns (3)

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. Prerequisite: COMM 3400 or permission of instructor.

COMM 4440 - Developing and Evaluating Health Communication Campaigns (3)

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. Prerequisite: COMM 3400 or permission of instructor.

COMM 4500 - Topics in Communication (3) variable title

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 be taken more than once with different designations. Prerequisite: COMM 3000 or permission of instructor.

COMM 4750 - Advanced Audio and Video Production (3)

Capstone course for audio and video production. Emphasis is placed on combining production types to produce longer and more complex programs. Prerequisite: COMM 2200 and COMM 2751.

COMM 4760 - Electronic Media Management (3)

Analysis of complex systems necessary to manage media companies such as radio stations, television stations and cable outlets. Students will develop a master plan for a new media company. Prerequisite: COMM 1500 or permission of instructor.

COMM 4800 - Special Study and Individual Projects (1-3)

Work with an assigned faculty member on a project of special interest. May be repeated for a maximum of 6 credit hours. A maximum of 3 credit hours may be counted for the major. Prerequisite: COMM 3000 and permission of instructor.

COMM 4840 - Teaching Journalism and Advising Student Media in the Secondary School (3)

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. Prerequisite: COMM 3000 or permission of instructor.

COMM 4850 - Teaching Speech and Directing Speech Activities in the Secondary School (3)

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. Prerequisite: COMM 3000 or permission of instructor.

COMM 4890 - Communication Internship (1-3)

An opportunity for students to receive academic credit for faculty approved on-the job learning experiences within certain communication areas of emphasis. May be repeated for a maximum of 6 credit hours. A maximum of 3 credit hours may be counted for the major. *Credit/No credit only.* Prerequisite: COMM 3000 and permission of instructor.

COMM 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

COMM 4990 - Senior Seminar (3)

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. Prerequisite: Communication major, COMM 3000 and COMM 3150.

CS-Computer Science Courses

CS 1010 CA - Introduction to Interactive Entertainment (3) Su, F, Sp

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 (4)

Application of the most recent implementation of a selected programming language to the solution of technical and scientific problems. Prerequisite: CS 1030 and basic skills in Algebra.

CS 1023 - Selected Programming Language (4)

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. Prerequisite: CS 1030 and basic skills in Algebra.

CS 1030 - Foundations of Computer Science (4) Su, F, Sp

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 Computer Science curriculum. The course is taught at an introductory level and includes topics such as: history of computers, computer architecture, operating systems, world-wide web and HTML, programming with Java, database, software engineering, networking, and more. Co-Requisite: Computer Literacy.

CS 1400 - Fundamentals of Programming (4) Su, F, Sp

This course covers basic operating system navigation and components of the program development process. The majority of the course covers basic problem solving and program design of a software application using a selected language. Topics presented and discussed depending on selected language include: thinking logically to solve problems, working with input/output devices, compilation and library use, structured programming and modularity concepts, conditional and iterative structures including recursion, object oriented design, data types and structures, and pointers. Co-Requisite: CS 1030 or Co-requisite/Prerequisite of NTM 2300.

CS 1410 - Object-Oriented Programming (4) Su, F, Sp

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. Prerequisite: CS 1400.

CS 2140 - Computer Systems Administration (4) not currently offered

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. Prerequisite: CS 1400.

CS 2250 - Structured Computing in a Selected Language (4)

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. Prerequisite: Basic skills in fundamental Algebra.

CS 2350 - Web Development (4) Su, F, Sp

This course provides an introduction to Internet programming and Web application development. Subjects covered include basic Web page design, dynamic Web page development, and an introduction to server-side scripting and database connectivity. The course will explore various technologies such as HTML, XML, CSS, Javascript, and/or PHP. Prerequisite: CS 1400. Prerequisite/Co-requisite: CS 2550.

CS 2420 - Introduction to Data Structures and Algorithms (4) Su, F, Sp

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. Prerequisite: CS 1410 and MATH 1080 or MATH 1050/MATH 1060.

CS 2450 - Software Engineering I (4) Su, F, Sp

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 and Project Development Life-Cycle for the object model; to facilitate a mastery of the notion and process of object oriented analysis and design, and to teach quality design and development style through applications of object-oriented project development within a variety of problem domains. In depth coverage of UML and current Software Engineering models. Prerequisite: CS 1410.

CS 2550 - Database Design and Application Development (4) Su, F, Sp

A database management system (DBMS) is a computer application program designed for the efficient and effective storage, access and update of large volumes of information. This course will look at such systems from two perspectives: 1) A user-centered perspective focusing on how a DBMS is used to support a data intensive application, by examining common relational data modeling, query language and design techniques, and 2) A system implementation perspective focusing on the policies, algorithms and data structures used to design and implement a database. The course will cover

the sequential query language (SQL) extensively, as well as database normalization rules. Prerequisite: CS 1030 or NTM 2300.

CS 2650 - Computer Architecture/ Organization (4) Su, F, Sp

A fundamental course designed to explore the specific physical and functional characteristics of computer systems. Topics will include the architecture of the PC including BIOS, interrupts, addressing, memory management, types of disk drives (such as SCSI and EIDE), types of buses, video cards, modems, network cards, hardware compatibility issues, number representations, and/or gates and basic digital circuit concepts. The course also introduces assembly language skills in popular 16 and 32 bit microprocessors. Prerequisite: CS 1400.

CS 2705 - Network Fundamentals and Design (4) Su, F, Sp

A comprehensive examination of the hardware and software components of a network and the practical techniques for designing and implementing computer systems in a network. Topics will include the purpose and use of various LAN, MAN, WAN configurations (Ethernet, rings HDLC, SMDS, ATM, Frame Relay, ISDN, xDSL, TCP/IP UDP/IP, x.25, PPP, Sonet and new protocols. Media type and structures (repeaters, bridges, switches, hubs, routers with routing algorithms, and gateways), signaling/data encoding, multiplexing, error detection/correction and flow control, packet formats, network classes, and subnetting. Prerequisite: CS 1030.

CS 2780 - Windows Application Programming (4) not currently offered

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. Prerequisite: CS 1410 and basic algebra skills.

CS 2800 - Individual Projects & Research (1-4) Su, F, Sp

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. Prerequisite: CS 1410. 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 2890 - Cooperative Work Experience (1-4) Su, F, Sp

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. Prerequisite: CS 1410. 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 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

CS 3030 - Scripting Languages (4) F, Sp

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. Prerequisite: CS 1400 and CS 2705 or CS 1400 and NTM 2300.

CS 3040 - Windows/Unix/Linux Infrastructure and Administration (4) Su, F, Sp

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. Prerequisite: CS 2705.

CS 3100 - Operating Systems (4) Su, F, Sp

An overview of computer operating systems concepts, system software components with emphasis on installation, management, monitor/supervisor and I/O management, control commands, network installation, and device drivers. The operating systems studied will be Windows or UNIX. Prerequisite/Co-requisite: CS 2420.

CS 3130 - Computational Structures (4) Su, F, Sp

Advanced principles of computational models and algorithm analysis. Topics include: the design of efficient algorithms, order statistics, set manipulation problems, Turing machines, graph algorithms, matrix operations, integer and polynomial arithmetic, combinatorics, and pattern matching algorithms. Emphasis will be on the application of abstract models in a software computational context. Prerequisite: CS 2420.

CS 3210 - UNIX System Programming and Internals (4) F, Sp

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. Prerequisite: CS 2420.

CS 3230 - Internet Multimedia Services and Applications Using Java (4) F, Sp

An introduction to the design and coding of applications using threads. Topics will include the use of threads in the design of operating systems, device drivers, utility programs and general applications. Language used in the course will be Java. Applications will include multimedia, Web Servers, search engines, security issues, and the use of the Java language in the development of applets for home pages. Prerequisite: CS 2420.

CS 3250 - Advanced Object Oriented Programming (4)

Develop and expand abilities in solving lengthy, advanced problems, multiple parallel tasks, generic packages, and other object-oriented techniques using selected languages. Prerequisite: CS 2420.

CS 3260 - Mobile Development for the iPhone (4) Sp

Introduction to developing applications for mobile iOS devices (iPhone, iPod Touch and iPad) using the iPhone SDK, in conjunction with the Xcode/Cocoa development environment. Students will learn the basics of the Objective-C programming language and use it to develop applications for the iPhone family of devices. Students will also gain experience in working in a team environment. Prerequisite: CS 1410, CS 2350 and CS 2550.

CS 3270 - Mobile Development for Android (4) F

Introduction to developing applications for Android mobile devices. Students will use the Eclipse IDE in conjunction with the Android SDK. Students will gain advanced experience in Java and XML as they develop mobile applications both individually and as members of a development team. Prerequisite: CS 2350, CS 2550 and CS 3230.

CS 3540 - Database Administration (4) F, Sp

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. Prerequisite: CS 2550.

CS 3550 - Distributed Database Architecture Management and Application (4) F, Sp

This course is designed to teach students to design, implement, and maintain a distributed database application. Applications development using database programming techniques emphasizing database structures, such as stored procedures, user defined functions, cursors, triggers, and distributed queries will be covered. Other topics will include: advanced transaction processing as well as distributed database problems and solutions using enhanced SQL and XML. Prerequisite: CS 2550.

CS 3610 - Introduction to Game Industry (4)

This is 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. Prerequisite: CS 1400.

CS 3620 - Server-Side Web Development (4)

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 ASP.NET, PHP, Python, Ruby and Java. Students will gain real-world experience in creating Websites for multiple Web platforms. Prerequisite: CS 2350 and CS 2550.

CS 3630 - Rich Internet Application Development (4)

An introduction to developing and deploying rich Internet applications (RIAs) using technologies such as Flex, ActionScript, and Silverlight. Students will develop engaging websites by incorporating RIAs in the web application development process. Prerequisite: CS 2350 and CS 2550.

CS 3705 - Protocol Analysis (4) F, Sp

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. Prerequisite: CS 2705 or NTM 2435.

CS 3720 - Network Architectures and Protocols (4) not currently offered

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. Prerequisite: CS 3705.

CS 3730 - Client/Server Network Programming (4) not currently offered

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. Prerequisite: CS 2705 and CS 3210.

CS 3750 - Software Engineering II (4) F

(Community Based Learning Designation) 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. Prerequisite: CS 2450, CS 2420, MGMT 2400, and ENGL 3100 or NTM 3250.

CS 3805 - Computer and Network Security (4) F, Sp

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. Prerequisite: CS 2420, ENGL 3100 or NTM 3250, and CS 3705.

CS 3830 - Writing Secure Code (4)

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. Prerequisite: CS 2420.

CS 3840 - Computer Forensics for Security Assurance (4)

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. Prerequisite: CS 2420 and CS 3040.

CS 4110 - Concepts of Formal Languages and Algorithms for Computing (4) F, Sp

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. Prerequisite: CS 2420 and either MATH 1630 or CS 3130.

CS 4230 - Java Application Development (4) Sp

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. Prerequisite: CS 3230.

CS 4280 - Computer Graphics (4) Sp

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. Prerequisite: CS 2420.

CS 4350 - Advanced Internet Programming (4) F, Sp

This course builds on the knowledge of CS 2350 to go deeper into the areas of eBusiness, multimedia, HTML, DHTML,

XML, Javascript, Java, ASP, PHP, Python, Perl, Flash, and other technologies focusing on the server-side coding and database manipulation required for enterprise level web applications. It requires a high level of programming skill and knowledge of databases. Prerequisite: CS 2350, CS 2550.

CS 4500 - Artificial Intelligence and Neural Networks (4) F, Sp

This course covers basic artificial intelligence principles and introduces students to AI languages. Concepts of programming parallel architecture machines are introduced and developed. The neural network design of parallel computing is studied, along with its implications in Artificial Intelligence software development. Prerequisite: CS 2420 and either MATH 1630 or CS 3130.

CS 4640 - Game Development I (4)

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. Prerequisite: CS 3610. Pre/Co-requisites: PHYS 2010 or PHYS 2210, MATH 1210.

CS 4650 - Game Development II (4)

Senior project Game Development II course focuses on 3D game programming in a team work project environment using a game engine. At conclusion student should be able to add the resulting program into their game portfolio. Prerequisite: CS 4640. Pre/Co-requisites: MATH 2270 or MATH 2250, CS 4280, CS 4500, CS 4750.

CS 4730 - Applied Cryptography (4) Sp

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. Prerequisite: CS 2420 and either MATH 1630 or CS 3130.

CS 4740 - Security Vulnerabilities and Attack Prevention (4) Sp

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. Prerequisite: MATH 1040 or MATH 1220 or MATH 3410, ENGL 3100 or NTM 3250, CS 3100 and CS 3705.

CS 4750 - Advanced Software Engineering (4) Sp

Each team member will contribute to the full implementation, configuration, and testing phases of a prototyped project designed in CS 3750. Software project management, documentation, and configuration management will continue to be emphasized throughout the semester. The software project, final documentation, and training session(s) will be delivered to the client before the students have completed the course. Prerequisite: CS 3750.

**CS 4780 - Object Oriented Windows
Application Development (4) Su**

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 Microsoft Windows Forms 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. Prerequisite: CS 2420.

CS 4790 - N-Tier Web Programming (4) F

This course is designed to teach sound concepts in n-tier development of web applications using ASP.NET. Students will develop multiple applications using RAD and OOP techniques using the n-tier model. Skills mastered in this course will include: Use of C# and VB within the Microsoft .NET framework, ADO.NET, SQL Server, Oracle, DHTML, XML and layered application design. Prerequisite: CS 2350.

**CS 4800 - Individual Projects and
Research (1-4) Su, F, Sp**

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. Prerequisite: CS 2420. Note: Only 4 credit hours of either CS 4800 or CS 4890 can apply to a CS degree as an elective course, and only a maximum of 6 hours of both CS 4800 and CS 4890 may be taken to satisfy missing credits or to achieve full time academic status.

CS 4820 - Compiler Design (4) F

A study of compilers, grammars, finite-state and push down automata, scanning, parsing, error handling, semantic analysis and code generation. Prerequisite: CS 2420.

**CS 4830 - Advanced Topics in Computer
Science (1-4) Variable Title F, Sp -**

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. May be repeated. Prerequisite: Consent of instructor.

**CS 4890 - Cooperative Work Experience
(1-4) Su, F, Sp**

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. Prerequisite: CS 2420. Note: Only 4 credit hours of either CS 4800 or CS 4890 can apply to a CS degree as an elective course, and only a maximum of 6 hours of both CS 4800 and CS 4890 may be taken to satisfy missing credits or to achieve full time academic status

**CS 4899 - Bachelor's Degree Assessment
o F, Sp**

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. Prereq/Coreq: Successful completion of requirements for the Bachelor's Degree.

**CS 4920 - Short Courses, Workshops, Institutes
and Special Projects (1-4) F**

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

DANC-Dance Courses

DANC 1010 CA/DV - Introduction to Dance (3)

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 (1)

Introduction to the techniques of the classical ballet including alignment, positions, port de bras, and allegro combinations. May be repeated for a maximum of 4 credit hours. Open to all students. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 1200 - Modern I (1)

Introduction to the movement techniques of modern dance. May be repeated for a maximum of 4 credit hours. Open to all students. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 1310 - Music for Dance (2)

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 Dance
Form (1) variable topic**

This course is designed to provide enrichment opportunities for those who undertake dance as a field of study or as recreational activity. It allows for the study of changing series of dance forms, including, but not limited to African, Flamenco, Middle Eastern, Clogging, Ballroom, Renaissance, etc. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 1500 - Jazz I (1)

Introduction to the style, technique, and rhythmic structures of jazz dance with emphasis on increasing movement capabilities and personal expression. May be repeated for a maximum of 4 credit hours. Open to all students. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 1520 - Folk & Ethnic Dance (1)

Folk and ethnic dances of Europe, Near and Far East, Africa, and the Americas as they relate to concert dance. Open to all students. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 1580 - Tap Dance (1)

Special training in tap dance skills and techniques. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 2250 - Alignment and Conditioning for Dance/Pilates (1)

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 for credit, but use toward Major/Minor must be approved by program advisor.

DANC 2300 - Dance Kinesiology (2)

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/Co-requisite: NUTR 1020 Foundations in Nutrition.

DANC 2410 - Improvisation (2)

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 (1.5)

Technique course designed to increase skill in classical ballet. May be repeated for a maximum of 4 credit hours. Prerequisite: DANC 1100 (2 credit hours minimum), or DANC 2470 (1 credit hour minimum), or by audition. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 2480 - Jazz II (1)

Refinement of beginning skills, emphasis on development of technical abilities and performance qualities. May be repeated for a maximum of 4 credit hours. Prerequisite: DANC 1500 (2 credit hours minimum), or DANC 2480 (1 credit hour minimum), or by audition. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 2490 - Modern II (1.5)

Refinement of beginning skills, emphasis on development of technical abilities and performance qualities. Prerequisite: DANC 1200 (2 credit hours minimum), or DANC 2490 (1.5 credit hour minimum), or by audition. May be repeated for a maximum of 6 credit hours.

DANC 2610 - Dance and Digital Technology (2)

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 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. In individual cases, this course might be considered as an elective in the Dance Major. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 2950 - Dance Festival Participation (1)

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. Prerequisite: Audition and permission. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 3010 - Dance History I: Primitive Period-the Early Decades of Modern Dance (3)

Study of the history and philosophy of dance from lineage-based societies through the early decades of modern dance. Areas covered will include pre-Christian civilizations, the Middle Ages, the Renaissance and the Golden Age of Ballet. Prerequisite: DANC 1010.

DANC 3020 - Dance History II: 20th Century Art and Education (3)

Study of the history and philosophy of dance in art and education from the Age of Innovation in Ballet through the Contemporary Period of history. Areas of study will include ballet and modern dance today, black dance in America, vernacular forms and dance as public art. Prerequisite: DANC 1010.

DANC 3320 - Techniques and Materials for Teaching Modern Dance (2)

Methods, teaching techniques, accompaniment, and practical experience in teaching modern dance. This is the secondary teaching methods class. Prerequisite: DANC 2490.

DANC 3440 - Dance for Musical Theatre (1)

Dance skills and techniques taken from the repertoire of the modern musical theatre. Special emphasis on characterization and style as demonstrated by the works of the leading choreographers of this genre. Prerequisite: DANC 1200 and DANC 1500. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 3450 - Special Topic Dance Form (1) variable titles

This course is designed to provide enrichment opportunities for those who undertake dance as a field of study or as recreational activity. It allows for the study of changing series of dance forms, including, but not limited to African, Flamenco, Middle Eastern, Clogging, Ballroom, Renaissance, etc. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 3470 - Ballet III (1.5)

Coordinating course designed to increase skill in classical ballet technique. Prerequisite: DANC 2470 (3 credit hours minimum), or DANC 3470 (1.5 credit hour minimum), or by audition. May be repeated for a maximum of 6 credit hours.

DANC 3490 - Modern III (1.5)

Exercises and activities to develop strength, flexibility, endurance, and technical dance skill. Prerequisite: DANC 2490 (3 credit hours minimum), or DANC 3490 (1.5 credit hour

minimum), or by audition. May be repeated for a maximum of 6 credit hours.

DANC 3500 - Choreography I: Space & Time/Design in Dance (2)

Study of the elements of time and space as they are artistically significant in themselves and in organized forms of meaning in dance. Considering time and space design in related fields of music and art included as relevant to choreographic design and communication in dance. Prerequisite: DANC 2410. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 3510 - Choreography II: Process (2)

Study of and experience in various approaches to the choreographic process as related to artistic concepts and to the philosophy of art as espoused by various traditional and contemporary dance artists and as developed by the individual student. Prerequisite: DANC 3500. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 3520 - Choreography Practicum (2)

Supervised experience choreographing a dance for public performance. Arranged through cooperative effort of student and supervisor. Prerequisite: DANC 3510 and approval of instructor. May be repeated for credit.

DANC 3580 - Intermediate/Advanced Tap Dance (1)

Intermediate/Advanced training in tap dance skills and techniques. Prerequisite: Lower Division Tap Dance (DANC 1580) and/or instructor approval. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 3640 - Teaching Creative Dance in the Elementary School (2)

Techniques for teaching creative dance and basic dance forms. Suggested for Elementary Education majors.

DANC 3860 - Field Experience (1)

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. Prerequisite: 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 for credit, but use toward Major/Minor must be approved by program advisor.

DANC 3910 - Moving Company: Rehearsal & Development (2)

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 for credit, but use toward Major/Minor must be approved by program advisor.

DANC 3911 - Moving Company: Performance (2)

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. Prerequisite: DANC 3910. May

be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 4250 - Alignment and Conditioning for Dance/Pilates (2)

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: DANC 2250. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 4610 - Dance and Digital Technology (2)

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 (1)

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. Prerequisite: DANC 2610. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 4700 - Creative Synthesis in Dance (2)

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. Prerequisite: for BA in Dance: DANC 2610, DANC 3520 and senior dance major standing. Prerequisite: for BA/BS in Dance Education: DANC 2610, DANC 3860 and senior dance major standing.

DANC 4800 - Individual Study (1-4)

Individual work or work in small groups by arrangements in special topics not included in the announced course offerings. Prerequisite: Approval of instructor. In individual cases, this course might be considered as an elective in the Dance Major. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 4890 - Cooperative Work Experience (1-6)

Individual work or work in small groups by arrangement; in special topics not included in the announced course offerings. Prerequisite: Approval of instructor. In individual cases, this course might be considered as an elective in the Dance Major. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 4910 - Rehearsal and Performance (1)

Preparation and rehearsal of dance composition to be presented in concert. Prerequisite: consent of instructor. May be repeated for an unlimited number of credit hours. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

**DANC 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)
(Offered as needed)**

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. In individual cases, this course might be considered as an elective in the Dance Major. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DANC 4950 - Dance Festival Participation (1)

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. Prerequisite: Audition and permission. May be repeated for credit, but use toward Major/Minor must be approved by program advisor.

DENT-Dental Science Courses

DENT 2201 - Concepts of Community Dental Health (1)

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 (2)

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 (4)

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 (3)

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 (2)

Preparatory skills for clinical radiology, including information on radiation safety and exposure techniques. Must accompany DENT 2206.

DENT 2211 - Oral Pathology (3)

The study of manifestations and identification of disease processes in the oral cavity.

DENT 2215 - Periodontology (2)

The study of basic periodontal structures and disease processes.

DENT 2216 - Clinical Dental Hygiene II (3)

Clinical application of DENT 2217. Must accompany DENT 2217. Two four-hour labs each week. Prerequisite: DENT 2206 and DENT 2207.

DENT 2217 - Dental Hygiene II (3)

Continuation of DENT 2206. Didactic instruction for intermediate skills in dental hygiene treatment. Must accompany DENT 2216. Prerequisite: DENT 2207.

DENT 2219 - Dental Materials (1)

Identification of and laboratory experiences with materials used in dentistry and dental hygiene.

DENT 2230 - Oral Health Research & Statistics (2)

This course is designed to provide the student with research design and statistics principles as they apply to oral health settings and issues. Prerequisite: WSU Quantitative Literacy requirement.

DENT 2235 - Dental Medicine I (2)

The study of common medical conditions and their treatment. Emphasis is placed on oral manifestations of systemic disease and related pharmacology.

DENT 2250 DV - Professional Ethics (1)

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 (1-3)

Special project in a student's area of interest.

DENT 2830 - Directed Readings, Projects and Research (1-3)

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 (1-3)
Consult the semester class schedule for the current offering under this number.**

The specific title and credit authorized will appear on the student transcript.

DENT 3130 - Independent Study (1-3)

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 - Community Dental Health Service Learning Lab (1)

This course leads the student through on-campus and off-campus field projects with selected community agencies.

DENT 3305 - Dental Medicine II (3)

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. Prerequisite: DENT 2235.

DENT 3336 - Clinical Dental Hygiene III (4)

Clinical application of DENT 3337. This course must accompany DENT 3337. Three four hour clinics each week. Prerequisite: DENT 2206 and DENT 2216.

DENT 3337 - Dental Hygiene III (3)

Continuation of DENT 2207, DENT 2217. Emphasis on advanced instrumentation in the care of clients with

periodontal disease. Must accompany DENT 3336.
Prerequisite: DENT 2207 and DENT 2217.

DENT 3346 - Clinical Dental Hygiene IV (4)

Clinical lab which must accompany DENT 3347. One eight hour clinic and one four hour clinic each week. Prerequisite: DENT 2206, DENT 2216, DENT 3336.

DENT 3347 - Dental Hygiene IV (2)

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. Prerequisite: DENT 2207, DENT 2217, DENT 3337.

DENT 4010 - Interdisciplinary Health Care Teams (3)

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 - Dental Hygiene Clinical Teaching Practice (4)

Supervised teaching in the Weber State Dental Hygiene program. Prerequisite: Consent of the instructor and acceptance into the BS/DH major program.

DENT 4410 - Dental Hygiene Needs of the Geriatric Client (2)

An overview of dental health needs of elderly clients. Prerequisite: Consent of instructor and acceptance into the BS/DH major program.

DENT 4530 - Principles and Application of Evidence-based Dental Hygiene Practice (2)

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. Prerequisite: Acceptance into the BS/DH program and completion of WSU Quantitative Literacy requirement.

DENT 4780 - Baccalaureate Thesis (3)

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. Prerequisite: Acceptance into the BS/DH program, completion of the WSU Quantitative Literacy requirement.

DENT 4800 - Individual Research (1-3)

Special project in a student's area of interest.

DENT 4810 - Summer Elective Clinic (4)

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.

DENT 4830 - Directed Readings, Projects and Research (1-3)

Limited to dental hygiene majors. A maximum of nine hours may be accumulated with this course.

DENT 4850 - Study Abroad (1-6) Variable Title

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.

DENT 4890 - Advanced Community or Clinical Work Experience (2)

This course is designed to specifically meet the interests and career goals of the student. The 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. Prerequisite: Acceptance into the BS/DH Program and consent of the instructor.

DENT 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

DENT 4990 - Seminar (1-2)

Current concepts in dental hygiene for baccalaureate level dental hygiene students.

DET-Design Engineering Technology Courses

DET 1060 - Fundamentals of Mechanical Drafting Using 3D CAD (3) F, Sp

A beginning course for two and four year technology majors, students who need a related drafting class, and students wanting to explore a 3D mechanical design/drafting class. Includes sketching, 3D CAD modeling, geometric construction, shape and size description, orthographic projection, sectional views, auxiliary views, threads and fasteners, and an introduction to working drawings. Three hours of lectures per week. Lab time as required.

DET 1160 - Geometric Dimensioning & Tolerancing Using 3D CAD (3) F, Sp

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. Prerequisite: DET 1060.

DET 1250 - Fundamentals of Architectural Drafting Using 2D CAD (3) F, Sp

A beginning course for two and four year technology majors, students who need a related drafting class, and students wanting to explore architectural 2D drafting. Includes sketching, an introduction to the fundamentals of computer aided drafting, and the use of 2D CAD to create residential and light commercial (Type IV and V buildings) construction documents.

DET 1340 - Architectural Board Drafting for Interior Design (3) F

A beginning course for Interior Design students who need an introduction to manual basic drafting board skills including sketching, instruments and their use, lettering, geometric construction, shape and size description. Also an introduction to the fundamentals of architectural working drawings and procedures used in developing a set of residential plans, including architectural standards, design procedures and building requirements.

DET 1350 - Residential Architectural Design (3) F, Sp

The study of residential and light commercial (Type IV and V buildings) architectural design and construction documents. Covers procedures used in developing residential plans using 2D CAD. Includes architectural design and drafting standards, conventions, procedures and current building code requirements of the International Residential Code (IRC) and International Energy Conservation Code (IECC). Prerequisite: DET 1250.

DET 2000 - Introduction to Building Information Modeling (BIM) (3) F, Sp

The study of commercial architectural (Type I, II and III buildings) construction documents and an introduction to Building Information Modeling (BIM). Covers procedures used in developing commercial plans using 3D CAD to create a building information model that uses integrated design between architecture, structure and mechanical electrical and plumbing (MEP). Includes commercial architectural drafting standards, design procedures, and building code requirements including the latest release of the International Building Code (IBC) and Americans with Disabilities Act (ADA) guidelines. Software applications used to develop commercial architectural designs using BIM will be explored.

DET 2460 - Product Design Fundamentals Using 3D CAD (3) F, Sp

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. Three lectures per week. Prerequisite: DET 1160.

DET 2650 - Product Design & Development (3) Sp

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. Prerequisite: DET 2460.

DET 2660 - Architectural Structural Design & Detailing (BIM II) (3) Sp

An analysis of the structural behavior of architecturally engineered buildings and structures. A study of the properties of materials and their connections used in the construction of the built environment including: wood, steel, concrete, masonry and various other commonly used construction materials. Students will learn how loads are applied to simulate the stresses placed on structural components to determine what solution meets the design criterion established by code and design professionals in residential and commercial applications. 2D and 3D CAD are used to create residential and commercial construction documents including structural details, wall, floor and roof framing plans. Prerequisite: MATH 1080 (or MATH 1040 and MATH 1050) and DET 2000.

DET 2830 - Directed Readings (1-3) F, Sp

Directed readings in Design Engineering Technology including product design and development and architectural areas. Must have department approval.

DET 2890 - Cooperative Work Experience (1-3) Su, F, Sp

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.

DET 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4) F, Sp

Faculty approval required. Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

DET 3000 - BIM & The Green Built Environment (BIM III) (3) F

An analysis of sustainability in the green built environment. Course discussions will include how green building can be integrated into new and existing construction, the comparison of conventional and green construction practices, short and long term costs and benefits of green building as well as the history, current technologies, and emerging trends of green building. Software will be used to run analysis of power use and generation as well as other design decisions found within sustainability in the built environment. Prerequisite: DET 2000.

DET 3100 - Tool Design (3) F

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. Prerequisite: MFET 1210, DET 2460, and MATH 1080 (or MATH 1050 and MATH 1060).

DET 3300 - Applied Kinematic Analysis (3) Sp

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. Prerequisite: MFET 2300.

DET 3400 - Technical Illustration and Documentation I (3) F

Projects in design presentation using CAD and other computer graphics software as the primary medium. Image capture, image processing and manipulation, types of views, use of color, composition, page layout, integration of text, and forms of output. Prerequisite: DET 2000.

DET 3460 - Parametric Design Graphics (3) Sp

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. Prerequisite: DET 1060 and NTM 1700.

DET 3470 - Introduction to CATIA V5 (3) F

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. Prerequisite: DET 1160.

DET 4350 - Integrated Project Delivery & File Management (BIM IV) (3) F

An advanced BIM course dealing with the management of building information models including file management, template creation, custom family and content creation within the architectural, structural and Mechanical Electrical Plumbing (MEP) environments. Software applications used to detect clashes, review, animate, script and present the model will be explored. Prerequisite: DET 2000.

DET 4400 - Technical Illustration and Documentation II (3) Sp

The study of professional design presentation and the processes, tools, and media used. Problem definition, visual organization, incorporating visual identity, integrating word and image, information design and design for interactive media. Prerequisite: DET 3400.

DET 4470 - Advanced CATIA V5 (3) Sp

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. Prerequisite: DET 3470.

DET 4500 - Hydraulic and Pneumatic Applications (3) Sp

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. Prerequisite: MET 3400.

DET 4600 - Senior Project (2-2) F, Sp

A Capstone project spanning two consecutive semesters. The project includes application of skills, knowledge, techniques and concepts to the design and manufacturing project. Emphasis placed on integrated project management including preparation of drawings, creation of presentations, project organization and control, and documentation. Prerequisite: Senior standing and approval of the department. A student must apply for senior project one semester before the start of the senior project. DET 4600. Co-Requisite: MFET 4610.

DET 4610 - Senior Project (2-2) F, Sp

A Capstone project spanning two consecutive semesters. The project includes application of skills, knowledge, techniques and concepts to the design and manufacturing project. Emphasis placed on integrated project management including preparation of drawings, creation of presentations, project organization and control, and documentation.

DET 4830 - Directed Readings (1-3) Su, F, Sp

Directed readings in Design Engineering Technology including product design and development and architectural areas. Must have department approval.

DET 4890 - Cooperative Work Experience (1-3) Su, F, Sp

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.

DMS-Diagnostic Medical Sonography Courses

DMS 4110 - Sonography Principles & Instrumentation (3)

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 (3)

Developing, analyzing and evaluating a quality assurance program.

DMS 4210 - Cardiac Sonography I (3)

Concepts in cardiac sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4220 - Cardiac Sonography II (3)

Continuation of 4203.

DMS 4230 - Cardiac Sonography III (3)

Continuation of DMS 4220.

DMS 4310 - Abdominal Sonography (3)

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 Sonography (1)

Concepts in superficial structure sonographic scanning technique and protocol to produce and evaluate diagnostic images in the clinical setting.

DMS 4330 - Gynecologic Sonography (1)

Concepts in gynecologic sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4340 - Obstetric Sonography (3)

Concepts in obstetric sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4410 - Vascular Sonography I (2)

Concepts in vascular sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4420 - Vascular Sonography II (3)

Continuation of DMS 4410.

DMS 4510 - Breast Sonography (1)

Concepts in breast sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4610 - Cardiac Laboratory (1)

Patient position and instruction, transducer selection and anatomic placement, scanning protocol, and image quality are practiced and reviewed for cardiac sonographic examinations.

DMS 4620 - Medical Laboratory (1)

Patient position and instruction, transducer selection and anatomic placement, scanning protocol, and image quality are practiced and reviewed for medical sonographic examinations.

DMS 4630 - Vascular Laboratory (1)

Patient position and instrumentation, transducer selection and anatomic placement, scanning protocol, and image quality are practiced for vascular sonographic examinations.

DMS 4801 - Individualized Research (1-3)

Contract with faculty advisor required.

DMS 4811 - Cardiac Clinical I (3)

A minimum of 24 hours per week in an active diagnostic cardiac sonography department.

DMS 4812 - Cardiac Clinical II (3)

Continuation of DMS 4811.

DMS 4813 - Cardiac Clinical III (3)

Continuation of DMS 4812.

DMS 4821 - Medical Clinical I (3)

A minimum of 24 hours per week in an active diagnostic medical sonography department.

DMS 4822 - Medical Clinical II (3)

Continuation of DMS 4821.

DMS 4823 - Medical Clinical III (3)

Continuation of DMS 4822.

DMS 4831 - Vascular Clinical I (3)

A minimum of 24 hours per week in an active diagnostic vascular sonography department.

DMS 4832 - Vascular Clinical II (3)

Continuation of DMS 4831.

DMS 4833 - Vascular Clinical III (3)

Continuation of DMS 4832.

DMS 4841 - Breast Clinical (3)

A minimum of 24 hours per week performing breast sonography examinations. Prerequisite: DMS 4510 Breast Sonography.

DMS 4911 - Cardiac Comprehensive Review (1)

Review and requirements for advanced responsibilities of the cardiac sonographer.

DMS 4912 - Medical Comprehensive Review (2)

Review and requirements for advanced responsibilities of the medical sonographer.

DMS 4913 - Vascular Comprehensive Review (1)

Review and requirements for advanced responsibilities of the vascular sonographer.

DMS 4921 - Workshops, Conferences and Telecourses (1-3)**ECON-Economics Courses****ECON 1010 SS - Economics as a Social Science (3) Su, F, Sp**

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 (3) F

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.

ECON 1740 AI - Economic History of the United States (3) F, Sp

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. Note: MATH 1050 is a prerequisite for all Economics courses numbered 2000 or higher.

ECON 2010 SS - Principles of Microeconomics (3) Su, F, Sp

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. Prerequisite: MATH 1050 with a "C" or higher grade (or CR if taken on a CR/NC basis).

ECON 2020 SS - Principles of Macroeconomics (3) Su, F, Sp

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. Prerequisite: MATH 1050 with a "C" or higher grade (or CR if taken on a CR/NC basis), and ECON 2010.

ECON 2899 - Economics Foundations and Admission Assessment (0) Su, F, Sp

Completion of ECON 2899 is required of all non-business Economics students pursuing any major, minor, emphasis or certificate awarded by the John B. Goddard School of Business & Economics. The course objectives are: 1) assessment of Business Foundation knowledge, and 2) admittance to the Goddard School. Students should register for this course concurrent with (same semester as) their last required Business Foundation course (ECON 2010, ECON 2020 and QUAN 2600) or after the required Business Foundation courses have been completed. Students must have an overall GPA of 2.5 or higher and a Business Foundation GPA of 2.5 or higher and a minimum grade of "C-" in each of the three Business Foundation courses. *Credit/No credit*. Pre/Co-requisite: ECON 2010, ECON 2020, QUAN 2600.

ECON 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ECON 3030 - Managerial Economics (3) F, Sp

This course uses the tools of differential calculus and regression theory to analyze the managerial decisions of individual firms. Prerequisite: MATH 1050, QUAN 2600, QUAN 3610.

ECON 3090 - History of Economic Thought (3) Sp

This course covers the major concepts and contributions of the scholars of the past in economic doctrine and interpretations. Prerequisite: ECON 2010, ECON 2020.

ECON 3110 - International Trade (3) F, Sp

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. Prerequisite: ECON 2010, ECON 2020.

ECON 3120 - International Finance and Monetary Systems (3) Sp

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. Prerequisite: ECON 2010, ECON 2020.

ECON 3150 - Business Studies Abroad- International Finance (3)

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, dgstevenson@weber.edu).

ECON 3200 - Money and Banking (3) Sp

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. Prerequisite: ECON 2020.

ECON 3400 - Labor Economics (3) F

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. Prerequisite: ECON 2010.

ECON 3410 - Women in the World Economy (3)

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. Prerequisite: ECON 2010.

ECON 4010 - Intermediate Microeconomic Theory (3) F

The application of economic concepts to individual and firm behavior, consumer behavior, demand analysis, economics of the firm, and price theory. Prerequisite: ECON 2010, ECON 2020 and BSAD 2899 or ECON 2899.

ECON 4020 - Intermediate Macroeconomic Theory (3) Sp

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. Prerequisite: ECON 2010, ECON 2020, QUAN 2400 or ECON 3030, and BSAD 2899 or ECON 2899.

ECON 4170 - Economic Development (3) F

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. Prerequisite: ECON 2010, ECON 2020.

ECON 4320 - Industrial Organization (3)

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. Prerequisite: QUAN 2400 or ECON 3030, ECON 2010.

ECON 4520 - Public Finance (3)

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. Prerequisite: ECON 2010, ECON 2020.

ECON 4550 - Introduction to Econometrics (3) F

Advanced Regression Analysis. Topics include ordinary least squares, generalized least squares, nonlinear regression, dummy variables, autocorrelation, heteroskedasticity, and serial correlation. Computers used extensively. Prerequisite: ECON 2010, ECON 2020, QUAN 2400 or ECON 3030, QUAN 3610.

ECON 4560 - Mathematical Economics (3) Sp

Advanced application of mathematical modeling techniques to selected economic issues. Prerequisite: ECON 4010, ECON 4020, QUAN 3610, QUAN 2400 or ECON 3030.

ECON 4800 - Independent Research (1-3) F, Sp

Individual work or work in small groups, by arrangement, in special topics not included in the announced course offerings. Prerequisite: QUAN 3610 and approval of instructor.

ECON 4810 - Experimental Courses (1-3)

Experimental or one-time courses designed to fill a need in the community or investigate interesting and unusual topics. Prerequisite: ECON 2010, ECON 2020.

ECON 4850 - Economics Study Abroad (1-3)

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). Prerequisite: ECON 2899 and BSAD 2899. Can be repeated once up to 6 credits.

ECON 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ECON 4980 - Research Methods (3)

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. Prerequisite: Senior standing and department approval.

EDUC-Education Courses

EDUC 1010 - Exploring Teaching (3) Su, F, Sp

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. Prerequisite: This course or an equivalent approved course is a prerequisite to all licensure programs in the Department of Teacher Education.

EDUC 2000 - Social Studies Concepts for Elementary Teachers (3) Su, F, Sp

Fundamental concepts from the social sciences commonly found in elementary social studies curriculum.

EDUC 2010 - Human Exceptionality (3)

This course will introduce students to the characteristics of exceptional children with emphasis on the educational and psychological implications of disabilities to the development of the child. CBL.

EDUC 2604 TD - Information Resources in Education (1)

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. Completion of this course meets part D of the WSU Computer and Information Literacy requirement. Cross-Listed with LIBS 2604.

EDUC 2890 - Cooperative Work Experience (1-6) Su, F, Sp

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.

EDUC 2920 - Short Courses, Workshops, Institutes and Special Programs (1-6) 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 taken on a Credit/No Credit basis.

EDUC 3100 - Instructional Planning & Assessment (3) F, Sp

This course introduces the basic concepts of lesson and unit design, planning and assessment based on student needs. Field experience required. Prerequisite: Admission to Teacher Education. (Should be taken concurrently with the other Teacher Education Level 1 courses EDUC 3120, EDUC 3140 and CHF 4710. EDUC 3110 or EDUC 3370 can be taken prior to or with other Level 1 courses.)

EDUC 3110 - Instructional Technology (2) F, Sp

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. Prerequisite: Completion of the computer and information literacy requirements through course work (NTM 1701, NTM 1702, and NTM 1703 or NTM 1700) or testing (NTM 1501, NTM 1502, and NTM 1503).

EDUC 3120 - Reading Instruction in the Primary Grades (3) F, Sp

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). (Should be taken concurrently with the other Teacher Education Level 1 courses EDUC 3100, EDUC 3140 and CHF 4710. EDUC 3110 or EDUC 3370 can be taken prior to or with other Level 1 courses.)

EDUC 3140 - Educational Psychology, Interpersonal Skills and Classroom Management (Elementary) (3) F, Sp

Fundamental theories and philosophies, concepts, processes, and applications related to human behavior, teaching and learning, interpersonal relationships, and classroom management. Field experience required. Prerequisite: Admission to Teacher Education. (Should be taken concurrently with the other Teacher Education Level 1 courses EDUC 3100, EDUC 3120 and CHF 4710. EDUC 3110 or EDUC 3370 can be taken prior to or with other Level 1 courses.)

EDUC 3140D - Educational Psychology, Interpersonal Skills and Classroom Management (Special Education) (3)

Fundamental theories and philosophies, concepts, processes, and applications related to human behavior, teaching and learning, interpersonal relationships, and classroom management. Field experience required. Prerequisite: Admission to Special Education major.

EDUC 3200D DV - Foundations of Diversity: Culturally, Linguistically Responsive Teaching (Special Education) (3) F, Sp

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. Prerequisite: Admission to Special Education major.

EDUC 3200E DV - Foundations of Diversity: Culturally, Linguistically Responsive Teaching (Elementary) (3) F, Sp

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. Prerequisite: Teacher Education Level I (EDUC 3100, EDUC 3120, CHF 4710, EDUC 3110, or EDUC 3370 and EDUC 3140). Should be taken concurrently with other courses in Teacher Education Level 2 Elementary (EDUC 3240, EDUC 3260E, and EDUC 3280).

EDUC 3200S DV - Foundations of Diversity: Culturally, Linguistically Responsive Teaching (Secondary) (3) F, Sp

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. Should be taken concurrently with other courses in the Secondary Teacher Education Core (EDUC 3260S, EDUC 3900, and EDUC 3930).

EDUC 3240 - Reading Instruction in the Intermediate Grades (3) F, Sp

Methods, foundations, and assessments for developmental reading in the elementary school, Grades 3-6. Field experience required. Prerequisite: Successful completion of Teacher Education Level 1 (EDUC 3100, EDUC 3140, CHF 4710, EDUC 3120, EDUC 3110 or EDUC 3370). Should be taken concurrently with the other courses in Teacher Education Level 2 Elementary (EDUC 3200E, EDUC 3260E, and EDUC 3280).

EDUC 3260E DV - The Exceptional Student (Elementary) (3) F, Sp

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. Field experience required. Prerequisite: Teacher Education Level 1 (EDUC 3100, EDUC 3120, CHF 4710, EDUC 3110 or EDUC 3370, EDUC 3140). Should be taken concurrently with the other courses in Teacher Education Level 2 Elementary (EDUC 3200E, EDUC 3240, and EDUC 3280).

EDUC 3260S DV - The Exceptional Student (Secondary) (3) F, Sp

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. Field experience required. Should be taken concurrently with the other courses in the Secondary Teacher Education Core (EDUC 3200S, EDUC 3900, and EDUC 3930).

EDUC 3280 - Elementary Social Studies Methods (3) F, Sp

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, teaching with technology and building classroom community. National and state curricular guidelines will be reviewed and discussed. Field experience required. Prerequisite: Teacher Education Level 1 (EDUC 3100, EDUC 3120, CHF 4710, EDUC 3110 or EDUC 3370 and EDUC 3140) and EDUC 2000. Should be taken concurrently with the other courses in Teacher Education Level 2 Elementary (EDUC 3200E, EDUC 3240, and EDUC 3260E).

EDUC 3370 - Advanced Instructional Technology (2) F, Sp

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. Prerequisite: Prerequisites/co-requisites: Completion of technology literacy requirements (NTM 1701/NTM 1702/NTM 1703 or NTM 1501/NTM 1502/NTM 1503 or NTM 1700) and passing the Teacher Education Technology Placement test at an acceptable level. This course can be taken prior to or with Level 1 courses: EDUC 3100, EDUC 3120, EDUC 3140, CHF 4710.

EDUC 3390 - Literacy in the Primary Grades (2) Su, F

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 (3) Su, F, Sp

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 3900 - Preparing, Teaching, and Assessing Instruction (3) F, Sp

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. Field experience in a public school setting is included. This course must be taken concurrently with EDUC 3200S, EDUC 3260S, and EDUC 3930.

EDUC 3930 - Reading and Writing Across the Secondary Curriculum (3) F, Sp

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. Field experience required. Should be taken concurrently with the other courses in the Secondary Teacher Education Core (EDUC 3200S, EDUC 3260S, and EDUC 3900).

EDUC 4250 - Second Language Acquisition: Theories and Implementation (3) F

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 (3) Sp

Teaching strategies for English language development and content area instruction.

EDUC 4300 - Elementary Mathematics Methods (3) F, Sp

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. National and state curricular guidelines will be reviewed and discussed. Field experience required. Prerequisite: Teacher Education Level 2 Elementary (EDUC 3200E, EDUC 3240, EDUC 3260E), MATH 2010 and MATH 2020. Should be taken concurrently with the other courses in Teacher Education Level 3 Elementary (EDUC 4320, EDUC 4330, and EDUC 4340).

EDUC 4310 - Foundations of Cooperative Learning (2)

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 (3)

Methods for developmental language arts. Field experience required. Prerequisite: Teacher Education Level I (EDUC 3100, EDUC 3110, and EDUC 3140) and Level II (EDUC 3200E, EDUC 3240, EDUC 3260E, and EDUC 3280). Should be taken concurrently with the other courses in Teacher Education Level 3 Elementary (EDUC 4300, EDUC 4330, and EDUC 4340).

EDUC 4330 - Elementary Science Methods (3) F, Sp

Methods and materials for teaching hands-on guided discovery science. National and state curricular guidelines will be reviewed and discussed. Field experience required. Prerequisite: Teacher Education Level 2 Elementary (EDUC 3200E, EDUC 3240, EDUC 3260E). Should be taken concurrently with the other courses in Teacher Education Level 3 Elementary (EDUC 4300, EDUC 4320 or EDUC 4350 if previously taken, and EDUC 4340).

EDUC 4340 - Elementary Art/Music Methods (3) F, Sp

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. National and state curricular guidelines will be reviewed and discussed. Field experience required. Prerequisite: Teacher Education Level 2 Elementary (EDUC 3200E, EDUC 3240, EDUC 3260E). Should be taken concurrently with the other courses in Teacher Education Level 3 Elementary (EDUC 4300, EDUC 4320, and EDUC 4330).

EDUC 4380 - Student Teaching in Elementary Education (4) F, Sp

Student teaching experience in elementary public school setting plus weekly seminar on campus. Offered CR/NC only. Prerequisite: EDUC Level 3 (EDUC 4300, EDUC 4320 or EDUC 4350 if previously taken, EDUC 4330, and EDUC 4340) and permission of Field Experience Director. Should be taken concurrently with EDUC 4820E, EDUC 4840, and EDUC 4860.

EDUC 4420 - Foundations of Education of the Gifted (2) (not currently taught)

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.

EDUC 4450 - Creativity and Applied Imagination in the K-12 Classroom (2) (not currently taught)

Exploration and development of readily available personal and community resources to encourage creative thinking, classroom involvement, and transfer of learning.

EDUC 4470 - Teaching for Thinking (2) (not currently taught)

Theory and practice for teaching thinking skills in elementary, middle, and high school classrooms. Prerequisite: Admission to Teacher Education and EDUC 3140 or equivalent.

EDUC 4480 - Differentiated Curriculum for the Gifted and Talented (3) (not currently taught)

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.

EDUC 4490 - Assessment and Evaluation in Education of the Gifted (3) (not currently taught)

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.

EDUC 4510 - Foundations in Special Education Practice and Law (3)

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. Prerequisite: Admission to Teacher Education.

EDUC 4515 - Special Education Law and Practice (3)

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. 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. Prerequisite: Admission to Teacher Education.

EDUC 4520 - Collaboration, Consultation, and IEP Development (3)

Roles of the special educator and families. IEP development, Least Restrictive environment, managing multidisciplinary

team activities and techniques of collaboration and consultation. Prerequisite: Admission to Teacher Education.

EDUC 4521 - Practicum in Special Education (2) (not currently taught)

This Practicum experience will focus on examining in depth the lives of students with mild to moderate disabilities in school, home, and community settings. Students will be introduced to the IEP process and will practice developing collaborative relationships within school settings. This Practicum must be taken either concurrently with, or after completion of, EDUC 4510 and EDUC 4520. Not currently being taught.

EDUC 4530 - Principles and Applications of Special Education Assessment (3)

Administer, score, and interpret norm-referenced assessments instruments, analyze in combination with data from other assessment processes, and use to determine eligibility and develop educational programs. Prerequisite: EDUC 4510, EDUC 4520, EDUC 4650, EDUC 4550 with B- or above.

EDUC 4540 - Managing Student Behavior (3)

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. Prerequisite: EDUC 4510, EDUC 4520, EDUC 4650, EDUC 4550 with B- or above.

EDUC 4550 - Instructional Planning and Learning Environments for Special Education Students (3)

Instructional programming and modification of curriculum for students with disabilities served by teachers with Mild/Moderate Endorsements. Prerequisite: Admission to Teacher Education.

EDUC 4580 - Learning Strategies and Transition for Special Education Students (3)

Instructional programming and modification of curriculum for students with disabilities served by teachers with Mild/Moderate Endorsements. Prerequisite: EDUC 4510, EDUC 4520, EDUC 4650, EDUC 4550 with B- or above.

EDUC 4581 - Pre-Student Teaching in Special Education: Assessment, Behavior Management, Instruction (4)

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) assessment, (b) behavior management, (c) curriculum and instruction for students K-12, and (d) planning and developing post secondary transition plans. Prerequisite: EDUC 4530, EDUC 4540, EDUC 4580, EDUC 4640 with B- or above.

EDUC 4640 - Validated Instructional Methods and Practicum: Mathematics (4)

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. Field experience required. (Special Education majors only). Prerequisite: EDUC 4510, EDUC 4520, EDUC 4650, EDUC 4550 with B- or above.

EDUC 4650 - Validated Instructional Methods and Practicum: Reading (4)

This course is designed to introduce principles and techniques for diagnosis and remediation of reading problems. The course will cover student characteristics and school setting demands that contribute to lack of success in reading classrooms. Field experience required. Prerequisite: Admission to Teacher Education.

EDUC 4660 - Validated Instructional Methods and Practicum: Written Expression (4)

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. Field experience required. Prerequisite: EDUC 4640, EDUC 4530, EDUC 4540, EDUC 4580 with B- or above.

EDUC 4670 - Special Education Student Teaching (4) Su, F, Sp

Supervised teaching in selected special education programs in an elementary or secondary school. Available on a CR/NC basis only. Prerequisite: successful completion of mild/moderate licensure course work.

EDUC 4680 - Special Education Student Teaching (8)

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. Prerequisite: Successful completion of Special Education major requirements, EDUC 4581, EDUC 4660 with B- or above. Must be taken concurrently with EDUC 4686.

EDUC 4685 - Special Education Student Teaching Seminar and Synthesis (1) Non-majors

The Seminar and Synthesis will support student teaching through regular meetings. Prerequisite: Successful completion of Special Education Licensure requirements. Must be taken concurrently with EDUC 4670.

EDUC 4686 - Special Education Student Teaching Seminar & Synthesis for Special Education Majors (4)

The Seminar and Synthesis will support student teaching through regular meetings on campus. Prerequisite: Successful completion of Professional Core, Special Education Core, and Concentration courses as specified in course catalog, EDUC 4581, and EDUC 4660 with B- or above.

EDUC 4700 - Learning in the Schools (2)

Principles of learning and management and their application to the school situation. Prerequisite: Student teaching.

EDUC 4740 - Building School Partnerships with ESL/Bilingual Families (1)

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 4810 - Adult Education (2)

A survey course in adult education with emphasis on philosophy, principles, and practices as evidenced in programs and various adult education organizations. Prerequisite: professional education course work, teaching experience, or approval of the instructor.

EDUC 4820E - Managing Diverse Classrooms (3) (not currently taught)

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. Prerequisite: Teacher Education Level 3 Elementary (EDUC 4300, EDUC 4320 or EDUC 4350 if previously taken, EDUC 4330, EDUC 4340). Should be taken concurrently with the other courses in Teacher Education Level 4 Elementary (EDUC 4840, EDUC 4860).

EDUC 4820S - Managing Diverse Classrooms (3) (not currently taught)

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. Prerequisite: Secondary Teacher Education Core (EDUC 3200S, EDUC 3260S, EDUC 3900, and EDUC 3930).

EDUC 4830 - Individually Prescribed Program (1-6) Su, F, Sp

Designed primarily for individual needs.

EDUC 4840 - Student Teaching in Elementary Education (8) F, Sp

Student teaching experience in a public school to synthesize theory and practice. Support seminars held on campus. Available on a CR/NC basis only. Prerequisite: EDUC Level 3 (EDUC 4300, EDUC 4330, EDUC 4340, & 4350) Should be taken concurrently with EDUC 4850.

EDUC 4850 - Integrated Elementary Education Student Teaching Seminar and Synthesis (4)

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. (Should be taken concurrently with EDUC 4840.)

EDUC 4860 - Elementary Senior Synthesis Seminar (1) (not currently taught)

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. Prerequisite: Teacher Education Level 3 Elementary (EDUC 4300, EDUC 4320 or EDUC 4350 if previously taken, EDUC 4330, EDUC 4340). Should be taken concurrently with the other courses in Teacher Education Level 4 Elementary (EDUC 4820E, EDUC 4840).

EDUC 4870 - Directed Experiences with Students (1) F, Sp

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 - Cooperative Work Experience (1-6)

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.

EDUC 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number.

The specific title and credit authorized will appear on the student transcript. Available on CR/NC basis.

EDUC 4930 - Student Teaching in Secondary Education (4) F, Sp

Student teaching experience in secondary public school setting plus weekly seminar on campus. Offered CR/NC only. Prerequisite: Secondary Teacher Education Core (EDUC 3200S, EDUC 3260S, EDUC 3900 & EDUC 3930) and permission of Student Teaching Coordinator. Should be taken concurrently with EDUC 4950 Integrated Secondary Student Teaching Seminar.

EDUC 4940 - Student Teaching in Secondary Education (8) F, Sp

Student teaching experience in a public school to synthesize theory and practice. Support seminars held on campus. Available on a CR/NC basis only. Prerequisite: Secondary Teacher Education Core (EDUC 3200S, EDUC 3260S, EDUC 3900 & EDUC 3930). Should be taken concurrently with EDUC 4950 Integrated Secondary Student Teaching Seminar.

EDUC 4950 - Integrated Secondary Student Teaching Seminar (4) F, Sp

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. Prerequisite: Completion of Secondary Teacher Education Core (EDUC 3200S, EDUC 3260S, EDUC 3900, EDUC 3930). Should be taken concurrently with Student Teaching in Secondary Education (EDUC 4930 or EDUC 4940).

EDUC 4960 - Secondary Senior Synthesis Seminar (1) (not currently taught)

Synthesis of the TREC Model for elementary and secondary programs with specific emphasis on beginning a professional career in teaching. Senior Project is required. Should be taken concurrently with EDUC 4820S and EDUC 4840.

EDUC 5050 - Action Research in the Classroom (2) (TBA, as needed)

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.

EDUC 5060 - Effective Mentoring in the Classroom (2) (TBA, as needed)

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.

EDUC 5110 - Advanced Multicultural/Bilingual Education (3)

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 (3)

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 (3)

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 (2)

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 (3)

Assessment of reading problems and corrective procedures for remediation in elementary classrooms.

EDUC 5360 - Literacy in the Elementary School (3)

An exploration of current reading, oral and written language theories, and their applications for the improvement of literacy practices in schools.

EDUC 5770 - Field Experience in ESL/Bilingual Education (2) F, Sp

Students will gain experience in teaching and working with ESL/bilingual students and apply what they have learned from relevant courses.

EDUC 5840 - Student Teaching in Elementary Education for MED Students (6)

The student teaching experience is the culminating learning experience for the elementary 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. Offered CR/NC only. Prerequisite: EDUC 5860, MED 6110 or MED 6120, MED 6050, MED 6510, MED 6020, MED 6310 or MED 6311 and MED 6312 and MED 6313, MED 6360 and one of the following MED 6330, MED 6350, or MED 6352.

EDUC 5860 - Practicum in Education (1-4) Variable Title F, Sp

Practical synthesis and application of knowledge and skills gained in previous education courses. Student must have approval from the department or program chair, and should follow specific program guidelines for prerequisites and other requirements. This course may be taken more than one time. Offered CR/NC only.

EDUC 5880 - Student Teaching in Secondary Education for MED Students (6)

Student teaching experience, with supervision, in a public school to synthesize theory and practice from previous education courses. Offered CR/NC only. Prerequisite: EDUC 5860, MED 6020, MED 6060, MED 6120 or MED 6110, MED 6050, MED 6320, and MED 6510.

EDUC 5920 - Short Courses, Workshops, Institutes and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number.

The specific title and credit authorized will appear on the student transcript. Available on CR/NC basis.

EE-Electronics Engineering Courses**EE 1000 - Introduction to Electronics Engineering (2)**

An introductory course to Electronics Engineering topics including electronic terms, numbering systems, software tools, and documentation practices. College algebra and trigonometry are strongly recommended.

EE 1270 - Introduction to Electrical Circuits (4)

The basics of analog circuits as an introduction to Electronics 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. Lecture and lab combination. Prerequisite: MATH 1210.

EE 2260 - Fundamentals of Electrical Circuits (4)

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. Prerequisite: EE 1270 and MATH 1220.

EE 2700 - Digital Circuits (4)

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. Co-Requisite: (Recommend) CS 2250 or CS 1410.

EE 3000 - Engineering Seminar (1)

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.

EE 3010 - Electronic Circuits (2)

A review course of fundamental concepts of electrical and digital circuits. It is designed for returning students or anyone that needs to refresh concepts that are included in EE 1270, EE 2260, and EE 2700. Prerequisite: An EET BS from an ABET accredited program or EE 2260 and EE 2700.

EE 3110 - Microelectronics I (4)

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. Prerequisite: CHEM 1210 and EE 2260 or EE 3010.

EE 3120 - Microelectronics II (4)

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. Prerequisite: EE 3110.

EE 3210 - Signals and Systems (4)

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. Prerequisite: EE 2260 or EE 3010 and MATH 2250 or MATH 2270 and MATH 2280.

EE 3310 - Electromagnetics I (4)

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. Prerequisite: MATH 2210, PHYS 2220, and EE 2260 or EE 3010.

EE 3610 - Digital Systems (4)

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. Prerequisite: EE 2700 or EE 3010 and CS 2250 or CS 1410.

EE 3710 - Embedded Systems (4)

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. Prerequisite: EE 2700 or EE 3010, and CS 2250 or CS 1410.

EE 3890 - Internship (2)

This is a core course that is required for the BS Engineering degree. EE 3890 can be taken a maximum of three times for a total of six credits, but only two credits count toward the major. The student will need department approval before being allowed to register. Prerequisite: Permission from the department.

EE 4010 - Senior Project I (2)

Students will be required to complete a 200-hour 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. Prerequisite: Permission from the department.

EE 4020 - Senior Project II (2)

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. Prerequisite: EE 4010.

EE 4100 - Control Systems (4)

Topics related to control theory, analysis, and testing of systems in the time domain, frequency domain and state space. Lecture and lab combination. Prerequisite: EE 3120 and EE 3210.

EE 4210 - Digital Signal Processing (3)

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. Prerequisite: EE 3210.

EE 4310 - Electromagnetics II (3)

A study of intermediate electromagnetic issues common to circuits, systems, and communication networks. Prerequisite: EE 3310.

EE 4410 - Communication Circuits and Systems (3)

A study of communication circuits, modulation and decoding theory, spectrum usage, networks, and protocols. Prerequisite: EE 3210 and MATH 3410.

EE 4800 - Individual Studies (1-4)

The students will receive credit for approved studies in the Electronics Engineering program. A maximum of four credits can count as an elective course in the Electronics Engineering program.

EE 4900 - Special Topics (1-4)

A one-time special study course designed to introduce a new relevant topic that is not covered in the EE program. Lecture and lab combination. Laboratory activities support the selected course topic. A maximum of four credits can be counted for EE program.

ENGL-English Courses

ENGL 0900 ND - Fundamentals of College Reading and Writing (3)

A course designed to help students develop fundamental reading, writing, and thinking skills. Students in this course work closely with Skills Enhancement Center tutors in both group and one-to-one settings. Students with ACT scores in either English or Reading of 12 and below are required to take ENGL ND0900. 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 0955. ND (non-degree) do not count toward hours required for graduation.

ENGL 0955 ND - Developmental College Reading and Writing (6)

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. ND (non-degree) do not count toward hours required for graduation.

ENGL 0960 ND - Developmental College Writing (3)

Developing fundamental reading, thinking, and writing skills. Focuses on sentence structure and essay development. ND (non-degree) do not count toward hours required for graduation.

ENGL 1000 - College Reading (1-3)

The English department recommends this course as an excellent entry-level college course. Students in this course can expect to improve their reading comprehension, their critical thinking skills, their breadth and depth of knowledge, and their aptitude for learning.

ENGL 1010 EN - Introductory College Writing (3)

Students will learn practices of successful academic writing. Students will focus on the writing process, writing for specific audiences, collaboration with peers, and on the interrelationship between reading and writing. To enter 1010 the student must have 17 or higher on the ACT English portion, or equivalent. Student must complete ENGL 1010 satisfactorily (a grade of "C" or better) before enrolling in ENGL 2010.

ENGL 2010 EN - Intermediate College Writing (3)

This course 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. Prerequisite: ENGL 1010 with "C" 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 2100 - Technical Writing (3)

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. Prerequisite: ENGL 1010.

ENGL 2200 HU/DV - Introduction to Literature (3)

An introduction to three major literary genres, fiction, poetry, and drama, drawn from a diverse range of authors from various cultures and historical periods. Students will learn how to read literary texts closely and critically, and how literature--reading more generally--can have a meaningful part of their daily lives. Course includes relevant practice in the principles of successful writing, including drafting, revising, and editing. Prerequisite: ENGL 1010 with a "C" grade or better or equivalent.

ENGL 2220 HU/DV - Introduction to Fiction (3)

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. Prerequisite: ENGL 1010 with a "C" grade or better or equivalent.

ENGL 2240 HU/DV - Introduction to Poetry (3)

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. Prerequisite: ENGL 1010 with a "C" grade or better or equivalent.

ENGL 2250 CA - Creative Writing (3)

In this Gen Ed course students will learn in a workshop setting to write original pieces in three genres that may include the following: short stories, poetry, creative non-fiction, and plays. As models for their own writing, students will read exemplary pieces from each genre taught from different eras and cultures, in order to build a vocabulary base. Thus, students will become familiar with aspects of storytelling such as story arc, characterization, and dialogue; and aspects of poetry such as rhyme, rhythm, and figurative language, for

use in their own writing. Through regular exercises, students will generate ideas for creating original writing such as stories, poems, plays, and creative essays, and will refine oral and communicative skills. Students will critique and be critiqued by the entire class in order to revise early drafts, will analyze selected texts, and will evaluate their own and others' work. Prerequisite: ENGL 1010 with a "C" grade or better or equivalent.

ENGL 2260 CA - Introduction to Writing Short Fiction (3)

This course introduces students to writing original short fiction in a workshop setting. Students will read as models a judicious sampling of stories by authors such as Edgar Allen Poe, William Faulkner, Toni Morrison, Truman Capote, and others as selected by the professor in order to build a vocabulary for analyzing aspects of storytelling such as plot, story arc, characterization, dialogue, meaningful detail, and story pacing. Using guided writing exercises and journaling, students will develop ideas from these sources to create original fiction for a series of in-class workshops. Students will critique, and be critiqued by, the entire class, in order to revise their stories. Prerequisite: ENGL 1010 with a "C" grade or better or equivalent.

ENGL 2290 HU/DV - Introduction to Drama (3)

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. Prerequisite: ENGL 1010 with a "C" grade or better or equivalent.

ENGL 2510 HU/DV - Masterpieces of Literature (3)

An introduction to select masterworks, selected from a diverse range of authors from various cultures and historical periods. Students will develop the critical and interpretive skills necessary to analyze various genres (fiction, drama, and poetry) and to reflect on the nature of literary excellence. Course includes relevant practice in the principles of successful writing, including drafting, revising, and editing. Prerequisite: ENGL 1010 with a "C" grade or better or equivalent.

ENGL 2710 HU /DV - Perspectives on Women's Literature (3)

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. Prerequisite: ENGL 1010 with a "C" grade or better or equivalent.

ENGL 2830 - Directed Readings (1-3)

Prerequisite: ENGL 2010 or equivalent.

ENGL 2890 - Cooperative Work Experience (1-6)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. Prerequisite: ENGL 1010 with a "C" grade or better or equivalent.

ENGL 2920S - Community Service (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 3010 - Introduction to Linguistics (3)

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. Prerequisite: ENGL 2010 or equivalent. Students in English, foreign languages, anthropology, philosophy, psychology, and history are encouraged to take this course.

ENGL 3020 - Introduction to the Study of Language for Teachers (3)

This course is designed for English teaching majors and minors. It introduces students to the nature of language and linguistics. It also reviews the elements of traditional grammar. This course surveys prescribed applications for prospective secondary school English teachers, including language variation, contemporary alternatives to traditional grammar, the history of English, and linguistics and composition. Prerequisite: ENGL 2010 or equivalent.

ENGL 3030 - Structure of English (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 3040 - History of the English Language (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 3050 - Grammar, Style, and Usage for Advanced Writing (3)

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, as well as students in communication, pre-law, and criminal justice. Prerequisite: ENGL 2010 or equivalent.

ENGL 3080 - Critical Approaches to Literature (3)

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. Prerequisite: ENGL 2010 or equivalent. Recommended prerequisites: ENGL 2220, ENGL 2240, or ENGL 2290.

ENGL 3100 - Professional and Technical Writing (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 3140 - Professional and Technical Editing (3)

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. Co-Requisite: ENGL 3100.

ENGL 3190 - Document Design (3)

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. Prerequisite: ENGL 3100.

ENGL 3210 - Advanced College Writing (3)

Basic expository techniques combined with other forms of discourse. Emphasis on originality, clarity and practical application for other courses as well as vocation. Prerequisite: ENGL 2010 or equivalent.

ENGL 3250 - Advanced Fiction Writing (3)

Short story and novel writing with emphasis upon free lance and publication. Begins with a review of basic elements of literature and effective creative writing and offers extensive feedback on each assignment from both professor and peers. Class lectures are combined with extensive student discussion. Prior experience in creative writing and other areas

of literature is recommended. Prerequisite: ENGL 2010 or equivalent.

ENGL 3260 - Poetry Writing (3)

Using "workshop" methodology, this course identifies and practices a variety of techniques and devices for generating, writing, and revising poems. It is intended for the serious student interested in writing poetry for publication and public reading. The course requires a substantial commitment to reading and evaluating original poetry. Prerequisite: ENGL 2010 or equivalent.

ENGL 3270 - Magazine Article Writing (3)

Emphasis on writing for publication and study of the current market. Extensive feedback is provided on each assignment by teacher and class. Lecture is combined with lively class discussion. Any additional background in imaginative writing, other areas of literature, or communications such as news reporting not essential but helpful. Lecture is combined with lively class discussion. Prerequisite: ENGL 2010 or equivalent.

ENGL 3280 - Biographical Writing (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 3300 - Children's Literature (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 3310 - Young Adult Literature (3)

Students will study the characteristics of literature for young adults and connections to adolescent development. Selection and evaluation, ethnic and culturally diverse authors, the history of young adult literature, and book-to-film comparisons will receive special emphasis. This course is designed for non-teaching English majors, students interested in adolescent psychology or in acquiring a breadth of exposure to literature that appeals to young adult readers. Prerequisite: ENGL 2010 or equivalent.

ENGL 3350 - Studies in Literary Genres (3) Variable Title Course

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 3400 - The Teaching of Literature (3)

Students will develop their own philosophies for teaching literature and language to middle, junior high, and high school students by exploring current research findings, theoretical approaches and practical strategies. Prerequisite: ENGL 2010 or equivalent. Any student not admitted to the Teacher Education Program must have instructor approval

prior to registering for this course. This course must be taken concurrently with ENGL 3410.

ENGL 3410 - The Teaching of Writing (3)

Students will develop their own philosophies for teaching writing to middle, junior high, and high school students by exploring current research findings, theoretical approaches and practical strategies. Prerequisite: ENGL 2010 or equivalent. Any student not admitted to the Teacher Education Program must have instructor approval prior to registering for this course. This course must be taken concurrently with ENGL 3400.

ENGL 3420 - Teaching With Young Adult Literature (3)

This course introduces prospective teachers, librarians, and other educators to the use of contemporary adolescent literature across the curriculum. Multicultural and global selection, critical evaluation of the literature, issues of censorship, reader response theory, media connections, and reading/writing strategies for teaching young adult readers will receive major emphasis. The course includes a practicum or service-learning experience in planning, sharing, and using young adult literature in public school classrooms. Prerequisite: ENGL 2010 or equivalent. This course is required of English teaching majors and minors and must be taken concurrently with ENGL 3020, ENGL 3400, and ENGL 3410.

ENGL 3500 HU - Introduction to Shakespeare (3)

This class is an introduction designed to foster a critical appreciation of the plays of Shakespeare. The class is intended for students who are fulfilling General Education credit, studying theater, or planning to teach. Students can expect to study at least one comedy, one tragedy, and one history play in this course. Prerequisite: ENGL 2010 or equivalent.

ENGL 3510 HU/DV - World Literature (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 3520 HU - Literature of the Natural World (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 3550 DV - Multicultural and Ethnic Literature in America (3)

A survey of intercultural literature which reflects the rich diversity inherent in the American experience. The course includes works by Native, Hispanic, Asian, and African American authors. Prerequisite: ENGL 2010 or equivalent.

ENGL 3580 - Regional Literature in America (3) Variable Title Course

This variable topics course treats characteristic literature in various genres and themes from a designated region of the United States such as the West, South, New England, and so on. It may be taken more than once with different designations. Prerequisite: ENGL 2010 or equivalent.

ENGL 3730 DV - Literatures of Cultures and Places (3) Variable Title Course

This variable topics course examines literature, cultures, and nations beyond England and America. Students will be introduced to the ways in which texts are closely tied to the geographical 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. It may be taken more than once with different designations. Prerequisite: ENGL 2010 or equivalent.

ENGL 3740 - The Literature of the Sacred (3) Variable Title Course

This variable topics course studies one or more spiritual, religious, or ethical books of world-wide fame. Texts such as the Bible, the Koran, and the Bhagavad-Gita will be considered as works of literature. It may be taken more than once with different designations. Prerequisite: ENGL 2010 or equivalent.

ENGL 3750 HU - Topics and Ideas in Literature (3) Variable Title Course

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. It may be taken more than once with different designations. Prerequisite: ENGL 2010 or equivalent.

ENGL 3820 - History of Literary Criticism (3)

Starting with the works of Plato and Aristotle, students will explore rhetorical strategies and philosophical ideas that have influenced the reading of literary texts from classical times to the present. Prerequisite: ENGL 2010 or equivalent.

ENGL 3840 - Methods and Practice in Tutoring Writers (1-3)

Controlled experience in tutoring student writers in all disciplines. This course is only for people who are actually employed as a tutor. Prerequisite: ENGL 2010 or equivalent.

ENGL 3850 - Methods and Practice in Tutoring and Mentoring ESL Students (1-3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 3880 - Philosophy and Literature (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 4010 - Topics in Language Study (3) Variable Title Course

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. It may be taken more than once with different designations. Prerequisite: ENGL 2010 or equivalent.

ENGL 4100 - Issues in Professional and Technical Writing (3) Variable Title Course

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. It may be taken more than once with different designations. Prerequisite: ENGL 3100.

ENGL 4110 - Content Management (3)

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. Prerequisite: ENGL 3100.

ENGL 4120 - Seminar and Practicum in Professional and Technical Writing (3)

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. Prerequisite: ENGL 3100.

ENGL 4400 - Multicultural Perspectives on Literature for Young People (3)

Students will study the principles of literature for young people in combination with the theories of multi-cultural education. Designed for teachers or those preparing to teach, it will address issues connected to schools, teaching strategies and pedagogy, and the selection and evaluation of materials for diverse populations. May be substituted for either ENGL 3300 or ENGL 3310 upon approval. Prerequisite: ENGL 2010 or equivalent.

ENGL 4410 - Strategies and Methodology of Teaching ESL/Bilingual (3)

This course emphasizes practical strategies and methods of teaching ESL/Bilingual in the public school systems of this country. Prerequisite: ENGL 2010 or equivalent.

ENGL 4420 - English Phonology and Syntax for ESL/Bilingual Teachers (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 4450 - ESL/Bilingual Assessment: Theory, Methods, and Practices (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 4520 - American Literature: Early and Romantic (3)

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. Prerequisite: ENGL 3080.

ENGL 4530 - American Literature: Realism and Naturalism (3)

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. Prerequisite: ENGL 3080.

ENGL 4540 - American Literature: Modern (3)

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. Prerequisite: ENGL 3080.

ENGL 4550 - American Literature: Contemporary (3)

This course focuses on American literature from the 1950s to the present 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. Representative writers of this period include: Arthur Miller, Flannery O'Connor, Elizabeth Bishop, Tillie Lerner Olsen, Ralph Ellison, James Baldwin, Allen Ginsberg, Cynthia Ozick, Amiri Baraka, Maxine Hong Kingston, Rita Dove, Toni Morrison, Thomas Pynchon, E. L. Doctorow. Prerequisite: ENGL 3080.

ENGL 4610 - British Literature: Medieval (3)

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. Prerequisite: ENGL 3080.

ENGL 4620 - British Literature: Renaissance (3)

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. Prerequisite: ENGL 3080. (Note: this survey does not

typically try to do justice to its largest figure, Shakespeare - for whom the department has established ENGL 4730: Shakespeare's Tragedies, Comedies & Histories.)

ENGL 4630 - British Literature: Neoclassical and Romantic (3)

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. Prerequisite: ENGL 3080.

ENGL 4640 - British Literature: Victorian (3)

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. Prerequisite: ENGL 3080.

ENGL 4650 - British Literature: Modern (3)

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). Prerequisite: ENGL 3080.

ENGL 4660 - British Literature: Contemporary (3)

This historical survey examines British and Anglo-Irish literature since 1950 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 the second half of a century increasingly multicultural in outlook. Possible focuses include post-war disillusion (William Golding); Absurdism and Postmodernism (Samuel Beckett, Tom Stoppard); neo-Romanticism (Ted Hughes, Seamus Heaney, Nuala Ni Dhomhnaill); experimentalism and magic realism (Doris Lessing, Salman Rushdie, Angela Carter); innovative historical fiction (John Fowles, A.S. Byatt); and legacies of Empire in a postcolonial world (Jean Rhys, V.S. Naipaul, Kazuo Ishiguro, Anita Desai). Prerequisite: ENGL 3080.

ENGL 4710 - Eminent Authors (3) Variable Title Course

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. It may be taken more than once with different designations. Prerequisite: ENGL 3080.

ENGL 4720 - Chaucer (3)

A study of Chaucer's best loved works, using mainly close reading to investigate selections from *The Canterbury Tales* and minor poems. The works will be considered in the context of theories of the Middle Ages and on the nature of love, of God, of persons, and of the universe. Prerequisite: ENGL 3080.

ENGL 4730 - Studies in Shakespeare (3)

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. Prerequisite: ENGL 3080.

ENGL 4740 - Milton: Major Prose and Poetry (3)

A comprehensive survey of the major prose and poetic works of John Milton, culminating in *Paradise Lost* and *Samson Agonistes*. Prerequisite: ENGL 3080.

ENGL 4750 - Classical Literature (3)

A survey of 3,000 years of intellectual and cultural advancement paralleled with the ascent of civilization from Crete to the Roman empire. The course explores the significance of myths in the process of literary development. Prerequisite: ENGL 3080.

ENGL 4760 - Irish Literature (3)

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. Prerequisite: ENGL 3080.

ENGL 4830 - Directed Readings (1-3)

Prerequisite: ENGL 2010 or equivalent.

ENGL 4890 - Cooperative Work Experience (1-6)

A continuation of ENGL 2890 Cooperative Work Experience. Open to all students. Prerequisite: ENGL 2010 or equivalent.

ENGL 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. Prerequisite: ENGL 1010 with a "C" grade or better or equivalent.

ENGL 4940 - Writer's Workshop (3)

This course offers an opportunity for students to choose a writing project and workshop it with their peers under the direction of the instructor. Writing skills will be developed and honed through intensive writing projects which could include a variety of genres: nonfiction, creative nonfiction, fiction, (short story collection, novel), biography, autobiography, poetry, etc. The course is designed for students with a

strong writing background. Prerequisite: any of the following: ENGL 3250, ENGL 3260, ENGL 3270, ENGL 3280, ENGL 3350.

ENGL 4960 - Metaphor: Editing the Student Literary Journal (3)

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. Prerequisite: ENGL 2010 or equivalent.

ENGL 5010 - Introduction to Linguistics (3)

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. 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 been admitted to Weber State University's MA program in English but have no upper-division undergraduate coursework in linguistics.

ENGL 5020 - Introduction to the Study of Language for Teachers (3)

This course is designed for English teaching majors and minors. It introduces students to the nature of language and linguistics. It also reviews the elements of traditional grammar. This course surveys prescribed applications for prospective secondary school English teachers, including language variation, contemporary alternatives to traditional grammar, the history of English, and linguistics and composition. This course is designed for students who have been admitted to WSU's MA program in English but have no upper-division undergraduate coursework in linguistics.

ENGL 5050 - Grammar, Style, and Usage for Advanced Writing (3)

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. 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 designed for students with bachelor's degrees who have been admitted to Weber State University's MA program but do not have upper-division undergraduate coursework in linguistics.

ENGL 5110 - Writing for Teachers (3)

Designed primarily for teachers already in service, this course explores the most current research and theory concerning the teaching of writing and applies it to real problems they face in the secondary classroom.

ENGR-Pre-Engineering Courses

ENGR 1000 - Introduction to Engineering (2) F

Introduction to engineering for students in the pre-engineering program. Engineering as a profession and career opportunities. Fundamentals of engineering design and analysis using

the computer. College algebra and trigonometry strongly recommended.

ENGR 2010 - Statics (3) F

Vector mechanics, force and moment systems, equilibrium of particles and rigid bodies, friction and moments of inertia. Prerequisite: MATH 1210 and PHYS 2210.

ENGR 2080 - Dynamics (4) Sp

Fundamentals of position, velocity and acceleration. Kinematics and kinetics of particles. Newton's laws, conservation of momentum and energy. Dynamics of rigid bodies. Prerequisite: ENGR 2010 with a grade of "C" or higher.

ENGR 2140 - Strength of Materials (3) Sp

Fundamentals of stress and strain, Hooke's law, torsion, bending of beams, combined stresses and design of members. Prerequisite: ENGR 2010 with a grade of "C" or higher.

ENGR 2160 - Materials Science and Engineering (3) Sp

Combined lecture/laboratory 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. Prerequisite: CHEM 1210. Co-Requisite: ENGR 2140.

ENGR 2210 - Electrical Engineering for Non-majors (4) Sp

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. Prerequisite: MATH 1210.

ENGR 2300 - Thermodynamics I (3) F

Thermodynamic properties, equations of state, first and second laws of thermodynamics. Analysis of open and closed systems, availability and irreversibility, power and refrigeration cycles. Prerequisite: MATH 1210 and PHYS 2210.

ENGR 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

ESL-English as a Second Language Courses

ESL 0010 - Language Foundations I (2)

Students receive instruction and practice writing English on the letter, word and phrase level. Writing by hand using the Roman alphabet is practiced. Students gain an understanding of elementary grammatical structures through practical application in conversation, reading and writing. Basic vocabulary development is stressed.

ESL 0015 - Language Foundations II (2)

Students continue to receive instruction and practice writing English on the letter, word and phrase level, and simple sentences are introduced. Handwriting is reinforced and practiced. Students expand their understanding of elementary grammatical structures through practical application in conversation, reading, and writing. Vocabulary development is stressed.

ESL 0020 - Beginning Reading I (2)

This course enables students to interpret language written in the Roman alphabetic system and build a foundation of basic vocabulary through reading simple text.

ESL 0025 - Beginning Reading II (2)

Students in this course expand their vocabulary and interpretation skills by reading short paragraphs of simple text.

ESL 0030 - Basic Conversation I (2)

Students in this course learn to understand and produce short spoken utterances referring to basic personal information and the immediate environment. Vocabulary-building of essential terms is strongly emphasized.

ESL 0035 - Basic Conversation II (2)

This course facilitates students' abilities to engage in basic communicative exchanges involving familiar topics such as personal background and needs, social conventions and routine tasks. There is a strong emphasis on vocabulary building.

ESL 0110 - Written Communication I (2)

Students are introduced to writing simple paragraphs on familiar topics with instruction in basic punctuation as well as basic verb tense. Instruction includes joining sentences and making comparisons. Students continue to develop vocabulary and skills in basic grammar.

ESL 0120 - Topics in English (2)

While focusing on reading and vocabulary, this course enables students to apply basic reading strategies to short texts about non-academic topics to help novice level students increase their English proficiency.

ESL 0130 - Basic English Communication (2)

The course is designed for the student to develop the ability to sustain basic conversations about common topics and exchanges encountered in and out of class. Course work includes introductory work in speaking, listening, and pronunciation. Students enroll concurrently in ESL 0150 Pronunciation I.

ESL 0141 - Grammar Foundations I (2)

This course is a beginning level basic English grammar course structured around the simple present, present progressive, expressions of past time, nouns and pronouns. Basic sentence patterns using the verb "to be" and "to have" are emphasized. Grammar is integrated into writing exercises and speaking practice.

ESL 0150 - Pronunciation I (1)

This course familiarizes students with the consonant and vowel sounds used in spoken English. Co-Requisite: ESL 0130 Basic English Communication.

ESL 1210 - Written Communication II (2)

Paragraph writing is introduced with topic sentences, supporting details, and concluding sentences. Students expand paragraph length with a variety of non-academic topics and methods of development such as narration and description. Sentence writing and vocabulary building are also emphasized. Students continue to develop their keyboarding skills as well as grammatical skills and usage.

ESL 1220 - Topics in Learning English (2)

While focusing on reading and vocabulary, this course enables students to further develop their ability to apply reading strategies to semi-academic topics.

ESL 1230 - Interpersonal Communication (2)

This course is designed for students of English who are increasing the use of their new language to work, study, socialize, and overcome communication barriers. At this level, students gain facility in oral communication over a greater variety of personal and academic topics. Students are required to enroll concurrently in ESL 1250 Pronunciation II.

ESL 1241 - Grammar Foundations II (2)

This course builds on skills learned in Grammar Foundations I (ESL 0141). Present perfect and present perfect progressive tenses are introduced. Students begin to work with adjective clauses and the use of modals is expanded. Students are challenged to develop skills in recognizing and correcting grammar errors in written material.

ESL 1250 - Pronunciation II (1)

This course familiarizes students with rhythm, intonation, emphasis, and phrasing in spoken English. Co-Requisite: ESL 1230 Interpersonal Communication.

ESL 2310 - Written Communication III (2)

Paragraph writing is reviewed. The five paragraph essay model is introduced with simple introduction and conclusion paragraphs and adequately developed body paragraphs. Topics are generally experiential. Students continue to develop their language skills with grammar, punctuation, and vocabulary as they progress to becoming independent writers.

ESL 2320 - Topics for Academic Purposes I (2)

This course will help students increase their English proficiency and vocabulary through application of reading skills and strategies to modified academic texts.

ESL 2330 - Academic Communication I (2)

This course is for more advanced learners of English to develop abilities in speaking about a variety of topics for an extended period of time, and understanding and participating in classroom lectures and small-group discussions. Course work includes effective note-taking, vocabulary, and discussion strategies.

ESL 2341 - Advanced Grammar I (2)

This course is an in-depth study of the usage and meaning of more advanced English grammar structures including the past and future perfect, active and passive verbs, and noun clauses.

ESL 2351 - Community I (1)

Students will expand their communication skills in English and increase their understanding of American Culture. Students will meet 1 hour per week in class with an instructor and spend 3 hours per week volunteering for a community organization. Students will receive Community Based Learning credit for their volunteer activity in this class.

ESL 2410 - Written Communication IV (2)

Students write two-and-a-half page essays on academic topics and continue to develop paragraph writing. Paraphrasing, summarizing, and analyzing are important skills that students practice. Students continue to develop their language skills. Students learn to use teacher conferencing and writing center tutoring to help them in editing and revising their written work. Students are introduced to writing responses and opinions and expressing their insights into the topics.

ESL 2420 - Topics for Academic Purposes II (2)

This course focuses on academic topics. Students increase their English proficiency and vocabulary through an integrated skills approach. Reading texts are only slightly ESL adapted.

ESL 2430 - Academic Communication II (2)

This course focuses on English language learners' abilities in expressing, supporting, and defending opinions. A variety of semi-academic and academic topics are presented at an increasingly authentic, unsimplified language level.

ESL 2441 - Advanced Grammar II (2)

This course is an in-depth study of the usage and meaning of advanced English grammar structures including usage and meaning of infinitives and gerunds, conditionals, and adverb clauses.

ESL 2451 - Community II (1)

Students continue to expand their communication skills in English and increase their understanding of American Culture. Students will meet 1 hour per week in class with an instructor and spend 3 hours per week volunteering for a community organization. Students will receive Community Based Learning credit for their volunteer activity in this class.

ESL 2510 - Written Communication V (3)

This class prepares students to function successfully in the required university writing classes, ENGL 1010 and ENGL 2010. Students write three to five page essays on academic topics. Students continue to use teacher and writing center resources to edit and revise their work as they expand their ability to write. Paraphrasing, analyzing, summarizing, and documenting sources are emphasized. Students are introduced to library and internet resources. Students continue to practice writing responses and opinions.

ESL 2520 - Topics for Academic Study (3)

This course focuses on reading, understanding, and dealing with academic topics and course assignments. Using authentic, unadapted texts, this course provides the student with a guided approach in bridging the difficulty level between ESL classes and other academic courses.

ESL 2750 - Special Projects and Activities for Language Learning (1-3) Variable Title.

Special projects are designed to offer a variety of language and cultural experiences for the ESL student. Activities offered may include trips, special interest seminars, independent study or workshops. Contact the LEAP Department for programs offered.

ETM-Quality & Lean Manufacturing Courses**ETM 5913 - Six Sigma Tools I (3)**

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. Prerequisite: 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 5923 - Six Sigma Tools II (3)

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 Masters Degree. Prerequisite: ETM 5913, Six Sigma Tools I.

ETM 5933 - Lean Tools (3)

This course teaches students lean manufacturing tools for continuous improvement in a manufacturing environment. Prerequisite: 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 Masters Degree.

ETM 5943 - Lean-Sigma Implementation (3)

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 Masters Degree. Prerequisite: ETM 5923, ETM 5933.

FIN-Finance Courses**FIN 1010 - Personal Finance (3) Su, F, Sp**

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 (3) F, Sp

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.

FIN 3200 - Financial Management (3) Su, F, Sp

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. Prerequisite: Business Foundations; BSAD 2899; QUAN 3610.

FIN 3300 - Investments (3) F, Sp

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. Prerequisite: Business Foundations; BSAD 2899; FIN 3200.

FIN 3350 - Financial Institutions (3) F

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. Prerequisite: Business Foundations; BSAD 2899; FIN 3200.

FIN 3400 - Real Estate Principles and Practices (3) F, Sp

Fundamental economic aspects of real estate with emphasis on realty as a commodity of trade. The subject matter in this course of general interest to both those desiring to enter the real estate profession and those who only intend to own real estate. (Note: Online course may be taken only ONCE.)

FIN 3500 - Capital Budgeting (3) F, Sp

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. Prerequisite: Business Foundations; BSAD 2899; FIN 3200.

FIN 4400 - Financial Problems - Corporate Finance (3) F, Sp

Problems in financial management with an emphasis on corporate finance. Use of financial software and computers is an integral part of problem solutions. Prerequisite: Business Foundations; BSAD 2899; FIN 3200.

FIN 4410 - Financial Problems - Investments (3) F, Sp

Problems in financial management with an emphasis on investments. Use of financial software and computers is an integral part of problem solutions. Prerequisite: Business Foundations; BSAD 2899; FIN 3300.

FIN 4800 - Independent Research (1-3) Su, F, Sp

Directed research and study on an individual basis. May be repeated until a total of 4 hours credit is accumulated. Prerequisite: Business Foundations; BSAD 2899; Senior Standing; Written Instructor Approval.

FIN 4850 - Finance Study Abroad (1-3)

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). Prerequisite: BSAD 2899. Can be repeated once up to 6 credits.

FIN 4860 - Finance Internship (3) Su, F, Sp

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. Prerequisite: Business Foundations; BSAD 2899; Senior Standing; Instructor approval.

FIN 4900 - Special Topics in Finance (4)

Special treatment of current topics in Finance. This course will involve primary and/or secondary research by class participants. Prerequisite: Business Foundations; BSAD 2899; FIN 3200; Instructor approval.

FL-Foreign Language Courses**FL 1000 - Proficiency Development (1-2) (N)**

(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.

FL 1010 - First Year I (3) (N)

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.

FL 1020 - First Year II (3) (N)

Continuation of FL 1010. Basic language skills including listening, speaking, reading, writing and culture.

FL 1700 - Conversational Skills for Specific Purposes (1-3) (N)

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.

FL 1851 - Study Abroad (3) (N)

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.

FL 1852 - Study Abroad (1-3) (N)

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.

FL 2000 - Proficiency Development (1-2) (NH)

(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.

FL 2010 - Second Year I (3) (NH)

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.

FL 2020 HU - Second Year II (3) (NH)

Continuation of FL 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.

FL 2021 - Second Year II (3) (NH)

Continuation of FL 2010 without General Education Humanities credit. Offered through examination only.

FL 2030 - Second Year Language Review (3) (NH)

This course will prepare students who wish to continue language study. Emphasis on conversational skills and a review of language structure and usage. Prerequisite: FL 2020, though may be taken concurrently.

FL 2550 - Cultural Heritage in Translation (3) Variable Title

Studies in culture, history, geography, social customs, fine arts and civilization for students with no or very limited proficiency. This course will be taught in English. May be repeated for other non- English speaking cultures.

FL 2600 HU - Introduction to Foreign Literature in Translation (3) Variable Title

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 for credit under different titles.

FL 2851 HU - Study Abroad (3) (NH)

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.

FL 2852 - Study Abroad (1-3) (NH)

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.

FL 2920 - Short Courses, Workshops, Institutes and Special Programs (1-6)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

FL 2920S - Community Service (2) (NH)

Students will receive an overview of community service and explore opportunities for service learning in the community. Five preparatory workshops (first week only) followed by 55 hours of approved community service.

FL 3000 - Proficiency Development (3) (IL)

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. Prerequisite: Completion of or currently enrolled in FL 2020.

FL 3060 - Grammar & Composition (3) (IL)

Required of all majors and minors. Readings to develop conversation, composition and grammar skills. One sheltered section may be offered to students who have not had extensive in-country experience.

FL 3160 - Introduction to Literature (3) (IL)

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.

FL 3190 - Foreign Language Journal (1) (IM)

For foreign language students in the third year who work on publishing the foreign literary journal. Includes selecting articles, editing and preparing journal layout.

FL 3220 - Phonetics and Phonology (3) (IL)

Analysis of the sounds of language and word formation: practice of native like speech patterns. Required of all teaching majors and minors.

**FL 3320 - Applied Language Studies
(1-3) Variable Title**

(Minimal proficiency level varies with content) May be repeated under different titles.

FL 3360 - Advanced Grammar (3) (IL)

Analysis and application of syntactic principles and discourse structure.

**FL 3550 DV - Cultural Heritage I (3)
Variable Title (IM)**

Studies in culture, history, geography, social customs, fine arts and civilization. May be repeated for other non-English-speaking cultures.

FL 3560 - Cultural Heritage II (3) Variable Title (IM)

Studies in culture, history, geography, social customs, fine arts, and civilization. May be repeated for other non-English speaking cultures.

**FL 3570 - Special Topics in Culture
(3) Variable Title (IM)**

In-depth studies in culture, history, geography, social customs, fine arts and civilization. May be repeated for other non-English speaking cultures.

FL 3610 - Literature Survey I (3) Variable Title (IH)

A survey of the authors and works of a particular period or place. May be repeated under different titles.

FL 3620 - Literature Survey II (3) Variable Title (IH)

A survey of the authors and works of a particular period or place. May be repeated under different titles.

FL 3630 - Literature Genres (3) Variable Title (IM)

May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with FL 3160.

FL 3650 - Literature Periods (3) Variable Title (IM)

May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with FL 3160.

FL 3670 - Literature Authors (3) Variable Title (IM)

May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with FL 3160.

**FL 3690 - Literature Special Topics in
Literature (1-3) Variable Title (IM)**

May be repeated under different titles. One literature course is required for regular and teaching majors. May be taken concurrently with FL 3160.

FL 3710 - Business Language I (3) (IM)

Business Language and Practices. Required of all commercial majors.

**FL 3720 - Language for Specific Purposes
I (3) Variable Title (IM)**

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.

**FL 3730 - Language for Specific Purposes
II (3) Variable Title (IM)**

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.

FL 3740 - Translation/Interpreting I (3) (IM)

Basic techniques and procedures used in bilingual translation of non-fiction texts. Written and oral translation of scientific and technical texts. Emphasis will be on the stylistic, syntactic, cultural, lexical, and terminological problems.

FL 3850 - Study Abroad (1-6) (IM)

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.

FL 4190 - Foreign Language Journal (1) (IM)

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.

FL 4220 - Special Topics in Linguistics (3) (IM)

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.

**FL 4340 - Foreign Language Acquisition and
Teaching for Proficiency (3) (IH) F**

Theories of Second Language Acquisition, particularly as they apply to the teaching of foreign languages. This course will also review various assessment techniques, the ACTFL Proficiency Guidelines and the National Standards for Foreign Language Learning. Offered fall semester only.

**FL 4400 - Methods of Teaching a Foreign
Language (3) (AL) Sp**

Practical Methods, techniques and strategies in teaching foreign languages. Emphasis is on planning, teaching and assessment. Offered spring semester only. FL 3220, FL 4340, the ACTFL Oral Proficiency Interview and Writing Proficiency Test are required; the department standard is Advanced-Low. Students must complete FL 4400 and complete the Praxis II Content Knowledge Exam in French, German or Spanish prior to student teaching.

**FL 4500 - Methods of Teaching a
Foreign Language (4)**

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. FL 6500 is designed for teachers who are seeking to recertify or to become endorsed at the graduate level.

**FL 4620 - Survey of Literature I (3)
Variable Title (IH)**

One literature course is required of regular and teaching majors. Prerequisite: FL 3160

**FL 4630 - Survey of Literature II (3)
Variable Title (IH)**

One literature course is required of regular and teaching majors. Prerequisite: FL 3160

**FL 4690 - Special Topics in Literature
(3) Variable Title (IH)**

Detailed analysis of a particular body of literature. For students whose proficiency in the target language is at least Intermediate High. May be repeated under different titles. Prerequisite: FL 3160

FL 4710 - Business Language II (3) (IM)

Advanced Business Language and Practices. Required of all commercial majors.

FL 4740 - Translation/Interpreting II (3) (IH)

Advanced translation and practice in oral (simultaneous) interpreting of non-fiction texts. Emphasis will be on the stylistic, syntactic, cultural, lexical, and terminological problems.

FL 4830 - Directed Readings (1-3) (IH)**FL 4850 - Study Abroad (1-6) (A)**

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.

**FL 4920 - Short Courses, Workshops, Institutes
and Special Programs (1-4)**

(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.

FL 4960 - Senior Seminar and Thesis (3) (IH)**FL 4990 - Senior Assessment (.5)**

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.

**FL 6500 - Methods of Teaching a
Foreign Language (4)**

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. FL 6500 is designed for teachers who are seeking to recertify or to become endorsed at the graduate level.

GEO-Geosciences Courses**GEO 1020 - Dinosaurs and the Fossil Record (3) F**

An introduction to the nature of the fossil record and a review of the major events in the history of life, including the rise of dinosaurs and mass extinctions. A writing intensive course requiring a term paper using library resources. Three lectures per week.

**GEO 1030 PS - Earthquakes and
Volcanoes (3) Su, F, Sp**

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 (3) Su, F, Sp**

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 (1) F, Sp

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. Prerequisite: GEO 1060, or concurrent enrollment.

**GEO 1110 PS - Dynamic Earth: Physical
Geology (3) Su, F, Sp**

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 (1) F, Sp

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. Prerequisite: GEO 1110 or GEOG 1000, or concurrent enrollment in either class.

GEO 1130 PS - Introduction to Meteorology (3) F, Sp

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 (4) Sp

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. Prerequisite: GEO 1110 and GEO 1115.

GEO 1350 PS - Principles of Earth Science (3) Sp

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 2050 - Earth Materials (4) F

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. Prerequisite: GEO 1115 or permission of instructor.

GEO 2600 - Laboratory Safety (1) F, Sp

An interdisciplinary, team-taught 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.

GEO 2890 - Cooperative Work Experience (1-6)

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.

GEO 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4) (offered as needed)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

GEO 2950 - Geoscience Fieldtrips (1-3) F, Sp

Application of basic Geoscience field methods during fieldtrips. Readings, written and oral reports, and/or examinations may be required. Prerequisite: consent of instructor.

GEO 3010 - Oceanography and Earth Systems (3) Sp (alternate years)

Study of the world's oceans as a framework for examining the major issues in Earth system science. Topics include plate tectonics and the origin of ocean basins, atmosphere-ocean linkages and feedbacks, El Nino events, the ocean's role in biogeochemical cycles, structure and organization of marine ecosystems, and the scientific basis for understanding human impacts on marine systems. Three lectures per week. Prerequisite: GEO 1110 or GEO 1130 or GEOG 1000.

GEO 3060 - Structural Geology (4) F (alternate years)

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. Prerequisite: GEO 2050 and either MATH 1050 or MATH 1080; or consent of instructor.

GEO 3080 - Water Resources (3) F

A detailed examination of the water cycle, including, precipitation, surface water, groundwater, glaciers, water conservation, water management, and water pollution with special emphasis on the water resources of Utah and neighboring areas. Three lectures per week. Prerequisite: GEO 1115.

GEO 3150 - Geomorphology (4) F

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. Prerequisite: GEO 1220 and MATH 1050 or MATH 1080.

GEO 3180 - Paleontology (4) (offered as needed)

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. Prerequisite: GEO 1220 or ZOO 1110 or consent of instructor.

GEO 3210 - Quaternary Environmental Change (3) Sp (alternate years)

Overview of the geologic and paleoclimatic history of the Earth during the last 2 million years (the "Ice Age"), focusing on the interactions between geological, climatological, and biological processes and systems. Topics include the methods used to date Quaternary deposits, nature of Quaternary glaciations, use of proxy data to model past climates, causes of Quaternary climatic oscillations, history of Pleistocene Lake Bonneville, and the increasing role of humans as agents of environmental change. Three lectures per week. Prerequisite: GEO 1220 or GEOG 1000 or ANTH 2030.

GEO 3250 - Geology of Utah (3) F (alternate years)

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. Prerequisite: GEO 1220.

GEO 3400 - Remote Sensing I (4) F

An introduction to traditional photographic analysis and digital image processing of remotely sensed imagery (satellite and low-altitude aerial platforms) for earth scientists. An assessment of the electromagnetic spectrum with regard to spectral ranges of reflected and emitted energy as a means of identifying, interpreting, and analyzing earth surface phenomena. Image processing techniques are introduced through ERDAS Imagine software. Three lectures and one three-hour lab per week. Prerequisite: MATH 1040 or consent of instructor.

GEO 3550 - Sedimentology and Stratigraphy (4) Sp

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. Prerequisite: GEO 1220 and GEO 2050; or consent of instructor.

GEO 3570 - Foundations of Science Education (3)

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 3753 - Geomicrobiology (3)

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. Prerequisite: CHEM 1210 or approval of the instructor. Cross-listed with MICR 3753.

GEO 3880 - Groundwater (4) Sp

Origin, occurrence, behavior, and use of groundwater, with special emphasis on practical applications in Utah. Three lectures and one three hour lab per week. Prerequisite: GEO 1115 and either MATH 1050 or MATH 1080; or consent of instructor.

GEO 4010 - Ancient Environments and Paleocology (3) (offered as needed)

A multi disciplinary seminar course that will explore both physical and biological methods of interpreting ancient environments and ecology. Three lectures per week. Prerequisite:

GEO 3180, or GEO 3550, or ZOO 3450, or BTNY 3454, or CHEM 3070, or consent of instructor.

GEO 4060 - Geoscience Field Methods (3) F

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. One hour of lecture and six hours of lab/field work per week. Prerequisite: GEO 2050, GEO 3150, and GEO 3550.

GEO 4100 - Engineering Geology (3) Sp

Introduction to basic concepts in engineering geology and geotechnical engineering; emphasizes problem solving as the primary method. Three lectures per week. Prerequisite: GEO 1060 and GEO 1065, or GEO 2050, or consent of instructor.

GEO 4150 - Environmental Assessment (3)

Interdisciplinary study of geology applied to transport of contaminants in groundwater, environmental site assessment and remediation. Three hours of lecture per week. Prerequisite: GEO 1060 and GEO 1065, or GEO 2050, or consent of instructor.

GEO 4210 - Introduction to Computer Mapping and Geographic Information Systems (4) F

Principles of spatial analysis including data base design, data input, and spatial modeling in the context of an information system using the ArcGIS family of software. The nature of computer mapping is examined with an emphasis on scale, minimum mapping unit, topology, and projected mapped features. Three lectures and one three-hour lab per week. Prerequisite: MATH 1040 and proficiency in the Windows operating system, or consent of instructor.

GEO 4220 - Technical and Applicational Issues in GIS (4) Sp

A capstone course in spatial analysis in which data entry, data manipulation, spatial modeling, and analysis are addressed through the completion of the research project addressing a spatial problem using GIS and the computer as a modeling instrument. Advanced level, computer-intensive applications are employed using the ArcGIS family of software. Three lectures and one three-hour lab per week. Prerequisite: GEO 4210.

GEO 4300 - Igneous and Metamorphic Petrology (4) Sp (alternate years)

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. Prerequisite: GEO 2050 and CHEM 1220; or consent of instructor.

GEO 4400 - Remote Sensing II: Advanced Digital Image Processing (4) Sp

A laboratory intensive assessment of digital (raster) imagery using advanced computer-assisted digital processing procedures with an emphasis on quantitative statistical analysis through ERDAS Imagine image processing software. The focus is on feature classification of multi spectral imagery, principle components analysis, georectification, and error assessment. Three lectures and one three-hour lab per week. Prerequisite: GEO 3400.

GEO 4510 - Geology Field Camp (4) Su (alternate years)

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. Prerequisite: GEO 3060, GEO 3550, and GEO 4060; or consent of instructor.

GEO 4550 - Geochemistry (3) Sp (alternate years)

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. Prerequisite: CHEM 1220 and GEO 2050; or consent of instructor.

GEO 4570 - Secondary School Science Teaching Methods (3) F

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. Prerequisite: Admission to the Teacher Education Program.

GEO 4600 - Geophysics (3) (offered as needed)

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. Prerequisite: GEO 3060 and MATH 1220; or consent of instructor.

GEO 4630 - Global Tectonics (3) (offered as needed)

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. Prerequisite: GEO 2050 and GEO 3060; or consent of instructor.

GEO 4750 - Special Topics in Geosciences (1-4) Variable Title

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. The course may be repeated for credit. Prerequisite: GEO 1110, GEO 1115, and any specific courses selected by the instructor.

GEO 4800 - Independent Research (1-3) Su, F, Sp

Prerequisite: Consent of instructor prior to registration. (May be repeated for a maximum of five credit hours.)

GEO 4890 - Cooperative Work Experience (1-6)

A continuation of GEO 2890. Open to all students.

GEO 4920 - Short courses, Workshops, Institutes and Special Programs (1-4) (offered as needed)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

**GEO 4950 - Advanced Geoscience
Fieldtrips (1-3) F, Sp**

Application of Geoscience field methods during fieldtrips. Readings, written and oral reports, and/or examinations required. Prerequisite: consent of instructor.

GEO 4970 - Senior Thesis (2) F, Sp

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. Prerequisite: Senior standing and departmental approval of the thesis topic.

**GEO 5030 - Geology for Teachers (2-4)
(offered as needed)**

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. Course may be repeated. Contract must be approved by instructor, department chair, and Director of the Master of Education Program.

**GEO 5920 - Short courses, Workshops, Institutes and
Special Programs (1-4) (offered as needed)**

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

GEOG-Geography Courses

**GEOG 1000 PS - Natural Environments
of the Earth (3) Su, F, Sp**

A study of the interrelated systems that constitute the earth's surface environment, e.g., landforms, weather, climate, natural vegetation, hydrology, and soils, and their integrated patterns of world distribution.

GEOG 1001 - Natural Environments Field Studies (1)

This introductory level field studies course investigates natural environmental phenomena including weather, climate, natural vegetation, landforms, hydrology, soils and human impacts on the environment. While exploring local natural environments from a geographic perspective, understanding of principles of physical geography is enhanced through direct observation in the field and through the measurement of phenomena noted above. Prerequisite or current enrollment in: GEOG 1000 Natural Environments of the Earth.

GEOG 1002 - Map Reading and Land Navigation (2)

Orienteering and the use of maps, compasses, global positioning systems (GPS), and other navigational aids. Lecture and field work prepares course participants to apply navigational knowledge and skills in a professional setting. Weekly two-hour lab sessions for ten weeks.

**GEOG 1300 SS/DV - Places and Peoples
of the World (3) Su, F, Sp**

The study of different places, countries, and regions of the world. Addresses topics relating to natural environment, ethnic diversity, and regional differences in subjects related to culture, gender, age, class, social structure, spatial organization, and economic activities. Current social conditions within the world's major culture realms are analyzed and compared.

**GEOG 1400 PS - The Science of Global Warming:
Myths, Realities and Solutions (3)**

This course examines the science behind global warming, providing an understanding of the basic physical, chemical, biological and geographical principles that explain the

workings of Earth's climate system and the human influence upon it. The course also considers the feasibility and societal impacts of possible solutions to human-induced global warming. Finally, examination of the scientific process is a central part of the course, as students learn to separate truth from fiction in the arguments about whether or not global warming is a real problem, and if so, what should be done about it.

**GEOG 1520 SS/DV - Geography of the United
States and Canada (3) F, Sp**

Addresses topics relating to the area's natural environment, ethnic diversity, and regional differences in such subjects as culture, gender, age, class, social structure, spatial organization, and economic activities. Present social and cultural conditions within the United States and Canada are analyzed and compared.

**GEOG 2920 - Short Courses, Workshops,
Institutes and Special Programs
(1-6) (Offered as needed)**

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

**GEOG 2950 - Elementary Regional
Field Studies (1-3) Su**

The study of specific geographic regions, utilizing field observations, lectures, and individual student research.

GEOG 3050 - Weather and Climate (3) Sp

The advanced study of the processes that produce global climate patterns; analysis of the prospects and possible repercussions of global climate change; and an examination of climatic anomalies such as El Niño, hurricanes, tornadoes and other unusual phenomena. Prerequisite: GEOG 1000, or GEO 1130, or the equivalent.

GEOG 3060 - World Environmental Issues (3) Sp

A study of global and local environmental issues such as changing air and water quality, food production, waste management, and other topics. The course identifies strategies for creating healthier and more sustainable ways of living within our natural and built environments. Prerequisite: GEOG 1000, or BTNY 1403, or the equivalent, or consent of the instructor.

GEOG 3070 - Wetland Environments (3) F

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.

GEOG 3080 - Arid Lands (3) Sp

Presents a general overview of the characteristics and variant topography, geography, and climatic conditions of the Earth's arid lands. Examines the spatial location of arid regions and their climatic controlling factors. Weather patterns, hydrology, and eolian processes will be discussed along with sediment transportation and deposition of arid environments. The course will also review dune types and formation along with soils of arid zones. The course concludes with a discussion on the desertification and the impact of human intervention in the misuse of arid lands, while discussing preservation versus reclamation of these regions. Prerequisite: GEOG 1000, or GEO 1060, or the equivalent, or consent of the instructor.

GEOG 3081 - History of Geographic Thought (3) (alternate years)

A study of the development of the science of geography, giving attention to its changes in emphasis and philosophy. Prerequisite: Junior standing.

GEOG 3090 - Arctic and Alpine Environments (3) Sp

An examination of the physical environments of high altitude and high latitude places, the ways in which humans interact with these environments, and their broader roles within the large Earth systems. Topics will include causes and consequences of avalanches, climatic characteristics of the Arctic, glacier behavior, sea ice, and the responses of human physiology to high altitudes. Prerequisite: GEOG 1000, or GEO 1060, or the equivalent, or consent of the instructor.

GEOG 3210 - Urban Geography (3) F

The study of cities as elements of the landscape, their distribution, location, and structure, as related to their physical setting, economic function, and cultural inheritance.

GEOG 3300 - Historical Geography of the United States (3) Sp

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 (3) Sp

The spatial structure of the world's resources, production, commerce, and economic problems.

GEOG 3390 - Aerial Photo Interpretation (3) (Offered as needed)

The use of aerial photos to interpret geographic phenomena. One lecture and two 3-hour labs a week.

GEOG 3450 - Cartography (3) F

An introduction to map making, to include the history of cartography, the development of map components with emphasis on map projections, grid systems, scale, direction, and symbol design. Particular attention will be paid to the creation of maps using both manual and digital (computer and computer-assisted) techniques. The course also will deal with map reading skills for spatial analysis, orientation, and land navigation. One lecture and two 3-hour labs per week.

GEOG 3460 - Advanced Cartography (3) Sp

The advanced study of maps and their role in portraying geographic data. Emphasis will be placed on various digital (computer and computer-aided) mapping techniques that categorize geographic data and illustrate this information in map form. The course will also examine cartographic visualization, databases, and production. One lecture and two 3-hour labs per week. Prerequisite: GEOG 3450 or permission of instructor.

GEOG 3500 - Geography of Utah (3) F

A study of the physical environment and activities of man in Utah.

GEOG 3540 DV - Geography of Latin America (3) F

Addresses topics relating to Latin America's natural environment, ethnic diversity, and regional differences in culture, gender, age, class, social structure, spatial organization, and economic activities. Current issues relating to culture and society in Latin America are analyzed within the context of its colonial inheritance and its future prospects.

GEOG 3590 DV - Geography of Europe (3) F

Addresses topics relating to Europe's natural environment, ethnic diversity, and regional differences in culture, gender, age, class, social structure, wealth, spatial organization, and economic activities. Current issues and social conditions within Europe and its major subdivisions are discussed and analyzed.

GEOG 3600 - Quantitative Methods in Geography (3) F

The gathering and analysis of spatial data. Hypothesis testing and the use of selected computer statistical packages. Two lectures and one 3-hour lab a week. Prerequisite: Quantitative Literacy (MATH 1040 recommended, but not required).

GEOG 3620 DV - Geography of Russia and the Former USSR (3) (alternate years)

Addresses topics relating to Russia's natural environment, ethnic diversity, and regional differences in culture, gender and age structure, class structure, spatial organization, and economic activities. Current social and economic conditions in Russia and its Near Abroad are analyzed within the context of the breakup of the former Soviet Union.

GEOG 3640 DV - Geography of Asia (3)

Addresses topics relating to Asia's natural environment, ethnic diversity, and regional differences in culture, gender, age, class, social structure, spatial organization, and economic activities. Current societies in Asia are analyzed with special attention given to their colonial inheritance and future prospects.

GEOG 3660 DV - Geography of China and Japan (3) Sp

Covers subjects dealing with the area's natural environment, ethnic diversity, and regional differences in culture, gender, age, class, social structure, spatial organization, and economic activities. Current topics relating to social conditions within China and Japan are analyzed and compared.

GEOG 3740 DV - Geography of Africa (3) Sp

The study of Africa's natural environment, ethnic diversity, and regional differences in culture, gender, age, class, societal structure, wealth, spatial organization, and economic activities. Current socio-economic conditions in Africa are analyzed within the context of its colonial inheritance and its future outlook.

GEOG 3780 - Geographic Area Studies (1-3)

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 when a different title is used.

GEOG 4410 - Land Use Planning Techniques and Practices (3) F

A study of the status and tools of planning, planning office organization, the federal and state role in planning, and problems in planning.

GEOG 4420 - Advanced Planning Techniques (3) Sp

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. Prerequisite: GEOG 4410.

GEOG 4800 - Individual Research (1-3) Su, F, Sp

A personalized course designed to foster individual research and scientific writing. May be repeated up to a maximum of 12 credit hours.

GEOG 4890 - Cooperative Work Experience (1-6) Su, F, Sp

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.

GEOG 4923 - Short Courses, Workshops, Institutes and Special Programs (1-3) (Offered as needed)

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.

GEOG 4950 - Advanced Regional Field Studies (1-3) Sp

A directed study of specific geographic regions utilizing field observations, lectures, and individual student research. Prerequisite: A general course in Geography or consent of the instructor. May be repeated up to a maximum of 12 credit hours.

GEOG 4990 - Research Seminar (3) Sp

A course in which hypothetico-deductive research methods and other quantitative techniques are applied to geographic problems. Prerequisite: GEOG 3600 and senior standing.

GEOG 5030 - Geography for Teachers (3) (Offered as needed)

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.

GERT-Gerontology Courses**GERT 1010 SS - Introduction to Gerontology (3)**

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 (3) Sp

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 (2-4)

A study on age related topics of current interest. Specific title will appear on student's transcript along with authorized credit.

GERT 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

GERT 3000 - Death and Dying (3) Sp

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 (3) F

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 DV - Ethnicity and Older Women in the American Society (3) F

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 (4)

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). Prerequisite: It is recommended to take a Statistics course before Research.

GERT 3500 - Social Welfare & Gerontological Policy Development and Service (3)

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. Prerequisite: SW 1010 or GERT 1010. (SW 3500/GERT 3500 must be completed before entering Field Practice).

GERT 3600 - Social Statistics (3)

Introduction to analysis and presentation of data. Prerequisite: Meet WSU Quantitative Literacy requirement. Cross-listed with SW 3600.

GERT 4220 - Societal Responses to Aging (3) F

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 SW 4220.

GERT 4650 - Retirement: Adjustment/Planning (3) Sp

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 SW 4650.

GERT 4830 - Readings and/or Projects (2-4)

Individual readings and/or projects for the senior Gerontology major (with the approval of the instructor) with a maximum of four (4) credit hours possible.

GERT 4860 - Introductory Field Practicum (2)

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). Prerequisite: GERT 1010, GERT 3320 and GERT 3500; must be a declared major or minor.

GERT 4861 - Advanced Field Practicum (2)

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). Prerequisite: GERT 3400, GERT 3500, GERT 4860, and must be a declared major or minor.

GERT 4862 - Specialized Field Practicum (2)

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). Prerequisite: GERT 3600, GERT 4861, and must be a declared major or minor.

GERT 4900 - Current Topics on Aging (2-4) Su

An in-depth study on age related topics of current interest. Specific title will appear on student's transcript along with authorized credit.

GERT 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

GERT 4990 - Senior Seminar (2) F

Preparation and discussion of gerontology concepts and topics. Information and techniques for obtaining a job and selecting a graduate school. Prerequisite: GERT 1010, GERT 3320, GERT 3400, GERT 3500 and GERT 3600.

HAS-Health Administrative Services Courses**HAS 3000 - The Health Care System (3)**

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 3020 - Health Care Marketing (3)

This course outlines the application of marketing principles to health care organizations and the public health arena. Students will apply those principles in the development of a marketing plan.

HAS 3150 - Community Health Agencies and Services (3)

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.

HAS 3190 DV - Cultural Diversity in Patient Education (3)

This course is an introduction to patient or client education skills and theory. It also focuses on health traditions of culturally diverse clients 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. Gender, age, and class will all be considered in the studies.

HAS 3230 - Health Communication (3)

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 Health Care (3)

Study of human resource principles and practices in Health Care facilities. The general topics include: job analysis and work flows, compensation, recruitment and selection, performance appraisals, discipline, legal environment, unions, safety and health. Prerequisite: HAS 3000.

HAS 3260 - Health Care Administrative and Supervisory Theory (3)

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. Prerequisite: HAS 3000.

HAS 3750 - Health Care Financial Administration (3)

This course is designed to build upon the concepts introduced in basic accounting courses and develop proficiency in applying administrative financial techniques in health care decision making. Prerequisite: HAS 3000, ACTG 2010, Quantitative Literacy, HIM 3200.

HAS 4320 - Health Care Economics and Policy (3)

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. Prerequisite: HAS 3000 and ECON 2010.

HAS 4400 - Legal and Ethical Aspects of Health Administration (3)

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. Prerequisite: HAS 3000 and HAS 3260.

HAS 4410 - Clinical Instructional Design and Evaluation (3)

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 (3)

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 (2)

Application of health administration core curriculum to specific practice issues in the long-term care setting. Setting-specific organization structures, relationships with healthcare providers, services offered, financial management issues, and regulatory issues are investigated. Prerequisite: HAS 3000 and HAS 4400.

HAS 4525 - Health Facility Operations (1)

A review of long-term care facility operations utilizing computer-based 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. Prerequisite: HAS 3000 and HAS 4520.

HAS 4620 - International Health and Health Care (3)

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 (1)

A capstone course for seniors designed to provide integration and application of theory through the use of case study analysis. Departmental approval required. Prerequisite: HAS 3000.

HAS 4800 - Individual Study (1-3)

Topics in allied health education studies tailored to the particular needs and interests of the student. Class may be repeated with program approval.

HAS 4850 - Study Abroad (1-6) Variable Title

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.

HAS 4860 - Practicum/Internship (2-6)

Provides opportunities for observation, participation and practical application of administrative and management skills in the institutional setting. Departmental approval required. Prerequisite: HAS 3000.

HAS 4990 - Seminar (1)

Topics, issues, and trends in Health Care. May be repeated with program approval.

HIM-Health Information Management Courses**HIM 2000 - Introduction to Health Information Systems and Settings (3)**

Introduction to the health information profession. Job duties, functions, and the professional organization are discussed. Health care settings, numbering and filing systems and equipment, master patient indexes, health information documentation requirements, discharge analysis and incomplete chart

control are presented. Prerequisite: HTHS 1101 and HTHS 1110.

HIM 2250 - Health Care Privacy and Security (3)

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 (3)

ICD-9-CM and CPT classification, conventions and coding procedures are introduced and practiced. Prerequisite: HTHS 1110 and HTHS 1111 or equivalent.

HIM 2320 - Ambulatory and Physician Office Coding (3)

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. Prerequisite: HIM 2300.

HIM 2330 - Classification Systems Topics and Reimbursement Issues (2)

Discussion of issues parallel to or founded in the use of classification systems: Federal reimbursement systems, coding compliance, quality auditing, peer review organizations, and database reporting.

HIM 2410 - ICD-10-PCS Coding (2)

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. Prerequisite: HIM 2300.

HIM 2500 - Healthcare Database Management & Security (3)

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 database management is developed. The HIPAA security law, development of policies and procedures to enforce the security rule are covered. Prerequisite: NTM 1700 or NTM 1702 or NTM 1502.

HIM 2861 - (2nd Year) Professional Practice Experiences (2)

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., ICD-9-CM, CPT, and other coding systems. Prerequisite: HIM 2000.

HIM 2862 - (2nd Year) Professional Practice Experiences (2)

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., ICD-9-CM, CPT, and other coding systems. Prerequisite: HIM 2861.

HIM 2863 - Professional Practice Experience in Coding (1)

Student's final experience in the coding setting. Skills and learning from the classroom and laboratory are reinforced and practiced in a simulated setting. Prerequisite: HIM 2300.

HIM 3000 - Computer Applications in Health Care (3)

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 inter-relationships of the organizational units with respect to data acquisition, storage, analysis, retrieval, and use.

HIM 3200 - Epidemiology and Biostatistics (3)

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. Prerequisite: Must meet WSU Quantitative Literacy requirement.

HIM 3300 - Introduction to Quality Improvement in Health Care (3)

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 (3)

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. Prerequisite: IST 3110.

HIM 3450 - Health Care Systems Analysis and Design (3)

A comprehensive introduction to the planning, design, and construction of health care information systems, using the systems development life cycle and other appropriate design tools. Prerequisite: HIM 3400.

HIM 3500 - Biomedical Research Support (2)

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.

HIM 4100 - Health Information Services Management (3)

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. Prerequisite: HAS 3260.

HIM 4990 - Baccalaureate Thesis and Presentation (3)

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.

HIM 5000 - Clinical Foundations in HIM (3)

A foundation in the language of medicine, pathophysiology and pharmacology will be discussed and developed.

HIM 5010 - Health Data Management (3)

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.

HIM 5020 - Diagnosis and Procedure Coding (3)

Coding and classification conventions and procedures are developed and practiced. The course will also include auditing of coded data for accuracy.

HIM 5030 - Clinical Data Management for Quality Care & Revenue Cycle Integrity (3)

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.

HIM 5040 - Privacy, Security and Confidentiality in Health Care (3)

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.

HIM 5050 - Health Information Systems & Technology (3)

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 (3)

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.

HIM 5090 - HIM Internship (3)

Provides opportunities for observation, participation and practical application of health information management skills in the institutional setting.

HIST-History Courses

HIST 1500 SS - World History to 1500 C.E. (3)

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.

HIST 1510 SS/DV - World History from 1500 C.E. to the Present (3)

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.

HIST 1700 AI - American Civilization (3)

An analysis of American civilization 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).

HIST 2700 - History of the United States to 1877 (3)

A chronological survey of American history from Native American and European colonial origins through Reconstruction, 1877. Directed toward History majors, minors, and those planning to teach U.S. history. Students may fulfill the American Institutions requirement by completing this course and HIST 2710 with a grade of C or better.

HIST 2710 - History of the United States since 1877 (3)

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. Students may fulfill the American Institutions requirement by completing this course and HIST 2700 with a grade of C or better.

HIST 2890 - Cooperative Work Experience (1-5)

Academic credit for internship opportunities in History-related careers. Grade, credit, and work experience to be determined in consultation with department chair. No more than 5 hours will count towards a major or minor. Prerequisite: Instructor approval.

HIST 2920 - Short Courses, Workshops, and Special Programs (1-6)

Consult the semester class schedule for current offering under this number. The specific title and credit authorized will appear on the student transcript. No more than 6 hours will count towards a major or minor.

HIST 3000 - Investigating History (3)

This course examines comparative interpretations and analyses of history using western and non-western sources. It will focus on the question of objectivity, and how historians use primary sources and draw conclusions. It will demonstrate how historical approaches throughout history are reflections of contemporary philosophies. It will also deal with philosophical, methodological, and historio-graphical issues within the craft of history, and help students form their own conclusions and clearly present them. This course is recommended

for all students planning on graduate work in history or working in the history profession.

HIST 3010 DV - American Indian History: 1300 to Present (3)

An introduction to American Indian history, stressing the integrity and viability of American Indian societies; dynamic, self-directed culture change; and the clash of cultures that occurred with Native American and European contact.

HIST 3030 DV - African-American History (3)

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 DV - History of U.S. Latinos (3)

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 DV - Women in American History: 1600 to Present (3)

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 shaped different female experiences.

HIST 3090 DV - American Social History (3)

Explores American society through analyses of the public and private lives of ordinary individuals from colonial times to the twentieth century.

HIST 3110 - American Ideas and Culture (3)

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 3130 - U.S. Urban History (3)

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 (3)

The ideas and issues which resulted in the 1787 Constitution. It considers two centuries of America Constitutionalism, focusing on powers and rights, and the role of the Constitution in American culture.

HIST 3230 - American Foreign Relations (3)

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 (3)

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 - American Environmental History (3)

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 - American Military History to 1917 (3)

Significance of military affairs in the context of American political, economic, and social history from the formation of the earliest colonial militias to the pre-World War I preparedness movement. Discusses major wars of this period but also emphasizes such themes as the professionalization of the officer corps, the relationship between war and technology, and civil-military relations.

HIST 3290 - American Military History since 1917 (3)

Significance of military affairs in the context of American political, economic, and social history from America's entry into World War I to the present. Discusses major wars of this period but also emphasizes such themes as the professionalization to the officer corps, the relationship between war and technology, and civil-military relations.

HIST 3350 - History and Philosophy of Science (3)

The evolution and practice of Western science from origins to contemporary ideas.

HIST 3400 - Principles of Public History (3)

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. (Replaces HIST 2500.)

HIST 3500 - Historical Preservation (3)

Advanced principles in the preservation, organization, and presentation of historical materials.

HIST 4010 - Colonial America (3)

The colonial origins of the United States to 1763.

HIST 4020 - Era of the American Revolution: 1763-1800 (3)

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 (3)

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 (3)

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 (3)

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 - Twentieth-Century United States: 1919-1945 (3)

Developments, historical patterns and conflicts which shaped the modern United States in the Twenties, the Great Depression and the Second World War.

HIST 4070 - Twentieth-Century United States since 1945 (3)

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 DV - History of the American West to 1900 (3)

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 (3)

Explores the history of the Trans-Mississippi West Region during the twentieth century, 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 (3)

A study of Utah history from its Native American beginnings through the 20th Century-emphasizing political, economic and social developments.

HIST 4210 - Ancient History (3)

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 (3)

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 (3)

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 (3)

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 (3)

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 - Twentieth-Century Europe (3)

This overview of European history begins with the First World War and concludes with an assessment of the challenges and opportunities presented to Europe by the current world order. The course will examine the ways in which Europe has been shaped by the rise and fall of totalitarian movements, war, genocide, colonial and post-colonial politics, the Cold War, globalization and the shift to a post-industrial economy.

HIST 4280 - History of Christianity in Europe (3)

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 - History of Russia to 1917 (3)

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 - Russia since 1917 (3)

Analyzes the political, economic, military, diplomatic, social, and ideological problems, crises, and programs from the Russian Revolutions of 1917 to the present.

HIST 4330 - History of England to 1485 (3)

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 (3)

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 - History of England since 1714 (3)

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 DV - History of Modern Germany (3)

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 (3)

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 (3)

A survey of the political, economic, social and cultural development of Spain and Portugal from the beginning to the present.

HIST 4430 - History of Scandinavia (3)

Examines the political, economic, social, and cultural development of Scandinavia, particularly Denmark, Norway, and Sweden. Special emphasis is given to the Viking Age, the Great Power period, and the twentieth century.

HIST 4450 - History of Modern Eastern Europe since 1815 (3)

Examines the political, economic, and social factors that have shaped the history of this region from 1815 to the present.

HIST 4500 - Teaching Social Studies in Grades 5-12 (3) Su, Sp

Materials and methods of teaching for skill, concept and value development in middle, junior high and senior high school social studies. (Required of all majors in Social Science area).

HIST 4510 DV - Twentieth Century World (3)

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 4530 DV - Far Eastern History (3)

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 DV - Southeast Asian History (3)

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 4590 DV - Middle Eastern History (3)

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 4610 - History of Africa (3)

Africa from earliest times to the twentieth century, with emphasis on the Sub-Sahara from its ancient kingdoms through the travails of the slave trade, European colonialism, and the independence movement.

HIST 4630 - History of Ancient and Colonial Latin America (3)

History of ancient Native Latin America through the Spanish and Portuguese takeover and colonization.

HIST 4650 DV - Modern Latin America (3)

A survey of the political, economic, social and cultural developments of the Latin American nations to the present.

HIST 4670 DV - History of Mexico (3)

A survey from ancient Native American times, the colonial experience, and the nation including the U.S. Southwest until 1848.

HIST 4710 - Special Issues and Topics in American History (3)

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.

HIST 4720 - Special Issues and Topics in European History (3)

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.

HIST 4730 - Special Issues and Topics in Global and Comparative History (3)

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.

HIST 4810 - Experimental Courses (3)**HIST 4830 - Directed Readings (1-3)**

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. Prerequisite: Instructor approval.

HIST 4860 - Internships in Historical Studies (1-6)

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. Prerequisite: Junior-class standing and permission of instructor and field supervisor.

HIST 4890 - Cooperative Work Experience (1-6)

Academic credit for advanced internship opportunities in History-related careers. Grade, credit, and work experience to be determined in consultation with instructor and field supervisor. No more than six hours will count towards a major or minor.

HIST 4920 - Short Courses, Workshops, and Special Programs (1-6)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. No more than six hours will count towards a major or minor.

HIST 4930 - History Workshop (1-5)

Offered as needed to give background history on topics which arise in timely subjects of world affairs. May be repeated for credit more than once with different topics. No more than five hours will count towards a major or minor. Only ten hours of this course number can be applied toward graduation.

HIST 4980 - History Honors Senior Project (2)

Designed for the History Honors student and will be taken in conjunction with History Seminar, HIST 4990. It will give the Honors student opportunity to develop more depth and skills in History on a Honors level of performance.

HIST 4990 - Senior Seminar (3)

A seminar for History majors requiring the completion of an extensive thesis project. Prerequisite: HIST 3000.

HIST 6010 - Colonial America (3)

The colonial origins of the United States to 1763.

HIST 6020 - The Era of the American Revolution 1763-1800 (3)

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 6040 - The Era of the Civil War and Reconstruction 1840-1877 (3)

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 6130 - History of Utah (3)

A study of Utah history from its Native American beginnings through the 20th Century, emphasizing political, economic and social developments.

HIST 6590 - Middle Eastern History (3)

The Middle East from the rise of Islam to the present with emphasis on the 19th and 20th centuries.

HIST 6610 - History of Africa (3)

Africa from earliest times to the twentieth century, with emphasis on the Sub-Sahara from its ancient kingdoms through the travails of the slave trade, European colonialism, and the independence movement.

HIST 6710 - Reading Seminar in American History (3)

When offered will focus on a specific subject in American History. It is assumed that these topics would generally be non-repetitive or repeated only infrequently based on the demand for the course and the instructor assigned to it. Students would be assigned readings on various aspects of the topic and respond through discussion in a seminar setting and written work.

HIST 6720 - Reading Seminar in European History (3)

When offered will focus on a specific subject in European History. It is assumed that these topics would generally be non-repetitive or repeated only infrequently based on the demand for the course and the instructor assigned to it. Students would be assigned readings on various aspects of the topic and respond through discussion in a seminar setting and written work.

HIST 6760 - Reading Seminar in World History (3)

When offered will focus on a specific subject in World History. It is assumed that these topics would generally be non-repetitive or repeated only infrequently based on the demand for the course and the instructor assigned to it. Students would be assigned readings on various aspects of the topic and respond through discussion in a seminar setting and written work.

HIST 6830 - Directed Readings (1-3)

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. No more than three hours will count towards a major or minor. Prerequisite: Instructor approval.

HLTH-Health Education Courses

HLTH 1020 LS - Science and Application of Human Nutrition (3) Su, F, Sp

(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. (Cross listed with NUTR 1020). This course is taught Web enhanced.

HLTH 1030 SS - Healthy Lifestyles (3) Su, F, Sp

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 (3) Su, F, Sp

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 (2) Su, F, Sp

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 (2) Su, F, Sp (available online only)

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. Prerequisite: NUTR 1020/HLTH 1020. (Cross listed with NUTR 2220)

HLTH 2300 - Emergency Response (3) F, Sp

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 AT 2300.

HLTH 2400 - Mind/Body Wellness (3) F, Sp

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 (2) Su, F, Sp (available online only)

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. Prerequisite: NUTR 1020/HLTH 1020. (Cross listed with NUTR 2420)

HLTH 2700 - Consumer Health (3) Sp

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 (1-3) Su, F, Sp

A comprehensive study or project in the field of Health Education. Hours to be arranged.

HLTH 2890 - Cooperative Work Experience (1-6) Su, F, Sp

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.

HLTH 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4) As Needed

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

HLTH 3000 - Foundations of Health Promotion (3) F, Sp

Emerging trends and roles of health education within occupational, medical, community, and school settings including history, philosophy, current practices. Prerequisite: HLTH 1030.

HLTH 3050 - School Health Program (3) F

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 (3) Sp

This course is an exploration of current and future uses of technology in the health promotion fields. Prerequisite: Completion of Computer & Information Literacy requirement or permission of instructor.

HLTH 3150 - Community Health Agencies and Services (3) Sp

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. Prerequisite: HLTH 3000 or HLTH 3050.

HLTH 3160 - Health Behavior and Special Populations (3) F

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. Prerequisite: HLTH 3000 or HLTH 3050.

HLTH 3200 - Methods in Health Education (3) F, Sp

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. Prerequisite: HLTH 3000 or HLTH 3050 or PEP 2200.

HLTH 3320 - Health and Nutrition in the Older Adult (3) Su, F, Sp (online only)

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. Prerequisite: NUTR 1020/HLTH 1020. (Cross listed with NUTR 3320)

HLTH 3400 - Substance Abuse Prevention (3) Su, F, Sp

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 DV - Multicultural Health and Nutrition (3) F, Sp

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. Prerequisite: NUTR 1020/HLTH 1020 and NUTR 2320. (Cross listed with NUTR 3420) This course is taught Web enhanced.

HLTH 3500 - Human Sexuality (3) Su, F, Sp

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 (3) F, Sp

Application of research methods used both in assessing individual and community needs for health education, and in assessing the effectiveness of health education programs. Prerequisite: HLTH 3000 and HIM 3200.

HLTH 4150 - Needs Assessment & Planning Health Promotion Programs (4) F, Sp

Conducting needs assessment and planning health promotion programs in a community, occupational, school or clinical setting. Prerequisite: HLTH 3000.

HLTH 4220 - Women's Health Issues (3) Sp

A feminist perspective and analysis of the psychological, cultural and political health related issues that impact women throughout the life span. Prerequisite: Upper division standing or consent of instructor. (Cross listed with Women's Studies)

HLTH 4250 - Contemporary Health Issues of Adolescents (2) Su, F, Sp

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 (2) Su, F, Sp

Provides elementary school teachers the resources and skills needed to teach the Utah Healthy Lifestyles curriculum.

HLTH 4700 - Wellness Coaching (3) F, Sp

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. Prerequisite: HLTH 2400, HLTH 3200.

HLTH 4800 - Individual Projects (1-3) Su, F, Sp

A comprehensive study or project in the field of Health Education. Hours to be arranged for seniors only.

HLTH 4860 - Field Experience (2-6) Su, F, Sp

Work experience which applies prior academic learning in a supervised setting. Prerequisite: Consent of faculty supervisor prior to registration. Can be repeated for credit.

HLTH 4890 - Cooperative Work Experience (1-6) Su, F, Sp

A continuation of HLTH 2890.

HLTH 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4) As Needed

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. Offered on an as needed basis.

HLTH 4990 - Senior Seminar (1) F, Sp

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 (2) Su, F, Sp

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 (2) Su, F, Sp

Provides elementary school teachers the resources and skills needed to teach the Utah Healthy Lifestyles curriculum.

HNRS-Honors Courses

HNRS 1110 HU - Introduction to Honors: The Construction of Knowledge (3)

An interdisciplinary class introducing students to the different ways university disciplines see the world and construct meaning.

HNRS 1500 PS - Perspectives in the Physical Sciences (3) Variable Title Course

An interdisciplinary approach to the physical sciences. This introductory class deals with basic concepts, problems and issues of the physical sciences.

HNRS 1510 LS - Perspectives in the Life Sciences (3) Variable Title Course

An interdisciplinary approach to the life sciences. This introductory class deals with basic concepts, problems and issues of the life sciences.

HNRS 1520 SS - Perspectives in the Social Sciences (3) Variable Title Course

An interdisciplinary introduction to the social sciences. This introductory course deals with the basic concepts, methods, models and issues of the social sciences.

HNRS 1530 CA - Perspectives in the Creative Arts (3) Variable Title Course

An interdisciplinary introduction to the creative arts. This introductory class deals with basic concepts, problems and issues of the creative arts.

**HNRS 1540 HU - Perspectives in the Humanities
(3) Variable Title Course**

An interdisciplinary approach to the arts and humanities. This introductory class deals with basic concepts, problems and issues of the arts and humanities.

**HNRS 2010 HU - Exploring Key Concepts
in the Disciplines: Humanities
(3) Variable title course**

This course will focus on the history and development of a central concept in the Humanities, using original sources as the primary class texts. Prerequisite: Prior to taking this course students are strongly advised to take HNRS 1110 HU and a 1000-level HNRS "Perspectives" General Education course.

**HNRS 2040 LS - Exploring Key Concepts
in the Disciplines: Life Science
(3) Variable title course**

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.

**HNRS 2110 HU/SS - Intellectual Traditions: Great
Ideas of the West in the Classical and
Medieval Eras (3) Variable Title Course**

A survey of influential ideas, literature and events that characterize antiquity and the middle ages in the Western world. The student may elect to apply general education credit in this interdisciplinary course to either Arts & Humanities or Social Sciences. Prior to taking this course students are strongly advised to take HNRS 1110 and a 1000-level HNRS "Perspectives" General Education course.

**HNRS 2120 HU/SS - Intellectual Traditions:
Great Ideas of the West in the Modern
Era (3) Variable Title Course**

A survey of the great ideas, literature and events that characterize Western civilization from the Renaissance to relativity. The student may elect to apply general education credit for this interdisciplinary course in either Arts & Humanities or Social Sciences. Prior to taking this course students are strongly advised to take HNRS 1110 and a 1000-level HNRS "Perspectives" General Education course.

**HNRS 2130 HU/SS/DV - Intellectual
Traditions: Great Ideas of the East
(3) Variable Title Course**

A survey of the great ideas, literature, religions and philosophical foundations of Asia. The student may elect to apply general education credit for this interdisciplinary course in either Arts & Humanities or Social Sciences. 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.

**HNRS 2830 - Directed Readings,
Projects, and Research (1-3)**

Individualized tutorial with a professor who may be selected from many possible disciplines. A maximum of three credit-hours of Directed Readings may be counted toward the 24 hours required for University Honors.

HNRS 2900 - Honors Colloquium (1-3)

Varied topics as described in the semester schedule; topics will be drawn from disciplines across the entire campus; may be taken more than once with different course content: restricted to lower division credit.

**HNRS 2920 - Short Courses, Workshops,
Institutes and Special Programs (1-3)**

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 specific and descriptive title. The specific title with the credit authorized for the particular offering will appear on the student transcript.

HNRS 3110 - Great Books (3)

A selection of books that embody some of the great ideas, literature, and events influential in history. May be taken up to twice for credit with different content.

HNRS 3900 - Honors Colloquium (3)

Varied topics as described in the semester schedule; topics will be drawn from disciplines across the entire campus; may be taken more than once with different course content.

**HNRS 4830 - Directed Readings: Senior
Project Research (1-3)**

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.

**HNRS 4920 - Short Courses, Workshops,
Institutes and Special Programs (1-3)**

Consult the semester class schedule for current offering under this number. The specific title and credit authorized will appear on the student transcript.

HNRS 4990 - Honors Senior Project (3)

Must be taken by students whose major department offers no Senior Project course; or may be taken in conjunction with a departmental Senior Project course when the project merits additional credit. For the University Honors designation, a Senior Project/Thesis must be completed.

HTHS-Health Sciences Core Courses

HTHS 1101 - Medical Terminology (2) Su, F, Sp

Medical terms of Greek and Latin origin. Designed for the pre-professional and workers in health related fields.

**HTHS 1103 - Introduction To Health Careers
and Care in a Diverse Society (3)**

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 1105 - Technology-Enhanced
Anatomy & Physiology (4) F**

This course teaches fundamentals of human anatomy and physiology that are required for further studies in nursing, allied health, and related disciplines. It is designed to be offered in a technology-enhanced environment (via Ednet to off-campus sites). Four hours of Ednet and two hours of laboratory/recitation per week. Open to concurrent enrollment students only.

HTHS 1106 - Technology-Enhanced Anatomy & Physiology (continued) (4) Sp

Four hours of Ednet and two hours of laboratory/recitation per week. Prerequisite: HTHS 1105. Open to concurrent enrollment students only.

HTHS 1108 - Biocalculations for Health Professions (5) F, Sp

Fundamental mathematical concepts using health professions applications will be taught. 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.

HTHS 1110 LS - Biomedical Core (4) Su, F, Sp

An integrated presentation of the basic concepts of physics, chemistry, human anatomy, human physiology and medical microbiology as related to humans. Biomedical Core is global and interdisciplinary while remaining introductory. Three lecture demonstrations per week. Two lab hours per week (HTHS 1110L). Students completing the Biomedical Core LS1110 receive credit for 4 credit hours in the Life Sciences general education requirements.

HTHS 1111 - Biomedical Core (continued) (4) Su, F, Sp

Three lecture demonstrations per week. Two lab hours per week (HTHS 1111L). Prerequisite: HTHS 1110.

HTHS 1115 - Biomedical Principles for Certificate of Completion for Paramedics (4)

Basic biomedical principles essential for effective administration of emergency health care in field-based situations. A WSU Online course for students in the Emergency Care and Rescue program.

HTHS 1120 - Case Studies in Health Sciences (3) F, Sp

Case Studies in Health Sciences is a WSU Online 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 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. Prerequisite: HTHS 1101, HTHS 1105 and HTHS 1106 or HTHS 1110 and HTHS 1111 or an equivalent course in anatomy and physiology. WSU Online class only.

HTHS 1130 - Common Medicines (3) (offered only as needed)

This is an introductory course and will provide information regarding proper drug usage for persons without significant backgrounds in the Biological Sciences. The course primarily discusses over-the-counter medicines as well as prescription drug groups which are commonly used by the public. The overall objective will be to provide information in such a way that individuals are more aware of possible drug-related problems, able to make wise and appropriate choices, and become well-informed consumers.

HTHS 2230 - Introductory Pathophysiology (3) Su, F, Sp

An introduction to the nature of disease and its effect on body systems. Prerequisite: Completion of anatomy and physiology courses with a grade of "C" or better.

HTHS 2231 - Introductory Pathophysiology Laboratory (1) Su, F, Sp

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 per week. Co-Requisite: HTHS 2230.

HTHS 2240 - Introduction to Pharmacology (3) Su, F, Sp

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. Students taking the HTHS 3240 course for upper division will also be required to write a 10 page paper on an application of pharmacological principle applied to a drug class. Students taking HTHS 2240 cannot take HTHS 3240 for credit. Prerequisite: (Recommended) HTHS 1101, HTHS 1110 and HTHS 1111.

HTHS 2830 - Health Sciences Directed Readings (1-3) F, Sp

Directed Readings in Health Sciences areas. Must have departmental approval.

HTHS 2904 TD - Information Resources in the Health Professions (1)

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 life-long learning. Emphasis is placed on resources in the health sciences. Completion of this course meets part D of the WSU Computer and Information Literacy requirement. Cross-listed as LIBS 2904.

HTHS 2990 - Health Sciences Seminar (1) only offered as needed

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.

HTHS 3240 - Introduction to Pharmacology (3) Su, F, Sp

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. Students taking the 3240 course for upper division will also be required to write a 10 page paper on an application of pharmacological principle applied to a drug class. Students taking HTHS 2240 cannot take HTHS 3240 for credit. Prerequisite: (Recommended) HTHS 1101, HTHS 1110 and HTHS 1111.

HTHS 3328 - Pathophysiology of Cells and Tissues (2) F, Sp

Biological interactions among cellular injuries, genetic disorders, neoplasia and inflammatory and immune disorders. A course in anatomy and physiology and/or pathophysiology with a "C" or better is strongly recommended. WSU Online class only.

HTHS 3329 - Pathophysiology of Organs and Systems (2) F, Sp

Interpretation of disease pathogenesis and pathological symptoms. A course in anatomy and physiology and/or pathophysiology with a "C" or better is strongly recommended. WSU Online class only.

HTHS 3410 - Foundations of Health Science Technology (3)

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.

HTHS 3412 - Health Science Technology Applications (3)

The purpose of this course is to teach students fundamental technological and pharmacological principles used in specific medical devices. The student will develop an understanding of different health science manufactured products and services and will receive exposure to industry representatives. Prerequisite: HTHS 3410.

HTHS 4010 - Interdisciplinary Health Care Teams (3)

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 NRS 4010.

HTHS 4850 - Study Abroad (1-6) Variable Title

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.

IDT-Interior Design Courses**IDT 1010 - Introduction to Interior Design (3)**

Explores interior design as it relates to human factors. Introduces color theory and the elements and principles of design as they relate to interiors. Introduces a brief survey of American architecture and furnishings.

IDT 1020 - Presentation Techniques (3) F

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.

IDT 1860 - Practicum (1-2)

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.

IDT 2010 - Sustainability I: Textiles and Soft Materials (3)

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.

IDT 2020 - Computer-aided Design and Drafting (3)

Application of basic computer-aided drafting and design as it relates to current professional practice in interior design. AutoCAD and AutoDesk software are featured. Three-dimensional projects may be required as part of this course. Prerequisite: DET 1340.

IDT 2035 - Design Process/Space Planning (3)

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. Prerequisite: IDT 2020.

IDT 2040 - Architectural Detailing (3)

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. Prerequisite: IDT 2020.

IDT 2050 - Codes (2)

The study and application of interior building codes that insures the health, safety, and welfare of individuals who occupy the structure.

IDT 2830 - Directed Readings (1-3)

Individually chosen readings or specialized topics supervised by a faculty member. Instructor's approval required.

IDT 2860 - Practicum (1-2)

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. Prerequisite: IDT 2020 and IDT 2035.

IDT 2990 - Interior Design Seminar (1)

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.

IDT 3000 - Lighting Design (3)

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. Prerequisite: IDT 2020, IDT 2035.

IDT 3010 - Historical Interiors (3)

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. Prerequisite: IDT 1020.

IDT 3020 - American and Modern Interiors (3)

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. Prerequisite: IDT 1020.

IDT 3025 - Professional Practice (3)

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. Prerequisite: IDT 2050.

IDT 3030 - Sustainability II: Materials, Hard Surfaces, and Specifications (3)

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.

IDT 3040 - Perspective/Rendering (2)

Perspective drawing, sketching, and manual and computer-generated rendering techniques are explored and utilized. It is required that IDT 4830 for one credit hour be taken in conjunction with this course. Prerequisite: IDT 3030.

IDT 3045 - Residential Design (3)

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. Prerequisite: IDT 3000 and IDT 3040.

IDT 3060 - Kitchen & Bath (3)

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. Prerequisite: IDT 3045.

IDT 4010 - Barrier-Free Design (3)

Application of practices and procedures for barrier-free interiors. Emphasis will be on design for the disabled and elderly.

IDT 4020 - Commercial Design (3)

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.

IDT 4025 - Senior Program Development (2)

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 IDT 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. Prerequisite: IDT 4020.

IDT 4030 - Senior Project (3)

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. Prerequisite: IDT 4025.

IDT 4040 - Portfolio Design (2)

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.

IDT 4830 - Directed Readings (1-3)

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.

IDT 4860 - Internship for Interior Design (3)

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.

IST-Information Systems & Technology Courses**IST 1100 SS - The Wired Society (3) Su, F, Sp**

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.

IST 2010 TE - Business Computer Skills (1) Su, F, Sp

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. Completion of IST TE2010 and an Information Literacy course (BSAD 2704 or LIBS 2704, or LIBS 1704, or NTM 1504) meets the WSU computer and information literacy requirement. *Credit/No credit.*

IST 2015 - Introduction to Information Systems & Technologies (1) F, Sp

This course introduces the student to the role played by computer technology in business strategy and problem resolution. It also introduces information technologies used in information systems, including: software development, hardware, operating systems, network management, project planning, and career paths. Students will develop their academic IST program plan. Lecture series by IST Faculty.

IST 2110 - Software Development I (3) F, Sp

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. Prerequisite: MATH 1050.

IST 2410 - Information Systems Architecture (3) F, Sp

This course provides students with a thorough grounding in computer hardware and operating system software, peripheral devices and contemporary information system architecture, including its structure, theory, and applications.

IST 2720 - Data Structures and Algorithms (3) F, Sp

This course introduces the basics of specifying abstract data types, control structures and modularization, and using them to design programs. Commonly used data structures and algorithms are studied. Emphasis is made on choosing data structures and algorithms appropriate for solving given business problems. Prerequisite: MATH 1050 and IST 2110.

IST 2891 - Cooperative Work Experience (1-4) F, Sp

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 IST project with their current employer, subject to approval by the Business Administration Department. Credit is determined by hours/week of work. Prerequisite: Department Approval.

IST 2892 - Cooperative Work Experience (1-4) F, Sp

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 IST project with their current employer, subject to approval by the Business Administration Department. Credit is determined by hours/week of work. Prerequisite: Department Approval.

IST 2893 - Cooperative Work Experience (1-4) F, Sp

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 IST project with their current employer, subject to approval by the Business Administration Department. Credit is determined by hours/week of work. Prerequisite: Department Approval.

IST 2894 - Cooperative Work Experience (1-4) F, Sp

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 IST project with their current employer, subject to approval by the Business Administration Department. Credit is determined by hours/week of work. Prerequisite: Department Approval.

IST 3110 - Information Technology for Business (3) Su, F, Sp

This course provides students hands-on experience with information technology tools useful for academic and professional activities. It will prepare students to use information technologies effectively to improve productivity and promote competitive position in the marketplace. Prerequisite: IST 2010, ENGL 1010 and MATH 1010.

IST 3210 - Database Design and Implementation (4) F, Sp

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. Prerequisite: MATH 1050 and IST 2110.

IST 3610 - Networks & Data Communications I (4) F, Sp

This course provides coverage of local area networks (LAN) technology and operations with emphasis on design and configuration issues. Design topics cover various aspects of inter-networking devices, bridges and gates, backbones, gateways and wide area network (WAN) connectivity. Configuration topics include installing a network operating system, hardening a server, creating user accounts, managing the network, connecting devices and monitoring the network. Prerequisite: Business Foundations; BSAD 2899, and IST 2410.

IST 3620 - Networks and Data Communications II (3) F

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. Prerequisite: Business Foundations; BSAD 2899 and IST 3610.

IST 3700 - E-business Technologies & Web Development (3) F, Sp

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. Prerequisite: Business Foundations; BSAD 2899 and IST 2110.

IST 3710 - Global Issues in Information Technology (3) Su, F, Sp

This course shows how information technology is used as a key competitive advantage by multinational and trans-national businesses. Topics include global perspectives on

coordination and control, cultural dimensions, and geo-political considerations of global information technology applications. Prerequisite: Business Foundations and BSAD 2899.

IST 3720 - Software Development II (3)

This course builds on the software development skills learned in Software Development I. Topics include class hierarchies, inheritance and interfaces, object aggregation, data structure and collections, file management, threading, network programming, and the design of multi-tiered, distributed computing applications involving relational databases. Prerequisite: Business Foundations; BSAD 2899 and IST 2720.

IST 3730 - Systems Analysis and Design (3) Sp

This course provides the knowledge and skills to design and implement computer-based systems to solve business problems. Topics include feasibility studies, requirement analysis, system design and development, implementation and testing. Students will learn the use of appropriate methodologies and tools, including object-oriented modeling and the use of computer-aided software engineering (CASE). Prerequisite: Business Foundations; BSAD 2899, IST 3210, and IST 3610.

IST 3750 - Electronic Business Communications (3)

This course gives students knowledge regarding the best practices in designing or developing electronic presentations, meetings, and collaborations. This course also familiarizes students with technologies fostering effective communication in virtual situations. Prerequisite: Business Foundations; BSAD 2899, MGMT 3200 or NTM 3250.

IST 4600 - Information Security I (3) F

In a computer-literate age, sophisticated criminals use computers in their illegal and destructive activities. This course discusses cyber crime and teaches students how to: recognize the patterns of an impending attack; detect attacks; set up a secure environment; and use tools to investigate cyber crime. Prerequisite: Business Foundations; BSAD 2899 and IST 3610.

IST 4620 - Information Security Basics (3)

In a computer-literate age, sophisticated criminals use computers in their illegal and destructive activities. This course discusses cybercrime and teaches students to understand networks; the phases of computer hacking; and setting up a secure environment. Prerequisite: Business Foundations, BSAD 2899 and IST 2410 or IST 3610.

IST 4700 - Information Security II (3) Sp

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. Prerequisite: Business Foundations; BSAD 2899 and IST 4600.

IST 4710 - Enterprise Software Development (3)

This course covers the creation and integration of enterprise applications using object-oriented programming and distributed object technology. Topics include design issues for enterprise system development, application architectures, and integrating legacy data and applications with new enterprise systems. Students will use state-of-the-art practices to develop and implement systems. Prerequisite: Business Foundations; BSAD 2899 and IST 3720.

IST 4720 - Emerging Information Technologies (3) Variable Title

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. Prerequisite: Business Foundations, BSAD 2899, and Business Administration Department approval.

IST 4730 - Senior Practicum: Project Management and Systems Development (3) F, Sp

This is a capstone course for the IST major. It provides hands-on and problem-solving experience in all areas of information technology including systems analysis, design, systems implementation, network design, software development, and database design. Students will participate as a member of a team to complete a proposal or a project for a significant computer-based system. This course focuses on working with actual business problems as represented in a major case study. Prerequisite: Business Foundations; BSAD 2899, IST 2015, IST 2110, IST 2410, IST 2720, IST 3210, IST 3610, IST 3700, and Business Administration Department approval.

IST 4801 - Individual Projects (1-3)

This course is open only to senior IST majors. Students will be required to complete an individual project, program, system, or research paper which will enhance their skills and marketability. Prerequisite: Business Foundations; BSAD 2899, Business Administration Department approval, and Senior standing.

IST 4802 - Individual Projects (1-3)

This course is open only to senior IST majors. Students will be required to complete an individual project, program, system, or research paper which will enhance their skills and marketability. Prerequisite: Business Foundations; BSAD 2899, Business Administration Department approval, and Senior standing.

IST 4803 - Individual Projects (1-3)

This course is open only to senior IST majors. Students will be required to complete an individual project, program, system, or research paper which will enhance their skills and marketability. Prerequisite: Business Foundations; BSAD 2899, Business Administration Department approval, and Senior standing.

IST 4810 - Experimental Courses (1-3)

Experimental or one-time courses designed to fill a need in the community or investigate interesting and unusual topics.

IST 4850 - Information Systems & Technology Study Abroad (1-3)

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). Prerequisite: BSAD 2899. Can be repeated once up to 6 credits.

IST 4891 - Cooperative Work Experience (1-4)

Prerequisite: Business Administration Department Approval.

IST 4892 - Cooperative Work Experience (1-4)

Prerequisite: Business Administration Department Approval.

IST 4893 - Cooperative Work Experience (1-4)

Prerequisite: Business Administration Department Approval.

IST 4894 - Cooperative Work Experience (1-4)

Prerequisite: Business Administration Department Approval.

IST 5930 - Professional Development Workshop in Information Technology (1-4)

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. Prerequisite: Permission of instructor.

IST 6610 - Information and Communications Technologies for e-Business (3)

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. Prerequisite: MACC, MBA, or IST Certificate program standing.

IST 6620 - Databases & Information Systems (3)

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. Prerequisite: Admittance to MACC or MBA program and IST 3110 or equivalent.

IST 6800 - Directed Studies (1)

Directed individual study and research on special topics related to information assurance. May be repeated for a cumulative total of three credit hours. Prerequisite: Approval of Business Administration Department Chair and course instructor.

LIBS-Library Science Courses**LIBS 1704 TD - Information Navigator (1)**

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. Completion of this course meets part D of the WSU Computer and Information Literacy requirement.

LIBS 2604 TD - Information Resources in Education (1)

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. Completion of this course meets part D of the WSU Computer and Information Literacy requirement. Cross-Listed with EDUC 2604.

LIBS 2704 TD - Information Resources in the Business Disciplines (1)

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. Completion of this course meets part D of the WSU Computer and Information Literacy requirement. Cross listed with BSAD 2704.

LIBS 2804 TD - Information Resources in the Social Sciences (1)

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. Completion of this course meets part D of the WSU Computer and Information Literacy requirement. Prerequisite: Social Science General Education course.

LIBS 2904 TD - Information Resources in the Health Professions (1)

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 life-long learning. Emphasis is placed on resources in the health sciences. Completion of this course meets part D of the WSU Computer and Information Literacy requirement. Cross-listed as HTHS 2904.

LING-Linguistics Courses**LING 4830 - Directed Readings in Linguistics (1-3)**

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. Prerequisite: 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.

LING 4900 - Variable Topics in Linguistics (1-3)

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. Prerequisite: 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.

LING 4990 - Centering Experience (3)

The Centering Experience is a capstone/synthesis requirement to be completed by reading texts from a list prepared by members of the Linguistics Minor Advisory Committee. The texts must be central to at least two of the disciplines

represented in the minor. The reading will be done either as a directed reading or, enrollment permitting, a seminar, either of which may be team taught. Assessment in LING 4990 will be tailored to the students' interests, and might take the form of a practicum, a project, or a thesis (especially suitable for BIS or Honors students).

MACC-Master of Accounting Courses

MACC 6120 - Financial Accounting & Reporting (3)

In-depth coverage of financial accounting and reporting topics from a theoretical and practical standpoint through a combination of reading assignments, classroom lecture/discussion sessions, assignments, cases, and student presentations. Topics include the FASB and the standard-setting process; SEC policy and practice; accounting for leases, post-employment benefits, deferred income taxes, and stock compensation plans.

MACC 6130 - Governmental and Nonprofit Accounting (3)

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.

MACC 6160 - Financial Statement Analysis (3)

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 6210 - Ethical Considerations & Legal Liability (3)

A study of the ethics espoused by accountants and their professional organizations with attention given to the current legal climate in which accountants operate.

MACC 6310 - Advanced Cost Accounting (3)

Advanced cost accounting topics including cost accounting for non-manufacturing organizations, human information processing, activity resource usage, pricing, performance measurement, and non-routine decisions.

MACC 6330 - Strategic Management Accounting (3)

A study and analysis of advanced managerial accounting subjects. Examines the impact of accounting information on managerial processes including planning, organizing, and controlling.

MACC 6560 - Advanced Auditing & Assurance Services (3)

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.

MACC 6570 - Information Systems Auditing (3)

Methods, techniques, controls, and procedures used in the audit of computerized accounting systems.

MACC 6580 - Internal Auditing (3)

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 6610 - Advanced Accounting Information Systems (3)

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 6801 - Individual Study (1, 2, 3)

Individual work or work in small groups, by arrangement, on special topics not included in the announced course offerings. Prerequisite: Approval of Graduate Coordinator and Instructor.

MACC 6802 - Individual Study (1, 2, 3)

Individual work or work in small groups, by arrangement, on special topics not included in the announced course offerings. Prerequisite: Approval of Graduate Coordinator and Instructor.

MACC 6803 - Individual Study (1, 2, 3)

Individual work or work in small groups, by arrangement, on special topics not included in the announced course offerings. Prerequisite: Approval of Graduate Coordinator and Instructor.

MACC 6991 - Lecture Seminar (1, 2, 3)

Lecture and discussion of current accounting topics by individuals from business and industry.

MACC 6992 - Lecture Seminar (1, 2, 3)

Lecture and discussion of current accounting topics by individuals from business and industry.

MACC 6993 - Lecture Seminar (1, 2, 3)

Lecture and discussion of current accounting topics by individuals from business and industry.

MATH-Mathematics Courses

MATH 0950 ND - Pre-algebra (3) Su, F, Sp

Whole number, integer, and fraction operations, solving linear equations, exponents, ratio and proportion, and applications (word problems). Prerequisite: Accuplacer score within previous 12 months.

MATH 0990 ND - First Course in Algebra (3) Su, F, Sp

Properties of real numbers, solving linear equations and inequalities, geometry, ratio and proportion, applications (word problems), graphing, solving linear systems, exponents, scientific notation, polynomials, factoring, and solving quadratic equations. Prerequisite: MATH 0950 or placement test within previous 12 months. Does not count toward graduation.

MATH 1010 - Intermediate Algebra (4) Su, F, Sp

Inequalities (including absolute value and systems), systems of equations, applications (word problems), functions (inverse, exponential, and logarithmic), variations, factoring, rational expressions, radicals, complex numbers, quadratic equations, parabolas, circles, quadratic formula, formulas, properties and applications of logarithms. Prerequisite: MATH 0990 or placement test within previous 12 months.

MATH 1020 - Fundamentals of Geometry (3)

An introduction to the definitions, methods, and logic of geometry. Prerequisite: MATH 0990 or placement test.

MATH 1030 QL - Contemporary Mathematics (3) Su, F, Sp

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. Prerequisite: MATH 1010 or ACT Math score 23 or higher or placement test.

MATH 1040 QL - Introduction to Statistics (3) Su, F, Sp

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. Prerequisite: MATH 1010 or Math ACT score 23 or higher or placement test.

MATH 1050 QL - College Algebra (4) Su, F, Sp

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, determinants, sequences and series, counting techniques, and an introduction to probability. In addition, mathematics of finance, rational zero and binomial theorems and mathematical induction are covered briefly. Prerequisite: MATH 1010 or Math ACT score of 23 or higher or placement test.

MATH 1060 - Trigonometry (3) Su, F, Sp

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. Prerequisite: MATH 1010 or Math ACT score of 23 or higher or placement test.

MATH 1080 QL - Pre-calculus (5) Su, F, Sp

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. Prerequisite: MATH 1010 or Math ACT score of 23 or higher or placement test.

MATH 1110 - Calculus Concepts and Applications (3)

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. Prerequisite: MATH 1050 QL or MATH 1080 QL or placement test.

MATH 1200 - Mathematics Computer Laboratory (1) F, Sp

Computer solution of mathematics problems using a computer algebra system. Prerequisite: MATH 1050 and MATH 1060, or MATH 1080, or Co-Requirement: MATH 1210.

MATH 1210 - Calculus I (4) Su, F, Sp

Limits, continuity, differentiation, integration. Prerequisite: MATH 1050 and MATH 1060 or MATH 1080 or placement test. Co-Requirement: The ability to use a computer algebra system.

MATH 1220 - Calculus II (4) Su, F, Sp

Transcendental functions, techniques of integration, analytic geometry, infinite series. Prerequisite: MATH 1210. Co-Requirement: The ability to use a computer algebra system.

MATH 1630 - Discrete Mathematics Applied to Computing (4)

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. Prerequisite: MATH 1050 or MATH 1080, and CS 1400 or ability to program in a contemporary computer language and the consent of the instructor.

MATH 2010 - Mathematics for Elementary Teachers I (3) Su, F, Sp

Prospective elementary school teachers revisit mathematics topics from the elementary school curriculum and examine them from an advanced perspective including arithmetic, number theory, set theory and problem solving. Prerequisite: MATH 1050 or placement test.

MATH 2020 - Mathematics for Elementary Teachers II (3) Su, F, Sp

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. Prerequisite: MATH 1050 and MATH 2010.

MATH 2120 - Euclidean Geometry (3) F

Exploration of Euclidean geometry, from basic concepts to advanced theorems. Prerequisite: MATH 1210 or consent of instructor.

MATH 2210 - Calculus III (4) Su, F, Sp

Vector algebra, vector valued functions, multivariable functions, partial derivatives, multiple integrals, line integrals, integration in vector fields. Prerequisite: MATH 1220.

MATH 2250 - Linear Algebra and Differential Equations (4)

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. Prerequisite: MATH 1220.

MATH 2270 - Elementary Linear Algebra (3) Su, F, Sp

Systems of linear equations, matrices, vector spaces, eigenvalues linear transformations, orthogonality. Prerequisite: MATH 1220.

MATH 2280 - Ordinary Differential Equations (3) F, Sp

Methods of solution for ordinary differential equations. Exact equations, linear equations Laplace Transforms, series solutions. Prerequisite: MATH 1220.

MATH 2410 - Foundations of Probability and Statistics (3)

An introduction to probability and statistics with special emphasis on concepts in the K-12 school curriculum. Prerequisite: MATH 1210 or MATH 1050 and consent of instructor.

MATH 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

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 3050 - History of Mathematics (3)

A survey of the history of mathematics and its impact on world culture with emphasis on mathematical motivations, original methods and applications. Prerequisite: MATH 1220.

MATH 3110 - Foundations of Algebra (3) Sp

An introduction to Abstract Algebra, Number Theory and Logic with an emphasis on problem solving and proof writing. Prerequisite: MATH 1210.

MATH 3120 - Foundations of Euclidean and Non-Euclidean Geometry (3) Sp

Axiomatic development of geometry; Euclidean and non-Euclidean. Prerequisite: MATH 1220 and MATH 2120.

MATH 3160 - Number Theory (3) Sp

An overview of beginning number theory including the integers, modulo arithmetic, congruencies, Fermat's theorem and Euler's theorem. Prerequisite: MATH 1210.

MATH 3270 - Linear Algebra (3) F or Sp (alternate years)

Theory and applications of linear algebra including abstract vector spaces and canonical forms of matrices. Prerequisite: MATH 2270.

MATH 3280 - Dynamical Systems (3) Sp (alternate years)

Linear and nonlinear systems of differential equations, qualitative behavior and stability of solutions, applications. Prerequisite: MATH 2270 and MATH 2280.

MATH 3410 - Probability and Statistics I (3) F, Sp

Introductory probability theory and mathematical statistics, including applications. Prerequisite: MATH 1220.

MATH 3420 - Probability and Statistics II (3) F, Sp

A continuation of MATH 3410-Introductory probability theory and mathematical statistics, including applications. Prerequisite: MATH 2210 and MATH 3410.

MATH 3550 - Introduction to Mathematical Modeling (3) F or Sp (alternate years)

Formulation, solution and interpretation of mathematical models for problems occurring in areas of physical, biological and social science. Prerequisite: MATH 2210, MATH 2270 or MATH 2280, or consent from instructor.

MATH 3610 - Graph Theory (3) F (alternate years)

Principles of Graph Theory including methods and models, special types of graphs, paths and circuits, coloring, networks, and other applications. Prerequisite: MATH 1210.

MATH 3620 - Enumeration (3) Sp (alternate years)

Principles of Enumeration including counting principles, generating functions, recurrence relations, inclusion-exclusion, and applications. Prerequisite: MATH 1210.

MATH 3710 - Boundary Value Problems (3) F

Fourier series and the method of separation of variables. Heat, wave, and potential equations, Sturm-Liouville problems, orthogonal functions, special functions. Prerequisite: MATH 2210 and MATH 2280.

MATH 3810 - Complex Variables (3) F or Sp (alternate years)

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. Prerequisite: MATH 2210.

MATH 4110 - Modern Algebra I (3) F (alternate years)

Logic, sets, and the study of algebraic systems including groups, rings, and fields. Prerequisite: MATH 2270.

MATH 4120 - Modern Algebra II (3) Sp (alternate years)

A continuation of MATH 4110: advanced topics from groups, rings, and fields including the Sylow theorems and Galois theory. Prerequisite: MATH 4110.

MATH 4210 - Introductory Real Analysis I (3) F

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. Prerequisite: MATH 2210 and MATH 2270

MATH 4220 - Introductory Real Analysis II (3) Sp (alternate years)

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. Prerequisite: MATH 4210

MATH 4320 - Topology (3) F or Sp (alternate years)

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. Prerequisite: MATH 2210 and MATH 2270.

MATH 4610 - Numerical Analysis I (3) F (alternate years)

Introduction to numerical methods. Use of the digital computer in solving otherwise intractable problems. Prerequisite: MATH 2270 and an ability to use a programming language

MATH 4620 - Numerical Analysis II (3) Sp (alternate years)

A continuation of MATH 4610-Introduction to numerical methods. Use of the digital computer in solving otherwise intractable problems. Prerequisite: MATH 4610

MATH 4710 - Partial Differential Equations (3) Sp (alternate years)

Partial differential equations. First and second order equations, characteristics and classifications, methods of solution, applications. Prerequisite: MATH 3710.

MATH 4750 - Topics in Mathematics (2-4)

This course will vary with the demand and may be taken more than once for a maximum of 8 credit hours. Prerequisite: Consent of the instructor.

MATH 4910 - Senior Research Project (3)

Mathematical research project for seniors. Students may not register for this course the last semester before they intend to graduate. Prerequisite: Instructor approval.

MATH 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

MBA-Master of Business Administration Courses

MBA 6010 - Legal and Regulatory Environment of Business (3)

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.

MBA 6020 - Financial and Managerial Accounting (3)

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.

MBA 6040 - Managerial Economics (3)

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.

MBA 6050 - Quantitative Methods I (3)

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. Prerequisite: Additional course work in College Algebra may be required prior to course registration as per department advisement and student's program of study requirements.

MBA 6051 - Quantitative Methods II (3)

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. Prerequisite: MBA 6050, or equivalent course in statistics.

MBA 6110 - Tools for the Ethical Manager (3)

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.

MBA 6120 - Organizational Behavior (3)

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.

MBA 6130 - Financial Management (3)

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. Prerequisite: MBA 6020, MBA 6050 & MBA 6051, or equivalent courses in accounting and statistics.

MBA 6140 - Marketing Management (3)

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.

MBA 6150 - Operations/Supply Chain Management (3)

“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. Prerequisite: MBA 6050 & MBA 6051, or equivalent courses in statistics.

MBA 6160 - Applications of Decision Models (3)

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. Prerequisite: MBA 6050 & MBA 6051, or equivalent courses in statistics.

MBA 6170 - Corporate Communications (3)

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.

MBA 6180 - Strategic Management (3)

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. Prerequisite: MBA 6130, MBA 6140, MBA 6150.

MBA 6210 - Management Accounting and Control (3)

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. Prerequisite: MBA 6020, or equivalent courses in accounting.

MBA 6310 - Information Technology in the Enterprise (3)

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.

MBA 6340 - Strategic Aerospace Management (3)

Within the context of the aerospace industry, students will be taught about creating client value, setting strategic direction, and leading through change for the purpose of establishing competitive advantages.

MBA 6350 - Continuous Process Improvement in Aerospace Management (3)

Within the context of the aerospace industry, students will be taught vital principles and practices of continuous process improvement that are relevant in maintaining operational excellence and ensuring product quality all throughout the value chain.

MBA 6360 - Aerospace Program Management (3)

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.

MBA 6410 - Global Macroeconomic Conditions (3)

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. Prerequisite: MBA 6040, or equivalent course in economics.

MBA 6420 - The Economics of Industry (3)

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. Prerequisite: MBA 6040, or equivalent course in economics.

MBA 6430 - International Marketing (3)

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.

MBA 6440 - Strategic Leadership (3)

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.

MBA 6450 - Leadership Through People Skills (3)

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.

MBA 6510 - Investment Analysis and Portfolio Management (3)

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. Prerequisite: MBA 6130.

MBA 6520 - International Business Field Studies (3)

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.

MBA 6530 - E-Business (3)

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.

MBA 6540 - Negotiations (3)

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.

MBA 6550 - Managing and Improving Quality (3)

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. Prerequisite: MBA 6050 & MBA 6051, or equivalent courses in statistics.

MBA 6560 - Business/Market Planning Using Online Resources (3)

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.

MBA 6580 - Project Management (3)

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.

MBA 6590 - Strategic Business Tax Planning (3)

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. Prerequisite: MBA 6010 or equivalent course in business law; MBA 6020 or equivalent courses in accounting.

MBA 6630 - Networking & Information Systems (3) F

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. Prerequisite: Admittance to MACC, MBA or MHA program.

MBA 6640 - Information Assurance in the Enterprise (3) Sp

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. Prerequisite: Admittance to MACC, MBA or MHA program.

MBA 6680 - Graduate Consulting Project (3) F, Sp

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. Prerequisite: Instructor approval.

MBA 6700 - Managing for Environmental Sustainability (3)

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. Prerequisite: Admission to MBA program; or graduate standing with permission of the MBA program.

MBA 6710 - Accounting and Finance for Environmental Sustainability (3)

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.

MBA 6720 - Environmental Economics for Sustainable Business (3)

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. Prerequisite: MBA 6040, MBA 6051 or equivalent.

MBA 6730 - Consulting Project in Environmental Sustainability (3)

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. Prerequisite: Instructor approval and MBA 6700, MBA 6710, and MBA 6720.

MBA 6740 - Principles of Contract Management (3)

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.

MBA 6750 - Financial Aspects of Contract Management (3)

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.

MBA 6760 - Legal Aspects of Contract Management (3)

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.

MBA 6800 - Directed Study (1-3)

Directed individual study and research on special topics related to business. May be repeated for a cumulative total of three credits. Prerequisite: Written approval of MBA program and instructor.

MCJ-Criminal Justice Master's Program Courses

MCJ 6100 - Contemporary Criminal Justice (3)

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 (3)

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 (3)

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 (3)

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 (3)

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 - Diversity Issues in Criminal Justice (3)

Course will sensitize and educate criminal justice professionals to issues of diversity. It explores the cross-cultural contact that criminal justice professionals have with citizens, victims, suspects, and co-workers, and the influence of culture, race and gender in the criminal justice field.

MCJ 6160 - Seminar: Criminal Justice Policy Analysis (3)

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 - Seminar: Juvenile Justice (3)

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 - Seminar: Contemporary Legal Issues (3)

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 (3)

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 6210 - Seminar: Judicial Administration (3)

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 - Seminar: Contemporary Law Enforcement (3)

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 - Seminar: Contemporary Corrections (3)

Course provides an analysis of critical problems confronting contemporary adult corrections agencies. Course examines the problems of institutions, the affect of judicial intervention in corrections, alternatives to incarceration, and the political milieu in which this occurs.

MCJ 6240 - Criminal Justice Planning, Budgeting, and Evaluation (3)

Course focuses on the planning, budgeting, and evaluation process in criminal justice organizations. Course examines both strategic and policy planning issues to include establishing organizational goals, budgeting, program implementation, evaluation and review.

MCJ 6250 - Topics in Criminal Justice (1-3) Variable Title

Course focuses on a special issue or topic in criminal justice. A new topic/issue will be selected each time the course is offered.

MCJ 6255 - Great Thoughts in Criminal Justice (3)

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. (May be repeated once for a total of 6 hours.)

MCJ 6260 - Graduate Readings (3)

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.

MCJ 6270 - Project (3)

Course provides students with the opportunity to conduct original research in criminal justice or complete a project in a criminal justice agency. Methods learned in the masters program will be applied.

MCJ 6810 - Experimental Course (1-3)**MCJ 6920 - Workshops and Conference (1-3)****MED-Master of Education Courses****MED 6000 - Fundamentals of Graduate Study (2)**

Review of program goals, policies, and procedures in the MED program. Introduction to the library, campus writing lab, and word processing facilities. A process for scholarly and professional writing will be covered as well as style, form, documentation, support, organization, and a number of other topics to help develop writing confidence for graduate work.

MED 6010 - Advanced Historical Foundations (2)

Study of the relationship of contemporary schooling issues to historical practices and philosophies.

MED 6020 - Diversity in Education (2)

Topics in this course will include issues related to differences among groups of people and individuals based on ethnicity, race, socioeconomic status, gender, exceptionalities, language, religion, sexual orientation, and geographical area as they impact teaching and learning.

MED 6030 - Advanced Educational Psychology (2)

Educational applications of principles and theories of psychology, human behavior, personality development and learning. Prerequisite: (Recommended) MED 6080.

MED 6050 - Curriculum Design, Evaluation & Assessment (3)

An overview of the theories of curriculum development as well as a practical appraisal of curriculum design, implementation, evaluation and assessment. Prerequisite: (Recommended) MED 6080.

MED 6060 - Instructional Strategies (2)

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. Prerequisite: (Recommended) MED 6080.

MED 6080 - Conducting Educational Research (3) F, Sp

Students learn to locate and interpret educational research, and to apply research methods to their own education issues. Prerequisite: MED 6000. (Only taught fall and spring)

MED 6085 - Developing a Project Proposal (1)

This course is designed to help students develop a Master's project proposal that is carefully researched and professionally written. Prerequisite: MED 6030, MED 6050, MED 6060, MED 6080, and Graduate Committee formed.

MED 6090 - Master's Project (3)

Development of a master's project is often related to a student's work assignment. Student must have a signed proposal and department permission to register. Prerequisite: MED 6085.

MED 6091 - Graduate Synthesis (1)

A review and synthesis of the program and its course work. The course includes opportunity to work with the development of personal portfolios. Prerequisite: All core requirements completed; Master's Project Proposal committee-approved, and Master's Project Report completed or in progress. Student must have a signed proposal and program approval to register. Prerequisite: MED 6085.

MED 6110 - Introduction to Classroom Management (3)

This course serves as an introduction to classroom management for those who have not had classroom experience or have been hired by a school district on a "letter of authorization," (hired without a license). 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. This course or MED 6120 is required for licensure.

MED 6120 - Advanced Classroom Management (3)

Eclectic review of the popular teacher-pupil interaction models as they are classified into ideological camps and effect, and management and strategies for the classroom. This course or MED 6110 is required for licensure.

MED 6130 - Topic in Education: (i.e., School Finance, Teaching for Inquiry, etc.) (1-3)

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.

MED 6140 - Adolescent Development (2)

Study of physical, mental, social, and psychological characteristics of adolescents, their needs and problems, and methods of working with those who have behavior problems.

MED 6150 - Action Research in the Classroom (2)

Students will explore effective classroom-based research techniques, complete classroom-based research projects, and engage in ongoing application of action research for the improvement of teaching practice.

MED 6160 - Effective Mentoring in the Classroom (2)

Course will cover strategies for effectively mentoring student teachers and novice teachers by expert teachers. Expectations for the course include journal keeping, writing assignments, and mentoring project.

MED 6180 - Teaching Interpersonal Skills (2)

Study and application of interpersonal skills leading to the application and teaching of selected techniques and systems in the classroom.

MED 6200 - Current Trends in Early Childhood Education (3) variable title

A variable title advanced course in Early Childhood Education (birth through age eight) based upon examination of the current trends in curriculum and instruction for young children. When this number is used it will be accompanied by a brief and specific descriptive title, i.e. literacy, math, science.

MED 6210 - School Law (3)

Considers the rights and responsibilities of students, teachers, and other educational practitioners. Relates these to school programs and operations as determined by state and federal constitutions, laws, and court decisions.

MED 6220 - Current Problems in Education (3)

A survey course which identifies and gives opportunity to research current problems in education at national, state, and local levels. Solutions and responses are developed from the research to address problems.

MED 6230 - Instructional Technology for Teachers (3)

Designed for students who have had a prior introduction to technology. Topics could include classroom applications of technology, software evaluations, and technology integration.

MED 6240 - Foundations of Teaching for Cultural and Language Differences (2)

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.

MED 6250 - Second Language Acquisition: Theories and Implementation (3)

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.

MED 6270 - Literacy Strategies for Teaching English Language Learners (3)

Teaching strategies for English language development and content area instruction.

MED 6280 - Family and Community Involvement in Education (2)

Examination of methods which would facilitate the interaction between the parent/community and the teacher/school through reciprocal communication, home-based involvement, school-based involvement and decision making. Special emphasis will be given to the importance of parental involvement in the education of second language learners.

MED 6300 - Conducting Qualitative Research (3)

Designed as an introduction to the philosophy, theory, and methodology of qualitative research. This course is a companion course to MED 6080, Conducting Educational Research. Special emphasis is placed on designing qualitative research proposals for master's degree projects.

MED 6311 - Content Instruction in the Elementary School: Science (2) Su

Explores new concepts in curriculum and methods of science instruction in the elementary schools. This course is required for elementary licensure.

MED 6312 - Content Instruction in the Elementary School: Mathematics (2) Sp

Explores new concepts in curriculum and methods of mathematics instruction in the elementary schools. This course is required for elementary licensure.

MED 6313 - Content Instruction in the Elementary School: Social Studies (2)

Explores new concepts in curriculum and methods of social studies instruction in the elementary schools. This course is required for elementary licensure.

MED 6314 - Reading Instruction in Elementary Schools (2) F

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. This course is required for elementary licensure.

MED 6316 - Language Arts Instruction in Elementary Schools (2) Sp

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. This course is required for elementary licensure.

MED 6320 - Content Area Literacy Instruction (3)

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. This course is required for secondary licensure.

MED 6330 - Using Children's Literature and Informational Text in the Classroom (2)

This course will provide a broad basis for using children's literature for instructional purposes in elementary classrooms to enhance literacy development.

MED 6340 - Reading Assessment and Instructional Interventions (3)

Assessment of reading problems and corrective procedures for remediation in elementary classrooms.

MED 6350 - Reading Comprehension Instruction (3)

An exploration of current research theories and their pedagogical implications related to teaching vocabulary, reading comprehension, and metacognition. This course is required for the Level 1 Reading Endorsement.

MED 6352 - Early Literacy Instruction (K-6) (2)

The purpose of this course is to focus on the research on emergent and early literacy development so that teachers may construct well-designed, appropriate literacy learning environments, and experiences for young language learners. Because this is an advanced course, students will be expected to have a reading background in early literacy. This course is required for the Level 1 Reading Endorsement.

MED 6353 - Understanding and Supporting Reading Development (grades 6-12) (3) every other semester

This course is to help practicing secondary teachers acquire skills and strategies to support struggling readers. Specifically, this course will provide teachers with a systematic and ongoing approach to classroom intervention to prevent continued failure in reading. Required for the Level 1 Basic Secondary Reading Endorsement.

MED 6354 - Literacy Leadership and Professional Development (2)

This course is designed to increase understanding of the administration and supervision of school literacy programs. Major topics will include: professional development, school/community relations, mentoring partnerships, student diversity, curriculum evaluation and development, and assessment. This course is required for the Reading Specialist Endorsement. Prerequisite: Basic Reading Endorsement.

MED 6355 - Research in Reading (3)

This course will engage students in studying and understanding primary research documents in reading. Students will be guided to explore both classical and contemporary reading research studies. Students will also be instructed in basic research techniques in reading. This course is required for the

Reading Specialist Endorsement. Prerequisite: Level 1 Basic Reading Endorsement.

MED 6356 - Internship in Reading (3)

This course is a field-based experience designed to give students an opportunity to work with curriculum and school leaders for improving reading instruction on a district or school level. Prerequisite: Level I Basic Reading Endorsement, MED 6355, MED 6354. The course is graded Credit/No Credit.

MED 6360 - Foundations of Literacy (3)

An exploration of current reading, oral and written language theories, and their applications for the improvement of literacy practices in schools.

MED 6380 - Values Education (3)

Designed for teachers, administrators, parents and community leaders. Examines the developmental processes of socialization and moral development. Four separate approaches of values education are evaluated.

MED 6420 - Foundations of Education of the Gifted (3)

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.

MED 6430 - Creative Processes in the Elementary School (3)

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.

MED 6440 - Social and Emotional Needs of the Gifted (2)

This course examines social and emotional developmental needs of gifted and talented children and proposes strategies for recognizing and meeting those needs in classrooms and with families.

MED 6450 - Creativity and Applied Imagination (2)

Exploration and development of readily available personal and community resources to encourage creative thinking/reasoning, classroom involvement, and transfer of learning.

MED 6470 - Teaching for Thinking (2)

Theory and practice for teaching thinking skills in elementary, middle, and high school classrooms.

MED 6480 - Differentiated Curriculum for the Gifted (3)

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.

MED 6490 - Assessment and Evaluation in Education of the Gifted (3)

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.

MED 6495 - Action Research in Education of the Gifted (3)

This is a capstone course in the program leading to a Utah teaching endorsement in education of the gifted and talented and meets the USOE endorsement requirement for a field experience or practicum in education of the gifted by requiring a community-based project in which learning from previous endorsement courses is synthesized in a practical way. Students are expected to take initiative in planning, implementing, documenting, and evaluating meaningful action research projects relevant to education of the gifted and talented. Prerequisite: Bachelors degree, teaching license, and MED 6420, MED 6480, MED 6490.

MED 6510 - Advanced Foundations in Special Education Practice and Law (Elementary and Secondary Teachers) (3)

This course focuses on 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, students 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. Prerequisite: Admission to Masters of Education.

MED 6510D - Advanced Foundations in Special Education Practice & Law (Special Education License) (3)

This course focuses on 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, students 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. Prerequisite: Admission to Masters of Education.

MED 6520 - Collaboration, Consultation, and IEP Development (3)

Roles of the special educator and families. IEP development, Least Restrictive environment, managing multidisciplinary team activities, and techniques of collaboration and consultation.

MED 6521 - Practicum in Special Education (2) Not currently being taught.

This Practicum experience will focus on examining in depth the lives of students with mild to moderate disabilities in school, home, and community settings. Students will be introduced to the IEP process and will practice developing collaborative relationships within school settings. This Practicum must be taken either concurrently with, or after completion of, MED 6510 and MED 6520.

MED 6530 - Principles and Applications of Special Education Assessment (3)

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.

MED 6540 - Advanced Managing Student Behavior (3)

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. Prerequisite: MED 6510 or MED 6520.

MED 6550 - Advanced Instructional Planning and Learning Environments for Special Education Students (3)

Effective teaching methods, instructional programming and modification of curriculum for students with disabilities. A direct instruction model is emphasized. Prerequisite: Admission to Masters of Education.

MED 6555 - Advanced Instructional Methods and Practicum: Reading (4)

This course is designed to introduce principles and techniques for diagnosis and remediation of reading problems. The course will cover student characteristics and school setting demands which contribute to lack of success in reading classrooms. Field experience required.

MED 6560 - Advanced Instructional Methods and Practicum: Mathematics (4)

Assessment and diagnosis of mathematics problems and corrective procedures for remediation. This course focuses on the needs of students with learning problems or who are at-risk for school failure. Students will apply the concepts learned in an action research project in a K-12 classroom.

MED 6570 - Advanced Instructional Methods and Practicum: Written Expression (4)

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. Field experience required.

MED 6580 - Advanced Learning Strategies and Transition for Special Education Students (3)

Effective teaching methods, strategies, and practices for secondary age level students with disabilities. A cognitive learning strategies approach is emphasized. Prerequisite: Admission to Masters of Education.

MED 6581 - Pre-Student Teaching in Special Education (4) Not currently being taught.

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) assessment, (b) behavior management, (c) curriculum and instruction for students K-12, and (d) planning and developing post secondary transition plans. Prerequisite: EDUC 4521/MED 6521 Practicum in Special Education, with a grade of B or better. Must be taken either concurrently with, or after completion of, EDUC 4530/MED 6530, EDUC 4540/MED 6540, EDUC 4550/MED 6550, and EDUC 4580/MED 6580.

MED 6730 - Mathematics for Teaching K-8: Assessment and Intervention (3)

Practicing teachers will gain a deeper understanding of the various types of assessment and their appropriate use for guiding instruction, intervention, and evaluation of student learning of mathematics content. This course is part of the Elementary Mathematics Endorsement.

MED 6900 - Individual Study (1-3)

Intended for the candidate who has special needs and who would benefit from an individual study program. Forms are available from Room ED 234 Med program office and must be approved by the instructor and the director at time of registration.

MED 6920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

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.

MED 6990 - Continuing Graduate Advisement (1)

This course is used to fill the continuous enrollment requirement while completing the Master's project. The course is graded Credit/ No Credit.

MED-Science Education Courses**MED 6610 - Life Science for Elementary Teachers (3)**

This course provides a background in concepts relating to living organisms and the interactions among them and their environment. The flexibility of these concepts is examined in light of research activities.

MED 6620 - Physical Science for Elementary Teachers (3)

Basic concepts of the physical sciences (chemistry and physics) are covered. The importance of the scientific method and the design of experiments is addressed as well as basic facts and discoveries. Hands-on laboratory activities are an important part of the course.

MED 6630 - Earth Science for Elementary Teachers (3)

A background in basic concepts relating to the formation, development, and history of the earth is provided. General concepts of the structure, composition, and modification of the planet (atmosphere, lithosphere, and hydrosphere) are investigated through laboratory activities applicable to elementary classrooms. Activities emphasize inquiry and appropriate activities for developing content, process skills, laboratory skills, and positive attitudes toward science.

MED 6640 - The World As A Classroom (1-3) variable title

This course is designed to provide enrichment opportunities for those who undertake either domestic or foreign travel to participate in study tours, research, and other professional development experiences. It offers participants an opportunity to learn outside the classroom in locations available only through travel.

MED 6650 - Understanding Science (3)

This course will examine the nature of science, the philosophy of science, and research in science education. Students will engage in authentic scientific research.

MED 6661 - Life Science for Secondary Teachers: Zoology (3)

This course examines basic concepts relating to living organisms, interactions among them, and relationships with their environment. Concepts of structure, function, ecology, behavior, and evolution will be investigated through laboratory activities applicable to secondary classrooms. Content relates to current areas of public concern and advances in the life sciences.

MED 6662 - Life Science for Secondary Teachers: Microbiology (3)

This course examines basic concepts relating to living organisms, interactions among them, and relationships with their environment. Concepts of structure, function, ecology, behavior, and evolution will be investigated through laboratory activities applicable to secondary classrooms. Content relates to current areas of public concern and advances in the life sciences.

MED 6663 - Life Science for Secondary Teachers: Botany (3)

This course examines basic concepts relating to living organisms, interactions among them, and relationships with their environment. Concepts of structure, function, ecology, behavior, and evolution will be investigated through laboratory activities applicable to secondary classrooms. Content relates to current areas of public concern and advances in the life sciences.

MED 6670 - Physics for Secondary Teachers (3)

A background in the basic concepts of physics is provided. Topics include laws of motion, gravity, energy, light, heat, sound, electricity, magnetism, atomic and nuclear physics, radioactivity, and relativity. Laboratories investigate concepts applicable to secondary classrooms. Activities associate science content with appropriate activities designed to develop process skills, laboratory skills, and positive attitudes toward science.

MED 6680 - Chemistry for Secondary Teachers (3)

A background in the basic concepts related to matter, its properties, and its reactions is provided. Laboratories investigate concepts applicable to secondary classrooms. Activities associate science content with appropriate activities designed to develop process skills, laboratory skills, and positive attitudes toward science.

MED 6691 - Earth Science for Secondary Teachers: Geology (3)

A background in basic concepts relating to the information, development, and history of the earth is provided. General concepts of the structure, composition, and modification of the planet's lithosphere are investigated through laboratory activities applicable to secondary classrooms. Activities emphasize inquiry and appropriate activities for developing content, process skills, laboratory skills, and positive attitudes toward science.

MED 6692 - Earth Science for Secondary Teachers: Meteorology (3)

A background in basic concepts relating to the information, development, and history of the earth is provided. General concepts of the structure, composition, and modification of the planet's atmosphere are investigated through laboratory activities applicable to secondary classrooms. Activities emphasize inquiry and appropriate activities for developing content, process skills, laboratory skills, and positive attitudes toward science.

MED 6693 - Earth Science for Secondary Teachers: Oceanography (3)

A background in basic concepts relating to the information, development, and history of the earth is provided. General concepts of the structure, composition, and modification of the planet's hydrosphere are investigated through laboratory activities applicable to secondary classrooms. Activities emphasize inquiry and appropriate activities for developing content, process skills, laboratory skills, and positive attitudes toward science.

MENG-Master of Arts in English Courses

MENG 5010 - Introduction to Linguistics (3)

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 5020 - Introduction to the Study of Language for Teachers (3)

This course is designed for English teaching majors and minors. It introduces students to the nature of language and linguistics and reviews the elements of traditional grammar. This course surveys prescribed applications for prospective secondary school English teachers, including language variation, contemporary alternatives to traditional grammar, the history of English, and linguistics and composition. This course is designed for students who have no upper-division undergraduate coursework in linguistics.

MENG 5050 - Grammar, Style, and Usage for Advanced Writing (3)

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 5080 - Critical Approaches to Literature (3)

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 5210 - Practicum in Teaching English (2)

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. Prerequisite: MED 6050 Curriculum Design, Evaluation, Assessment (3) must be taken prior to MENG 5210/6210. 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 5210/6210. MENG 5210 and MENG 6210 must be taken concurrently.

MENG 5510 - World Literature (3)

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 5520 - American Literature: Early and Romantic (3)

Students in this course read texts from the late eighteenth century to the decades just before the Civil War. 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 5530 - American Literature: Realism and Naturalism (3)

Students in this course read texts from the Civil War through World War I. 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 5540 - American Literature: Modern (3)

Students in this course read texts from the first half of the twentieth century. This course may not be applied to graduate degree requirements if an undergraduate survey covering the same time period was applied towards an undergraduate degree.

MENG 5550 - American Literature: Contemporary (3)

Students in this course read texts from the 1950s to the present. 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 5610 - British Literature: Medieval (3)

Students in this course read texts from the eighth century to the end of the fifteenth century. Works written in Anglo-Saxon English and northern medieval dialects will be read in modern translations. 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 5620 - British Literature: Renaissance (3)

Students in this course read texts from the beginning of the sixteenth century to the middle of the seventeenth. 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 5630 - British Literature: Neoclassical and Romantic (3)

Students in this course read texts from the late seventeenth century to the early nineteenth century. 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 5640 - British Literature: Victorian (3)

Students in this course read texts from 1830 until roughly World War I. 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 5650 - British Literature: Modern (3)

Students in this course read texts from the first half of the twentieth century. 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 5660 - British Literature: Contemporary (3)

Students in this course read British and Anglo-Irish literature since 1950. 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 5730 - Literature of Cultures and Places (3)

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 5750 - Classical Literature (3)

Students in this course read texts from the Golden Age of Greece to the fall of the Roman Empire. 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 5840 - Methods and Practice in Tutoring Writers (3)

Faculty supervised experience in tutoring student writers in all disciplines. This course is limited to teaching assistants in the MENG program.

MENG 5920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

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.

MENG 6005 - Intercultural Classroom Discourse (3)

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 - Bibliography and Research Methods (3)

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.

MENG 6030 - Studies in Literary Theory and Criticism (3) Variable Title

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.

MENG 6110 - Writing for Teachers (3)

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.

MENG 6120 - Teaching Traditional and Contemporary Young Adult Literature (4)

This course provides a broad, practical background in young adult literature, both traditional and contemporary, with emphasis on current theories and methods in literature pedagogy. Selection and evaluation of texts that appeal to young adults, reading strategies, censorship, themes and genres will be given special attention. Prerequisite: MED 6050 Curriculum Design, Evaluation, Assessment (3) must be taken prior to MENG 5210/6120. 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 5210/6120. MENG 5210 and MENG 6120 must be taken concurrently.

MENG 6210 - Teaching Literature in the Secondary Schools (3)

Designed primarily for in-service teachers, this course explores the most current research and theory concerning the teaching of literature and applies it to issues in the secondary classroom.

MENG 6230 - Wasatch Range Writing Project Summer Institute (1-6)

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.

MENG 6240 - Seminar in American Literature (3) Variable Title

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 for credit with different content.

MENG 6250 - Seminar in British Literature (3) Variable Title

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 for credit with different subject matter.

MENG 6260 - Seminar in World Literature (3) Variable Title

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 for credit with different subject matter.

MENG 6280 - TESOL Practicum (3)

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.

MENG 6310 - Language and Linguistics for Teachers (3)

Designed primarily for in-service teachers, this course explores recent research in linguistics and applies it to issues in the secondary classroom.

MENG 6320 - World Languages (3)

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 (3)

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 6400 - Multicultural Perspectives on Literature for Young People (3)

This course examines the theories of literature and multicultural education for young people K-12, as well as the use of multicultural literature in and out of the classroom. Students will apply the latest critical and pedagogical theories to extensive readings in Young Adult literature. This course is especially suited to in-service teachers, librarians and others who work with young people.

MENG 6410 - Strategies and Methodology of Teaching ESL/Bilingual (3)

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 (3)

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 (3)

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: (2-3) Variable Title

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 for credit with different subject matter.

MENG 6520 - Seminar in Shakespeare (3)

This seminar examines a range of Shakespeare's major works as well as relevant criticism.

MENG 6610 - Advanced Studies in Genre (2-3) Variable Title

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 for credit with different subject matter.

MENG 6710 - Variable Topics (2-3) Variable Title

Topics will vary based on student interest and instructor expertise. This course may be repeated for credit with different subject matter.

MENG 6821 - Teaching Developmental Reading and Writing (2)

This course introduces first-time teachers to the theory and practice of teaching developmental reading and writing.

MENG 6822 - Teaching College Writing (2)

This course introduces first-time teachers to the theory and practice of teaching college writing.

MENG 6823 - Teaching Practicum (1)

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.

MENG 6830 - Directed Readings (1-3)

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.

MENG 6920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

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.

MENG 6940 - Masters Project (2-6)

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.

MENG 6960 - Thesis (6)

Thesis credit may be taken in increments of 1-3 hours in any term. The thesis is a capstone research and scholarly writing course for the Master's Degree Program.

MET-Mechanical Engineering Technology Courses

MET 1000 - Introduction to Mechanical Engineering Technology and Design (3) F

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. Prerequisite: Credit or concurrent enrollment in MATH 1080 or equivalent.

MET 1500 - Mechanical Design Engineering (3) Sp

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. Prerequisite: MET 1000.

MET 1890 - Cooperative Work Experience (1-3)

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. Prerequisite: DET 1250, MATH 1080.

MET 2500 - Modern Engineering Technologies (3) Sp

A survey of modern engineering technologies including, but not necessarily limited to, energy generation, nano systems, smart materials, robotics, lasers, transportation systems, and bioengineering. Prerequisite: MET 1500.

MET 2890 - Cooperative Work Experience (1-3)

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. Prerequisite: Credit or concurrent enrollment in MFET 2300.

MET 3050 - Dynamics (3) F

Fundamentals of force, mass and acceleration, work and energy, and impulse and momentum applied to particles and rigid bodies. Prerequisite: MATH 1210, PHYS 2210 and MFET 2300.

MET 3150 - Engineering Technology Materials (3) Sp

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. Prerequisite: CHEM 1110 and MFET 2300.

MET 3300 - Computer Programming Applications of Mechanical Engineering Technology (3) F

Applications of computer programming and computer software to problems in mechanical engineering technology. Lecture plus computer-based laboratory work. Prerequisite: NTM 1700 or equivalent, MFET 2300.

MET 3400 - Machine Design (3) F

Application of engineering technology fundamentals to machine design. Techniques involved in designing and selecting individual machine parts. Prerequisite: MFET 2300.

MET 3500 - Mechanical Measurements and Instrumentation (3) Sp

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. Prerequisite: CEET 1850 or EE 1270 and ENGR 3300.

MET 3700 - Testing and Failure Analysis (3) F

Mechanical testing of materials, fatigue, fracture, wear, corrosion, embrittlement, failure mechanisms and analysis, case studies of failures. Lecture plus laboratory work. Prerequisite: MET 3150

MET 3890 - Cooperative Work Experience (1-3)

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. Prerequisite: Credit or concurrent enrollment in MET 3400.

MET 4200 - Mechanical Design with FEA (3) Sp

Application of engineering technology fundamentals in mechanical design using Finite Element Analysis. Lecture plus computer-based laboratory work. Prerequisite: MET 3400.

MET 4300 - Heating, Ventilating & Air Conditioning (3) Sp

Principles of heating, ventilating and air conditioning of buildings. Refrigeration systems, air and water distribution and solar energy. Indoor thermal environmental control. Prerequisite: Permission of instructor.

MET 4500 - Senior Project (3,3) F, Sp

A mechanical engineering technology project will be selected for team participation. Projects will require planning, analysis, design, development, production, testing and documentation. Prerequisite: MET 4200.

MET 4510 - Senior Project (3,3) F, Sp

A mechanical engineering technology project will be selected for team participation. Projects will require planning, analysis, design, development, production, testing and documentation. Prerequisite: MET 4200.

MET 4650 - Thermal Science (3) Sp

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. Prerequisite: MATH 1210, PHYS 2210 and CHEM 1110.

MET 4800 - Individual Research in Mechanical Engineering Technology (1-3) F, Sp

Special individual research and development projects in mechanical engineering technology. Credit and time determined by the student and the faculty project supervisor. Prerequisite: Permission of instructor.

MET 4830 - Directed Readings (1-3) F, Sp

Directed individual readings in mechanical engineering technology. Topic selected in consultation with instructor. Prerequisite: Permission of instructor.

MET 4890 - Cooperative Work Experience (1-3)

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. Prerequisite: MET 3400.

MET 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

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.

MET 4990 - Seminar in Mechanical Engineering Technology (1) Sp

Guest lectures from local industry, professionalism and engineering ethics, technology and society, and employment preparation. Prerequisite: MET 4500.

MFET-Manufacturing Engineering Technology Courses**MFET 1150 - Pre-Professional Seminar in Manufacturing (1) Sp**

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 (3) F, Sp

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 1890 - Cooperative Work Experience (1-3) F, Sp

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 (2) F

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: MFET 2150L. (MFET 2150L) is required.

MFET 2150L - Metal Forming, Casting & Welding Lab (1) F

Lab application of theories taught in MFET 2150 by use of student projects. Co-Requisite: MFET 2150.

MFET 2151 - Metal Forming Lecture/Lab (1)

Introduction to industrial metal forming processes, equipment selection, design criteria, shop procedures and terminology. Prerequisite: Instructor Approval.

MFET 2152 - Metal Casting Lecture/Lab (1)

Introduction to industrial metal casting processes, equipment selection, design criteria, shop procedures and terminology. Prerequisite: Instructor Approval.

MFET 2153 - Metal Welding Lecture/Lab (1)

Introduction to industrial metal welding processes, equipment selection, design criteria, shop procedures and terminology. Prerequisite: Instructor Approval.

MFET 2300 - Statics and Strength of Materials (5) Sp

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. Prerequisite: PHYS 2010/L or PHYS 2210/L and MATH 1210.

MFET 2360 - Manufacturing Processes and Materials (3) F

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 (3) Sp

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. Prerequisite: MATH 1010 or higher level.

MFET 2440 - Computer Numeric Control (CNC) in Manufacturing (2) Sp

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. Prerequisite: MATH 1080 and MFET 1210. Co-Requisite: MFET 2440L.

MFET 2440L - CNC in Manufacturing Lab (1) Sp

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: MFET 2440.

MFET 2550 - Basics of Quality Engineering (2) Evening classes only.

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)

MFET 2610 - Quality Improvement Principles and Techniques (2)

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 (1) F

Theory and skills course covering Gas Metal Arc Welding, Flux Core Arc Welding, and Gas Tungsten Arc Welding. Prerequisite: MFET 2150/MFET 2150L. Co-Requisite: MFET 2670L.

MFET 2670L - GMA, FCA and GTA Welding Lab (2) F

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. Prerequisite: MFET 2150/MFET 2150L. Co-Requisite: MFET 2670.

MFET 2830 - Directed Readings in Manufacturing Engineering Technology (1-3) F, Sp

Individual research on topics requested by industry or which meet special needs of Manufacturing Engineering Technology students. Prerequisite: Departmental approval.

MFET 2850 - CNC/CAM for Plastics and Composites Lecture/Lab (3)

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. Prerequisite: MFET 1210/L.

MFET 2860 - Plastics/Composites Materials & Properties (3)

Coverage of the most common commercial plastics including their additives, fillers, and fibers; includes common physical tests used to determine material characteristics; writing intensive. Prerequisite: CHEM 1110.

MFET 2870 - Design of Plastics/Composites Products (3)

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. Prerequisite: DET 1160 and MFET 2860.

MFET 2890 - Cooperative Work Experience (1-3) F, Sp

Open to all second year students in Manufacturing Engineering Technology. A continuation of MFET 1890.

MFET 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. Prerequisite: Departmental approval.

MFET 3010 - Tool Design (3) F

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. Prerequisite: MFET 1210; DET 1160.

MFET 3060 - Codes, Weld Inspection, and Quality Assurance (3) F

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. Prerequisite: MFET 2150/MFET 2150L.

MFET 3310 - Material Selection and Heat Treat (2)

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. Prerequisite: MFET 1210/L, MFET 2300, CHEM 1110. Co-Requisite: MFET 3310L.

MFET 3310L - Material Selection and Heat treat Lab (1)

Application of theory taught in MFET 3310. One 2-hour lab per week. Co-Requisite: MFET 3310.

MFET 3320 - Machine Design (2) F

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. Prerequisite: MFET 2300.

MFET 3340 - Applied Fluid Power (2) F

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. Prerequisite: MFET 2300; PHYS 2010/L or PHYS 2210/L. Co-Requisite: MFET 3340L.

MFET 3340L - Applied Fluid Power Lab (1) F

Application of the theory taught in MFET 3340. One 2-hr lab per week. Co-Requisite: MFET 3340.

MFET 3350 - Plastic and Composite Manufacturing (2) F

Design and processing of plastic and composite materials for industrial applications. Two lectures per week. Prerequisite: CHEM 1110 or CHEM 1210. Co-Requisite: MFET 3350L

MFET 3350L - Plastic and Composite Manufacturing Lab (2) F

Application of the theory taught in MFET 3350. Two 2-hr labs per week. Prerequisite/Co-requisite: MFET 3350.

MFET 3460 - Engineering Design using Solid Modeling (2)

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. Prerequisite: DET 1060 and NTM 1700. Co-Requisite: MFET 3460L.

MFET 3460L - Engineering Design using Solid Modeling Lab (1)

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. Prerequisite: DET 1060 and NTM 1700. Co-Requisite: MFET 3460.

MFET 3510 - Basics of Supply Chain Management (2) Evening classes only.

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).

MFET 3550 - Manufacturing Supervision (3) Sp

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.

MFET 3560 - Advanced Quality Engineering (2) Evening classes only.

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). Prerequisite: MFET 2550.

MFET 3570 - Manufacturing Quality Auditing (2) Evening classes only.

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). Prerequisite: MFET 2410 or equivalent.

MFET 3580 - Certified Mechanical Inspector (2) Evening classes only.

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)

MFET 3610 - Machining Processes Lecture/Lab II (3)

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. Prerequisite: MFET 1210.

MFET 3630 - Fusion Joining and Brazing Processes (2) Sp

Study of SAW, ESW, GMAW, EG, RW, PAW, PAC, Electron Beam, Laser, Friction, Brazing, and other welding processes. Prerequisite: MFET 2670/MFET 2670L. Co-Requisite: MFET 3630L.

MFET 3630L - Fusion Joining and Brazing Processes (1) Sp

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. Prerequisite: MFET 2670/MFET 2670L. Co-Requisite: MFET 3630.

MFET 3650 - Quality Management Institute (3)

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. Prerequisite: MFET 2410, MATH 1010 Intermediate Algebra or equivalent, and Basic Statistics course (MATH 1040) or equivalent.

MFET 3710 - Computer Aided Manufacturing and Rapid Prototyping (2) Sp

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. Prerequisite: MFET 2440/MFET 2440L, DET 1060, DET 1160 or MFET 3460. Co-Requisite: MFET 3710L.

MFET 3710L - Computer Aided Manufacturing and Rapid Prototyping Lab (1) F

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.

MFET 3750 - Welding Metallurgy I (2) F

Metallurgical principles applied to welding and weldability of ferrous metals. Prerequisite: MFET 2150/MFET 2150L, CHEM 1110. Co-Requisite: MFET 3750L.

MFET 3750L - Welding Metallurgy I Lab (1) F

A "hands-on" lab that reinforces the concepts taught in MFET 3750 of metallurgical principles applied to welding and weldability of ferrous metals. Prerequisite: MFET 2150/MFET 2150L, CHEM 1110. Co-Requisite: MFET 3750.

MFET 3760 - Welding Metallurgy II (2) Sp

Metallurgical principles applied to welding and weldability of nonferrous metals. Prerequisite: MFET 3750/MFET 3750L. Co-Requisite: MFET 3760L.

MFET 3760L - Welding Metallurgy II Lab (1) Sp

A "hands-on" lab that reinforces the concepts taught in MFET 3760 of metallurgical principles applied to welding and weldability of nonferrous metals. Prerequisite: MFET 3750/MFET 3750L. Co-Requisite: MFET 3760.

MFET 3810 - Statistical Process Control and Reliability (3) F

This is the second course in the Quality series for the MFET program. The course will focus on statistical techniques used in industrial process control charting, acceptance sampling, reliability practices and preventative maintenance. Course will utilize Minitab and Microsoft Excel Spreadsheet software. Three lectures per week. Prerequisite: MFET 2410.

MFET 3820 - Nondestructive Testing (3) Sp

Fundamental concepts relating to liquid penetrant, magnetic particle, ultrasonics, and radiography and other NDT processes. Prerequisite: MATH 1210 and PHYS 2010 or PHYS 2210.

MFET 3830 - Reinforced Plastics/Advanced Composite Lecture/Lab (3)

Polymer and reinforcement systems; material testing; mold design and development; laboratory involvement in rein-

forced plastics production processes. Prerequisite: MFET 3350/MFET 3350L and MFET 2860.

MFET 3870 - Mold Design and Process Strategies Lecture/Lab (3)

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. Prerequisite: MFET 2860.

MFET 3890 - Cooperative Work Experience (1-3) F, Sp

Open to all third year students in Manufacturing Engineering Technology. A continuation of MFET 1890.

MFET 3910 - Six Sigma Methods and Tools in Manufacturing (4) Sp

This is the third and final course in the Quality series for the MFET program. 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, Control Charts, Multi-Vari and Multivariate 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. Prerequisite: MFET 2410 and MFET 3810.

MFET 4050 - Detailed Scheduling and Planning I (2) Evening classes only.

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. Prerequisite: MFET 3510 or equivalent. (APICS series).

MFET 4090 - Welding Power Sources (2) Sp

Study of power sources used to generate and control voltage and amperage for welding. Two lectures per week. Prerequisite: CEET 1140.

MFET 4150 - Execution and Control of Operations (2) Evening classes only.

Focuses on prioritizing and sequencing work, executing work plans, implementing controls, reporting activity results, and evaluating and providing feedback on performance. Eval. Prerequisite: MFET 3510 or equivalent. (APICS Series).

MFET 4200 - Manufacturing Processes (2) Evening classes only.

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)

MFET 4210 - Cost Estimating and Engineering Economics (2)

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. Prerequisite: MATH 1080; NTM 1700. Co-Requisite: MFET 4610.

MFET 4250 - Detailed Scheduling and Planning (2) Evening classes only.

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. Prerequisite: MFET 3510 or equivalent. (APICS Series)

MFET 4300 - Design of Experiments (2)

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. Prerequisite: MFET 2410

MFET 4310 - Corrosion and Corrosion Control (2) Sp

Analysis of corrosion mechanisms for ferrous metals, nonferrous metals, and nonmetallic materials, as well as the control of corrosion. Prerequisite: CHEM 1110 and MATH 1080.

MFET 4350 - Principles of Lean Manufacturing (2)

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, takt 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 (2) Evening classes only.

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) Prerequisite: MFET 2410 or equivalent.

MFET 4580 - Process Automation (1) F

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. One 1-hour lecture per week. Prerequisite: MFET 2440/MFET 2440L, MFET 3010, NTM 1700; CEET 1850. Co-Requisite: MFET 4580L.

MFET 4580L - Process Automation Lab (2) F

Students duplicate demonstration sequence of automation equipment and develop new routines in: Controlling servo and non-servo robots, computer-aided manufacturing systems and CIM cell, programmable logic controllers, and other devices used in process automation. Co-Requisite: MFET 4580.

MFET 4590 - Production Planning & Process Control (3) F

This course addresses the organization, design, and management of production systems through lean manufacturing, constrain management and mrp/MRP II systems. This course introduces students to work standardization, visual manufacturing, workplace organization, value stream mapping, setup reduction and batch size reduction, total productive maintenance, pull systems/kanbans, and cellular manufacturing design concepts. Students will also be introduced to plant layout concepts, equipment specification issues and related ergonomics/OSHA issues.

MFET 4610 - Senior Project Planning & Estimating (3) F, Sp

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. Co-Requisite: MFET 4610L for manufacturing students or DET 4600 for design graphics students.

MFET 4610L - Senior Project Lab (2-2) F, Sp

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: MFET 4610 (with MFET 4610L only).

MFET 4620L - Senior Project Lab (2-2) F, Sp

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 (2) F

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 (2) F

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 (2) Evening classes only.

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). Prerequisite: MFET 3510.

MFET 4770 - Strategic Management of Resources (2) Evening classes only.

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. Prerequisite: MFET 3510 and be familiar with concepts addressed in all other APICS courses. (APICS series).

MFET 4800 - Individual Research in Manufacturing Technology (1-3) F, Sp

Special individual research and development projects in Manufacturing and Engineering Technology. Credit and time determined by the student and the faculty project supervisor. Prerequisite: Permission of instructor.

MFET 4830 - Directed Readings in Manufacturing Engineering Technology (1-3) F, Sp

Must have department approval.

MFET 4850 - Integration of Automated Systems (3)

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. Prerequisite: MFET 4580/MFET 4580L.

MFET 4890 - Cooperative Work Experience (1-3) F, Sp

Open to all fourth year students in Manufacturing Engineering Technology. A continuation of MFET 1890.

MFET 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)

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 (1) F, Sp

This course is designed to provide a structured review for the student to take the Certified Manufacturing Technologist (CMfgT) Exam.

MFET 5050 - Gateway to Technology (5) Su

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. This course will utilize a train the trainer approach, meaning that the high school teachers will learn both technical content as well as the teaching methodologies they will use in the presentation of the course at their high schools.

MFET 5100 - Introduction to Engineering Design (IED) (5) Su

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 5300 - Principles of Engineering (POE) (5) Su

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 5400 - Computer Integrated Manufacturing (CIM) (5) Su

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 5500 - Engineering Design and Development (EDD) (5) Su

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.

MGMT-Management Courses

MGMT 2400 - Project Management (3)

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 within the Department of Defense. 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.

MGMT 3010 - Organizational Behavior and Management (3) Su, F, Sp

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. (Note: Online course may be taken only ONCE.)

MGMT 3200 - Managerial Communications (3) F, Sp

Study of corporate communication methods to improve communication in organizations. Written and oral reports tailored to achieve strategic goals contingent upon business situations. Prerequisite: ENGL 1010, ENGL 2010.

MGMT 3300 - Human Resource Management (3) F, Sp

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. Prerequisite: Business Foundations; BSAD 2899; MGMT 3010.

MGMT 3350 - Employment and Labor Law (3) F

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. Prerequisite: Business Foundations; BSAD 2899; MGMT 3300.

MGMT 3400 - International Business (3) F

An exploration of the role of multi-national corporations in worldwide economic development and an analysis of the management processes of such corporations. Prerequisite: Business Foundations; BSAD 2899.

MGMT 3450 - Business Studies Abroad- International Management (3)

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). Prerequisite: Business Foundations; BSAD 2899, MGMT 3010.

MGMT 3550 - The Cultural Environment of International Business (3)

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. Prerequisite: Business Foundations; BSAD 2899.

MGMT 4300 - Influence and Group Effectiveness (3) F, Sp

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. Prerequisite: MGMT 3010.

MGMT 4310 - Compensation and Benefits (3) Sp

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. Prerequisite: Business Foundations; BSAD 2899; MGMT 3300.

MGMT 4320 - Staffing Organizations (3) F

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. Prerequisite: Business Foundations; BSAD 2899; MGMT 3300.

MGMT 4350 - Training (3)

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. Prerequisite: Business Foundations; BSAD 2899, MGMT 3300.

MGMT 4400 - Advanced Organizational Behavior (3)

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. Prerequisite: MGMT 3010.

MGMT 4650 - Negotiations (3) F, Sp

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). Prerequisite: Business Foundations; BSAD 2899, MGMT 3300.

MGMT 4800 - Independent Research (1-3) Su, F, Sp

Directed research and study on an individual basis. Prerequisite: Business Foundations; BSAD 2899; Senior Standing; Written Instructor Approval. May be repeated until a total of 4 hours credit is accumulated.

MGMT 4810 - Experimental Courses (1-3)

Experimental or one-time courses designed to fill a need in the community or investigate interesting and unusual topics.

MGMT 4850 - Management Study Abroad (1-3)

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). Prerequisite: BSAD 2899. Can be repeated once up to 6 credits.

MGMT 4860 - Management Internship (3) Su, F, Sp

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. Prerequisite: Business Foundations; BSAD 2899; Senior Standing; Instructor approval.

MGMT 4865 - Human Resource Internship (3) Su, F, Sp

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. Prerequisite: Business Foundations; BSAD 2899; Senior Standing; Instructor approval.

MHA-Master of Health Administration Courses

MHA 6000 - Health Systems & the Healthcare Economy (3)

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 Health Care (3)

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 - Long-term Care Administration (3)

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.

MHA 6160 - Medical Group Management (3)

Theory and principles of practice management. Emphasis on the fundamentals of organizing, staffing, and controlling a physician practice. Financial applications and resource consumption.

MHA 6180 - Health Care Entrepreneurship (3)

Develops an understanding of entrepreneurship, its importance for a health care organization and the health economy, and the challenges associated with promoting entrepreneurship within healthcare organizations.

MHA 6200 - Health Behavior and Managerial Epidemiology (3)

The course addresses the integration of epidemiology into strategic planning and managerial decision-making in health services organizations. Epidemiological principles and tools of investigation from clinical and managerial perspectives are addressed. 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. Prerequisite: MHA 6000 (may be taken concurrently) or Instructor Approval.

MHA 6240 - Human Resources Management in Healthcare (3)

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 6250 - Health Care Finance (3)

Application of financial management techniques to decision making for health care 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. Prerequisite: MHA 6000.

MHA 6300 - Quality Improvement and Risk Management in Health Services Organizations (3)

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 the smarter external customers and internal pressures to justify costs, continuous quality improvement, risk management, and changes demanding creative health care marketing techniques. Course content will include JCAHO and NCQA accreditation standards and processes, Life safety and fire code requirements, and handling of biohazards such as blood borne pathogens. Prerequisite: MHA 6000 or Instructor Approval.

MHA 6310 - Managed Care vs. Managed Health (3)

Examination of factors that influence future direction of managed care. Changing relationships among major stakeholders. Broad areas of discussion including market dynamics, product characteristics, reimbursement methodologies, contracting issues, management information systems, government initiatives, legal and ethical issues, demand management strategies, and future trends.

MHA 6320 - Health Policy and Economics (3)

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 - Quantitative Decision Making (3)

Selected mathematical, statistical, and computer applications and statistical techniques applied to decision making in hospitals and health care organizations.

MHA 6360 - Comparative International Health Systems (3)

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.

MHA 6380 - Patient Services Staff Management (3)

The course addresses and analyzes the roles and responsibilities of clinical administrators. Strategies and methodologies for leading and managing clinical professionals are discussed. The interface and communication challenges between clinical managers and administrative services managers will be addressed.

MHA 6400 - Strategic Health Planning and Marketing (3)

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. Prerequisite: MHA 6100 and MHA 6200.

MHA 6440 - Health Ethics and Law (3)

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 - Managing Health Information (3)

Introductory course that provides basic vocabulary and principles of modern information architectures. Computer networking and communication technologies needed to support modern information infrastructures. Differences between integrated and quilted systems are examined. Emphasis on management and use of information to support management decision making.

MHA 6500 - Field Work (3)

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 enterprisewide 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. Prerequisite: MHA 6000, MHA 6200, MHA 6300, MHA 6400.

MHA 6830 - Directed Study (1-3)

Directed individual study and research on special topics related to health care. May be repeated for a cumulative total of three credits. Prerequisite: Approval of MHA program and instructor.

MICR-Microbiology Courses**MICR 1113 LS - Introductory Microbiology (3) Su, F, Sp**

An introduction to microorganisms, their biology, and their relationships to health, technology, and the environment, with practical applications. Three lecture/demonstrations per week.

MICR 1153 LS - Elementary Public Health (3) Su, F, Sp

Principles and practices of public health, emphasizing prevention and control of communicable and degenerative diseases, and environmental health problems. Three lectures/demonstrations per week.

MICR 1370 LS - Principles of Life Science (3) Sp

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. Two hours of lecture and one 3-hour laboratory per week. Cross-listed with BTNY 1370 and ZOOL 1370.

MICR 2054 LS - Principles of Microbiology (4) F, Sp

Study of the morphology, reproduction, cultivation, metabolism, genetics, and ecology of microorganisms, along with many applications. This introductory microbiology course is designed for science majors and consists of three one-hour lectures and one two-hour lab per week. Prerequisite: CHEM 1210 or CHEM 1110 or CHEM 1200 or equivalent.

MICR 2600 - Laboratory Safety (1) F, Sp

An interdisciplinary, team-taught 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.

MICR 2890 - Cooperative Work Experience (1-5) Su, F, Sp

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.

MICR 2920 - Short Courses, Workshop, Institutes and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

MICR 3053 - Microbiological Procedures (3) F, Sp

Microscopy, staining methods, preparation of media, sterilization, preservation and maintenance of cultures, culture identification, enumeration methods, instrumentation. Two lectures and one 2-hour lab per week. Prerequisite: MICR 2054 and MATH 1050 or MATH 1080 or MATH 1210.

MICR 3154 - Microbial Ecology (4) F, Sp

Factors determining the growth and distribution of microorganisms in their natural habitats. Microbial diversity and their interactions with other living organisms and their surroundings. Microbial activities in nature, including biogeochemical cycles. Three lectures and one three-hour lab. Prerequisite: MICR 2054.

MICR 3203 - The Immune System in Health & Disease (3) Su, F, Sp

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. Three lectures per week Prerequisite: MICR 1113 or MICR 2054 or consent of instructor. Cannot be used as a Microbiology elective course for Microbiology majors.

MICR 3254 - Immunology (4) F

The study of the immune response in mammals. Three lectures and one 3 hour lab per week. Prerequisite: MICR 2054 or consent of instructor.

MICR 3305 - Medical Microbiology (5) Sp

Characteristics of pathogenic microorganisms and mechanisms by which they cause disease in higher animals. Three lectures and two two-hour labs per week. Prerequisite: MICR 3254.

MICR 3340 - Information Resources in the Life Sciences (2) Sp

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. Prerequisite: ENGL 2010. Cross listed in Botany, Library Sciences and Zoology.

MICR 3403 - Tropical Diseases (3) Sp

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. Two hours of lecture, one 3 hour laboratory per week. Prerequisite: MICR 2054.

MICR 3484 - Environmental Microbiology (4) Sp

Applied, environmental microbiology and biotechnology including transport of microorganisms through environment, microbial pathogens and toxins in environment. Biodeterioration, contamination control, and biosafety. Pollution microbiology, environmental management, bioremediation, waste treatment, biological insecticides.

Microbiology of man-made environments. Three lectures and one three-hour lab per week. Prerequisite: MICR 2054.

MICR 3502 - Environmental Health (2) F

Air and water quality, solid and hazardous waste management, food protection, environmental inspection and testing. Two lectures per week. Prerequisite: MICR 1113 or MICR 2054 or consent of instructor.

MICR 3570 - Foundations of Science Education (3)

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.

MICR 3603 - Advanced Microbiology for the Health Professions (3) Su, F, Sp

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 that field. Cannot be used as a Microbiology elective course for Microbiology majors.

MICR 3753 - Geomicrobiology (3) F

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. Prerequisite: CHEM 1210 or approval of the instructor. Cross-listed with GEO 3753.

MICR 3853 - Food Microbiology (3) F

Role of microorganisms in food production, preservation, and spoilage. Two lectures and one 2-hour lab per week. Prerequisite: MICR 2054.

MICR 4054 - Microbial Physiology (4) F

Structure, function, and metabolism of microorganisms, with emphasis upon the bacteria. Three lectures and one 3-hour lab per week. Prerequisite: MICR 2054 and completion of or concurrent registration in CHEM 3070.

MICR 4154 - Microbial Genetics (4) Sp

Genetics of microorganisms and its applications, including mutation, gene transfer systems, recombination, plasmids, recombinant DNA technology, and transposons. Three lectures and one 3-hour lab per week. Prerequisite: MICR 2054. CHEM 3070 recommended.

MICR 4252 - Cell Culture (2) F

Basic methods and applications for culturing plant and animal cells in vitro. Two 2-hour combined lecture and laboratory sessions per week. Prerequisite: MICR 2054 or BTNY 2104 and BTNY 2121. (cross-listed with Botany)

MICR 4354 - Industrial Microbiology and Biotechnology (4) Sp

Beneficial and detrimental involvement of microorganisms in industrial processes, microbial products, biotechnology, contamination control, and antimicrobial agents including antibiotics. Three lectures and one 3-hour lab per week. Prerequisite: MICR 2054, CHEM 2310 or CHEM 3070. MICR 3053 recommended.

MICR 4554 - Virology (4) Sp

Virus structure, classification, genetics, replication and other interactions with the host, with emphasis on bacteriophage and animal viruses. Three lectures and one 3-hour lab per week. Prerequisite: MICR 2054.

MICR 4570 - Secondary School Science Teaching Methods (3)

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. Prerequisite: Admission to the Teacher Education Program.

MICR 4800 - Directed Research (1-2) Su, F, Sp

Independent research under the advisement of a faculty member. Prerequisite: consent of instructor and a minimum of 6 credits of upper division microbiology course work.

MICR 4830 - Directed Readings (1-2) Su, F, Sp

Independent readings on advanced special topics under the direction of a faculty member. Prerequisite: consent of instructor and a minimum of 6 credits of upper division microbiology course work.

MICR 4890 - Cooperative Work Experience (1-5) Su, F, Sp

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.

MICR 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

MICR 4991 - Microbiology Seminar (1) F, Sp

Current topics in Microbiology. One hour per week. Prerequisite: Previous upper division courses in the department.

MICR 5034 - Microbiology for Teachers (4)

Science content course for teachers in the MEd Science Emphasis Program.

MILS-Military Science Courses**MILS 1010 - Leadership and Personal Development (3) F**

Establishes a foundation for self and team development through participation in adventure training and team-building activities. Subject matter includes land navigation, rappelling, physical fitness, first aid, leader behavior and unit effectiveness, effective time management and Army branches. A three-hour weekly leadership lab is included, as well as one weekend field training exercise during the semester. A \$75 lab fee is required. Participation in weekly physical fitness training is expected and should be taken as MILS 2400.

MILS 1020 - Introduction to Tactical Leadership (3) Sp

This course continues to emphasize self and team development through participation in classroom and leadership lab activities that are progressively more challenging. Subject matter includes winter survival, marksmanship and small

unit operations. Classroom discussion includes small unit tactics, troop leading procedures, communications skills and the organization of company-sized Army units. A three-hour weekly leadership lab is included as well as one weekend field training exercise during the semester. Prerequisite: MILS 1010 or Army Basic Training with chair's approval. A \$75 lab fee is required. Participation in weekly physical fitness training is expected and should be taken as MILS 2400.

MILS 2010 - Innovative Team Leadership (3) F

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. A \$75 lab fee is required. Participation in weekly physical fitness training is expected and should be taken as MILS 2400.

MILS 2020 - Foundations of Tactical Leadership (3) Sp

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. Prerequisite: MILS 2010 or Army Basic Training with chair's approval. A \$75 lab fee is required. Participation in weekly physical fitness training is expected and should be taken as MILS 2400.

MILS 2400 - Physical Readiness (1) F, Sp

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. This course may be repeated up to four times for credit.

MILS 2830 - Directed Readings, Projects and Research (1-3) Su, F, Sp

Independent reading/research on topic(s) of military interest under the supervision of a Military Science faculty member. Prerequisite: Requires instructor permission.

MILS 2921 - ROTC Leader's Training Course (3) Su, F, Sp

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. Prerequisite: Requires instructor permission.

MILS 2922 - Northern Warfare (2) Su, F, Sp

A two week course conducted in Alaska. Provides training in cold weather survival and small unit tactics. Credit/no credit grade only. Prerequisite: include the completion of the basic course and instructor permission.

MILS 2923 - Air Assault (2) Su, F, Sp

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. Prerequisite: include successful completion of the basic course and instructor approval.

MILS 3010 - Adaptive Team Leadership (4) F

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. A \$75 lab fee is required.

MILS 3020 - Leadership in Changing Environments (4) Sp

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. A \$75 lab fee is required.

MILS 4010 - Developing Adaptive Leaders (4) F

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. A \$75 lab fee is required.

MILS 4020 - Leadership in a Complex World (4) Sp

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. A \$75 lab fee is required.

MILS 4400 - Advanced Physical Readiness (2) F, Sp

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. Prerequisite: Requires instructor permission. (Students must be enrolled in one of the following courses: MILS 3010, MILS 3020, MILS 4010, or MILS 4020.) This course may be repeated up to four times for credit.

MILS 4830 - Directed Readings, Projects and Research (1-3) Su, F, Sp

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. Prerequisite: Requires instructor permission.

MILS 4921 - ROTC Leadership Development and Assessment Course (3) Su, F, Sp

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. Prerequisite: Requires instructor approval. Open only to students who have successfully completed basic course requirements, MILS 3010 and MILS 3020.

MILS 4922 - Airborne Operations (2) Su, F, Sp

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. Prerequisite: Requires instructor approval. Prerequisite includes completion of the basic course.

MILS 4923 - Cadet Troop Leader Training (2) Su, F, Sp

A two week course conducted at an Army installation in the continental U.S. or overseas. Provides first hand experience in an Army unit. Students learn about military life and the duties of a lieutenant. Credit/no credit grade only. Prerequisite: include completion of MILS 3010, MILS 3020 and Advanced Camp. Requires instructor approval.

MKTG-Marketing Courses**MKTG 3010 - Marketing Concepts and Practices (3) Su, F, Sp**

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 (3) Su, F, Sp

The application of psychological, sociological, and anthropological findings to the purchase and consumption of goods and services by ultimate and industrial consumers. Prerequisite or concurrent enrollment: MKTG 3010.

MKTG 3200 - Selling and Sales Management (3) Su, F

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. Prerequisite: MKTG 3010.

MKTG 3450 - Promotion Management (3) F, Sp

Strategic development of advertising, sales, sales management, public relations, and sales promotion programs. Prerequisite: Business Foundations; BSAD 2899, MKTG 3010. Prerequisite or concurrent enrollment: MKTG 3100.

MKTG 3500 - Retail Management (3) Su, F, Sp

Consideration of issues concerning the establishment and management of retail institutions. Prerequisite: Business Foundations; BSAD 2899; MKTG 3010.

MKTG 3600 - International Marketing (3) Sp

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. Prerequisite: Business Foundations; BSAD 2899; MKTG 3010.

MKTG 3700 - Business Studies Abroad - International Marketing (3)

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, dgstevenson@weber.edu). Prerequisite: Business Foundations; BSAD 2899, MKTG 3010.

MKTG 4200 - Internet Marketing (3)

This course is an elective course for Information Systems & Technologies and Marketing majors. The course deals with the steps used in developing a marketing plan, orienting the plan to developing an Internet presence, and developing a World-Wide Web site to implement the on-line components of the plan. Prerequisite: Business Foundations; BSAD 2899, IST 3110, MKTG 3010.

MKTG 4400 - Marketing Strategy (3) Sp

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. Prerequisite: Business Foundations; BSAD 2899; ACTG 2020; MGMT 3200; MKTG 3010.

MKTG 4800 - Independent Research (1-3) Su, F, Sp

Directed research and study on an individual basis. May be repeated until a total of 4 hours credit is accumulated. Prerequisite: Business Foundations; BSAD 2899; Senior Standing; Written Instructor Approval.

MKTG 4850 - Marketing Study Abroad (1-3)

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). Prerequisite: BSAD 2899. Can be repeated once up to 6 credits.

MKTG 4860 - Marketing Internship (3) Su, F, Sp

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. Prerequisite: Business Foundations; BSAD 2899; Senior Standing; Instructor approval.

MLS-Medical Laboratory Sciences Courses**MLS 1000 - Core Clinical Laboratory Skills (3)
Campus - not offered; Online - Su, F, Sp**

The MLS 1000 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 phlebotomy, specimen collection and processing, and laboratory instrumentation in the areas of hematology, serology, urinalysis, and clinical chemistry. Students must have the support of a clinical laboratory to obtain their hands-on laboratory requirement. Prerequisite: Departmental Approval.

**MLS 1001 - Online Orientation for AAS Degree (1)
Campus - not offered; Online - Su, F, Sp**

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, and academic advisement tailor-made specifically for AAS degree MLS students online.

**MLS 1003 - Introduction to Clinical Immunology
(1) Campus - not offered; Online* - Sp**

Principles and applications for laboratory testing including safe practices for laboratory practitioner, specimen quality assurance, basic concepts in clinical immunology, and clinical approaches to immunological testing. Prerequisite: MLS 1000. *Acceptance into the MLS AAS Program required

**MLS 1113 - Introduction to Medical
Laboratory Practices (4) Campus
- Su, F, Sp; Online* - F, Sp**

Principles and applications to laboratory testing including safe practices for the laboratory practitioner, specimen quality assurance, phlebotomy, urinalysis, basic concepts in clinical immunology, and clinical approaches to immunological testing. Laboratory session addresses the principles and applications to laboratory testing including safe practices for the laboratory practitioner, specimen quality assurance, phlebotomy, urinalysis, basic concepts in clinical immunology, and clinical approaches to immunological testing. *Acceptance into the MLS AAS Program required

**MLS 1123 - Principles of Hematology and Hemostasis
(5) Campus - Su, F, Sp; Online* - Su, Sp**

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. Pre/co-requisite: MLS 1113. *Acceptance into the MLS AAS Program required

**MLS 2003 - Applied Laboratory Mathematics
and Laboratory Statistics (3)
Campus - F; Online - F**

A discipline-specific course which tailors applied laboratory mathematics and clinical statistics to all areas of the medical laboratory with emphasis in clinical chemistry. Topics to include reagent preparation, specimen dilution protocols, quality assurance and quality control, practical applications of common statistical tests, and statistical analysis using Microsoft Excel. The course is designed to complement the mathematics component of Clinical Chemistry MLS 2211 and MLS 2213.

**MLS 2211 - Principles of Clinical Chemistry
I (5) Campus* - F; Online* - F**

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. Prerequisite: 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 (4) Campus* - F; Online* - F**

This course provides an in-depth coverage of clinically significant bacteria including epidemiology, pathogenicity, procedures for traditional laboratory identification and antimicrobial testing. Pre/Co-requisite: MICR 1113 or MICR 2054. *Acceptance into the MLS AAS Program required

**MLS 2213 - Principles of Clinical Chemistry
II (5) Campus* - Sp; Online* - Sp**

Continuation of MLS 2211 with the introduction to methods for the assessment of proteins, lipids, enzymology, therapeutic drug monitoring, toxicology and basic endocrinology. Prerequisite: MLS 2211. *Acceptance into the MLS AAS Program required

**MLS 2214 - Principles of Clinical Microbiology
II (4) Campus* - Sp; Online* - Sp**

This course is a continuation of MLS 2212 including, clinical mycology, virology, parasitology and miscellaneous clinical bacteria. Prerequisite: MLS 2212. *Acceptance into the MLS AAS Program required

**MLS 2215 - Principles of Immunohematology
(4) Campus* - Sp; Online* - Su, Sp**

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. Prerequisite: MLS 1113. *Acceptance into the MLS AAS Program required

**MLS 2256 - Supervised Clinical Experience
I (1) Campus* - Sp; Online***

Off campus supervised clinical experiences administered in conjunction with clinical faculty in WSU affiliated health care institutions. Co-Requisite: MLS 2257. Online students receive credit for clinical experience. *Acceptance into the MLS AAS Program required

**MLS 2257 - Supervised Clinical Experience
II (1) Campus* - Sp; Online***

Off campus supervised clinical experiences administered in conjunction with clinical faculty in WSU affiliated health care institutions. Co-Requisite: MLS 2256. Online students receive credit for clinical experience. *Acceptance into the MLS AAS Program required

**MLS 2830 - Directed Reading (1-3) Campus*
- F, Sp; Online* - Su, F, Sp**

Topics in Laboratory Medicine under the direction of departmental faculty advisor. May be repeated for a maximum of 6 hours. *Acceptance into the MLS AAS Program required

**MLS 2920 - Short Courses, Workshops, Institutes
and Special Programs (1-3) Campus*
- Su, F, Sp; Online* - Not offered**

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. *Acceptance into the MLS AAS Program required

**MLS 3301 - Online Orientation for BS Degree (1)
Campus - not offered; Online - Su, F, Sp**

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, Access Database, and short referenced paper writing and using library resources tailor-made specifically for BS degree MLS students online.

**MLS 3302 - Advanced Medical Laboratory Practices
I (4) Campus** - F; Online** - Su, Sp**

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 3311 - Advanced Immunohematology
(3) Campus** - F; Online** - F, Sp**

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 3313 - Advanced Hematology and Hemostasis
(4) Campus** - F; Online** - F, Sp**

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 (3)
Campus** - Sp; Online** - F, Sp**

This problem-solving oriented course presents the correlation of clinical chemistry test results 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, 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. Additionally, Therapeutic Drug Monitoring and Toxicology studies are presented. Prerequisite: MLS 3302. **Acceptance into the MLS BS Program required

**MLS 3316 - Advanced Clinical Microbiology
and Molecular Diagnostics (4)
Campus** - Sp; Online** - F, Sp**

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. Pre/Co-requisite: MICR 3305 or MICR 3603.
**Acceptance into the MLS BS Program required

MLS 4409 - Clinical Correlation (1) Campus
- Sp; Online** - Su, F, Sp**

Physician guided correlation between laboratory data and patient diagnosis. MLS 3302. **Acceptance into the MLS BS Program required

**MLS 4411 - MLS Simulated Laboratory I (4)
Campus** - F; Online** - F, Sp**

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. MLS 3302. **Acceptance into the MLS BS Program required

**MLS 4412 - MLS Simulated Laboratory II (4)
Campus** - Sp; Online** - Su, Sp**

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. Prerequisite: MLS 4411. **Acceptance into the MLS BS Program required

**MLS 4414 - Laboratory Teaching and Supervision
I (2) Campus** - F; Online** - Su, F, Sp**

On Campus: Students will apply sound instructional and pedagogical theory by writing learning objectives. The learning objectives will then apply to an instructional unit on a MLS topic of their choice which they prepare and present to the class. Each student will also participate as a laboratory teaching assistant (TA) in a MLS laboratory section assisting the faculty in the administration of the laboratory instruction. Each student will be assigned to a MLS course laboratory section in which expected behavior includes: active participation in laboratory teaching, demonstration of procedures, preparation of laboratory teaching materials and assisting laboratory faculty and students where ever needed. Online: Students are expected to apply sound educational and performance evaluation strategies set forth in MLS 3302. Students also are presented the opportunity to refine their interpersonal skills through a teaching/learning process specifically designed for the medical laboratory scientist. Prerequisite: MLS 3302. **Acceptance into the MLS BS Program required

**MLS 4417 - Laboratory Teaching and Supervision
II (1) Campus** - Sp; Online** - Su, F, Sp**

On Campus: Instructional unit prepared in MLS 4414 will be presented at local hospitals to physicians and laboratory professionals during this semester. Each student will also participate as a laboratory teaching assistant (TA) in a MLS laboratory section assisting the faculty in the administration of the laboratory instruction. Each student will be assigned to a MLS course laboratory section in which expected behavior includes: active participation in laboratory teaching, demonstration of procedures, preparation of laboratory teaching materials and assisting laboratory faculty and students where ever needed. Continued processes set forth in MLS 4414. Students are expected to apply sound educational and performance evaluation strategies set forth in MLS 4414. Students also are presented the opportunity to refine their interpersonal skills through a teaching/learning process specifically designed for the medical laboratory scientist. Prerequisite: On

Campus: MLS 4414. Online: MLS 4414. **Acceptance into the MLS BS Program required

**MLS 4453 - Supervised Clinical Experience
I (1) Campus** - Sp; Online****

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. Co-Requisite: MLS 4454. Online students receive credit for clinical experience. **Acceptance into the MLS BS Program required

**MLS 4454 - Supervised Clinical Experience
II (1) Campus** - Sp; Online****

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. Co-Requisite: MLS 4453. Online students receive credit for clinical experience. **Acceptance into the MLS BS Program required

MLS 4800 - Special Problems (1-3) Campus
- F, Sp; Online** - not offered**

Prerequisite: Consent of instructor prior to registration.
**Acceptance into the MLS BS Program required

**MLS 4801 - Research Projects in Medical Laboratory
Sciences I (1) Campus** - F, Sp; Online** - F**

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 4802. Pre/Co-requisite: MLS 3302. **Acceptance into the MLS BS Program required

**MLS 4802 - Research Projects in Medical Laboratory
Sciences II (1) Campus** - F, Sp; Online** - Sp**

This course is a continuation of MLS 4801, 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. Prerequisite: MLS 4801. **Acceptance into the MLS BS Program required

**MLS 4830 - Directed Readings (1-3)
Campus** - F, Sp; Online** - F, Sp**

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. **Acceptance into the MLS BS Program required

**MLS 4850 - Study Abroad (1-6) Variable Title
(variable and semesters offered)**

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.

**MLS 4920 - Short Courses, Workshops, Institutes
and Special Programs (1-3) Campus**
- F, Sp; Online** - not offered**

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized

will appear on the student transcript. **Acceptance into the MLS BS Program required

MLS 5101 - Analytical Chemistry Applications in Medical Laboratory Sciences (4)
Campus - not offered; Online - Su, F, Sp

Concepts, analytical methods, and clinical correlation of analytical chemistry as it applies to medical clinical chemistry are presented. Emphasis is on analytical methods and quality control practices covering carbohydrate, bilirubin, non-protein nitrogen, electrolyte, protein, lipid, enzyme, therapeutic drug monitoring, toxicology, and endocrinology chemistry. These topics will include clinical correlation with diabetes, hepatic, pancreatic, renal, and endocrine diseases. This non-laboratory course is designed for those who have hold degrees in non-medical laboratory science areas and wish to obtain current education in analytical chemistry specific to the modern hospital laboratory. Prerequisite: For medical laboratory personnel.

MLS 5102 - Clinical Applications in Hematology and Hemostasis (3) **Campus - not offered; Online - Su, F, Sp**

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. This non-laboratory course is designed for individuals holding BS/BA degrees in non-medical laboratory science and wish to obtain current education in hematology and hemostasis specific to the modern hospital laboratory. Prerequisite: For medical laboratory personnel.

MLS 5103 - Clinical Laboratory Microbiology I (3) **Campus - not offered; Online - F**

This course provides an in-depth coverage of clinically significant bacteria including epidemiology, pathogenicity, procedures for traditional laboratory identification and antimicrobial testing. Prerequisite: For medical laboratory personnel.

MLS 5104 - Clinical Laboratory Microbiology II (3) **Campus - not offered; Online - Sp**

This course is a continuation of MLS 5103, including clinical mycology, virology, parasitology and miscellaneous clinical bacteria. Prerequisite: MLS 5103; for medical laboratory personnel.

MLS 5105 - Clinical Immunohematology (3)
Campus - not offered; Online - Su, Sp,

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 CLT 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. Prerequisite: For medical laboratory personnel.

MPC-Master of Professional Communication Courses

MPC 5080 - Intercultural Communication (3)

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 is highly recommended as an elective for MPC students who have not taken it in their undergraduate curriculum. This course may not apply for graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit. Prerequisite: Permission of MPC advisor.

MPC 5090 - Gender and Communication (3)

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 for graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit. Prerequisite: Permission of MPC advisor.

MPC 5100 - Small Group Facilitation and Leadership (3)

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 for graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit. Prerequisite: Permission of MPC advisor.

MPC 5220 - Editing (3)

Develops editing knowledge and skills for print and online publications. Covers copy editing, content editing and page editing. This course may not apply for graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit. Prerequisite: Permission of MPC advisor.

MPC 5440 - Public Relations Media and Campaigns (3)

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 for graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit. Prerequisite: Permission of MPC advisor.

MPC 5500 - Topics in Communication (3) variable title

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 be taken more than once with different designations (topics). This course may not apply for graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit. Prerequisite: Permission of MPC advisor.

MPC 5550 - Organizational Communication (3)

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 for graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit.

Prerequisite: Permission of MPC advisor.

MPC 5650 - Communication Law (3)

First Amendment origins, interpretations and philosophy underlying regulation of the mass media. This course may not apply for graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit. Prerequisite: Permission of MPC advisor.

MPC 5810 - Persuasive Communication (3)

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 for graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit. Prerequisite: Permission of MPC advisor.

MPC 5850 - Advertising (3)

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 for graduate degree requirements if an undergraduate course of the same name or content has been used for undergraduate credit. Prerequisite: Permission of MPC advisor.

MPC 6000 - Introduction to Graduate Studies for a Master in Professional Communication (1)

What it takes to succeed as a graduate student is similar to what it takes to succeed as a working professional. This course gets students on their way to becoming successful master's students. Students are oriented to the nature, expectations, resources, and challenges of graduate study. They meet fellow students with similar goals and faculty members with wide-ranging expertise in professional communication. This course involves students early in researching the topics, trends, and theories for future graduate study.

MPC 6100 - Team Building and Facilitation (3)

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 (3)

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 6200 - Presentational Speaking and Visual Communication for the Workplace (2)

Speaking and visual communication are both powerful tools for the professional communicator. This course focuses on the message and speaker as sites of production of meaning. Effective messages and sharing of meaning are central to the professional communicator's ability to present well. This course focuses on developing and delivering strategic presentations and on impromptu oral communication. Class exercises focus on audience analysis, strategic thinking, theme development, message/argument construction, openings and closings, and creation of memorable messages. Elements of visual communication such as color, emphasis, balance, readability, and typography are discussed.

MPC 6300 - New Media in Professional Communication (3)

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 6400 - Communicating Organizational Leadership (3)

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 6500 - Topics in Professional Communication (3) variable title

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. This course may be repeated once as elective credit with different titles and topics.

MPC 6600 - Strategic Communication (3)

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 6700 - Research Methods for Professional Communication (3)

Communication must be measured in order to evaluate its effectiveness, to refine and improve results, and to demonstrate value to an organization. This course reviews methods available to professional communicators to measure and evaluate research regarding the performance of a particular communication medium or an integrated communication campaign. Students receive instruction on commonly used professional research methodologies such as focus groups, surveys, usability studies and test-and-control methods to learn how to run studies on a "shoestring budget." For projects with research budgets, students learn what to look for when hiring a research firm and how to evaluate and implement the research findings.

MPC 6800 - Advanced Communication Research and Writing (1)

To fulfill the requirements of the MPC degree, students will produce a research project growing out of the student's graduate study as it applies to the workplace (Project) OR write a more traditional academic capstone research thesis (Thesis). Students may choose one or the other to fulfill this requirement. This one-credit hour course is dedicated to an overview of appropriate projects and descriptions of project expectations. Students will, with the aid of the course instructor, select research topics as well as complete literature reviews and choose methods for student thesis or capstone applied projects. Research outcomes will be designed specifically to enhance student career goals. Students will form their thesis/project committees and will begin to compose their project prospectus.

MPC 6900 - Thesis/Project I (3)

In this course students will continue 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 prospectus approved.

MPC 6950 - Thesis/Project II (3)

This course will allow students to complete their workplace project or traditional academic thesis. Students will prepare, present and defend their projects or theses to project/thesis committees during this semester for review and approval. 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.

MSAT-Master of Science in Athletic Training Courses

MSAT 6080 - Research Methods I (3) Sp

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 (3) F

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. Prerequisite: MSAT 6080.

MSAT 6090 - Research Methods III (3) Sp

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. Prerequisite: MSAT 6085.

MSAT 6200 - Psychology of Sport, Injury & Rehabilitation (3)

This course is designed to provide a basic understanding of the psychology of sport, injury, and rehabilitation. Topics covered include emotion, 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. Prerequisite: PSY 1010.

MSAT 6300 - Orthopedic Assessment of Musculoskeletal Injuries: Lower Extremities (3) F

Content of this course addresses evaluation techniques and care for musculoskeletal injuries to the trunk and lower extremities for graduate-level 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. Prerequisite: ZOO 2100.

MSAT 6301 - Orthopedic Assessment of Musculoskeletal Injuries: Upper Extremities (3) Sp

Content of this course addresses evaluation techniques and care for musculoskeletal injuries to the head, face and upper extremities for graduate-level 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. Prerequisite: MSAT 6300.

MSAT 6350 - General Medical Conditions and Advances in Athletic Training (3) Sp

Discusses general medical disorders and conditions pertaining to sports medicine and inquire into the latest research of related issues.

MSAT 6400 - Basic Therapeutic Modalities for Musculoskeletal Injuries (3) F

Through lecture, discussion, and laboratory experience, the scientific basis of musculoskeletal rehabilitation involving therapeutic modalities will be examined. This course is designed to introduce students to the contemporary usage and basic foundation of therapeutic modalities, transmission of energy, infrared, and mechanical therapy. Two lecture and 2 lab hours per week. Prerequisite: MSAT 6300 and ZOO 2200 or HTHS 1110 and HTHS 1111.

MSAT 6401 - Advanced Therapeutic Modalities for Musculoskeletal Injuries (3) Sp

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 basic foundations of therapeutic modalities established in MSAT 6400. Topics for discussion include the application of electrotherapy devices, ultrasound, light therapy, and short-wave diathermy. Two lecture and 2 lab hours per week. Prerequisite: MSAT 6400.

MSAT 6430 - Principles of Athletic Training (3) F

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. Prerequisite: HLTH 2300 or AT 2300.

MSAT 6431 - Orthopedic Taping, Wrapping, & Bracing (1) Sp

This course is designed to give graduate athletic training students a basic understanding of athletic training taping, wrapping, bracing, padding, and splinting techniques. Students will also learn how to properly fit and repair athletic protective equipment. Students will apply a variety of techniques to support all areas of the body.

MSAT 6450 - Basic Rehabilitation of Musculoskeletal Injuries (3) F

Content of this course provides basic understanding of therapeutic exercise as it relates to the rehabilitation process of musculoskeletal injuries. Course provides basic concepts and hands-on techniques used in the rehabilitation of the athlete/patient from an injury state to a highly competitive state. Prerequisite: MSAT 6300 and MSAT 6301.

MSAT 6451 - Advanced Rehabilitation of Musculoskeletal Injuries (3) Sp

Content of this course provides advanced understanding of therapeutic exercise as it relates to the rehabilitation process of musculoskeletal injuries. This course provides advanced instruction and hands-on techniques in the rehabilitation of an athlete/patient from an injury state to a highly competitive state. Prerequisite: MSAT 6450.

MSAT 6500 - Introduction to Graduate Athletic Training (First Semester) (2) F

Provides an opportunity for students to observe the function of an athletic training facility and become aware of the various duties performed by a Certified Athletic Trainer. Orients students to the graduate athletic training program.

MSAT 6501 - Graduate Practicum I (2) Sp

Provides an opportunity for graduate-level athletic training students to receive skill proficiency testing in the areas of acute care of injury and illnesses. Prerequisite: MSAT 6500.

MSAT 6502 - Graduate Practicum II (3) F

Provides an opportunity for graduate-level athletic training students to receive skill proficiency testing in the areas of orthopedic assessment (upper body), risk management, psychosocial development, pharmacology, and taping, wrapping, bracing and padding. Prerequisite: MSAT 6301, MSAT 6431, MSAT 6501 and HTHS 2240.

MSAT 6503 - Graduate Practicum III (3) Sp

Provides an opportunity for graduate-level athletic training students to receive skill proficiency testing in the areas of basic therapeutic exercise, basic therapeutic modalities, risk

management and injury prevention, orthopedic assessment (lower extremities) and basic nutrition. Prerequisite: MSAT 6400, MSAT 6450, MSAT 6300, MSAT 6502, and PEP 3280.

MSAT 6504 - Graduate Practicum IV (3) Su

Provides an opportunity for graduate-level athletic training students to receive skill proficiency testing in the areas of advanced therapeutic exercise, advanced therapeutic modalities, and general medical conditions and disabilities. Prerequisite: MSAT 6503, MSAT 6401, MSAT 6451, MSAT 6350.

MSAT 6600 - Administration and Management in Athletic Training (3) F

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. Prerequisite: MSAT 6502.

MSAT 6700 - Advanced Diagnostic Imaging for the Athletic Training Profession (1) F

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. Prerequisite: MSAT 6350.

MSAT 6999 - Critical Thinking for Musculoskeletal Injury Management (1) F

Content of this course addresses evaluation techniques, rehabilitation processes and return to play guidelines for specific orthopedic injuries to the upper and lower extremities. The student must integrate anatomical structures, physiology principles, rehabilitation principles, and evaluative techniques to provide a basis for critical decision-making and care in a musculoskeletal injury management environment. Prerequisite: MSAT 6401 and MSAT 6451.

MSN-Master of Nursing Courses**MSN 6100 - Research Methods (3)**

This course prepares the student to critically appraise, compare, and evaluate published quantitative and qualitative research reports to develop and maintain an evidence-based environment within the nurse administration and nurse education setting. Appraisal of the strengths and weaknesses of the reported research designs will be emphasized. Co-Requisite: MSN 6141, MSN 6180 or permission of instructor.

MSN 6120 - Research and Statistics (3)

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. Prerequisite: MSN 6100, MSN 6141, MSN 6180. Co-Requisite: MSN 6160 or permission of instructor.

MSN 6141 - Advanced Nursing Theory (3)

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: MSN 6100, MSN 6180.

MSN 6160 - Evidence-Based Practice (3)

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. Prerequisite: MSN 6100, MSN 6141, MSN 6180. Co-Requisite: MSN 6120.

MSN 6180 - Improving Patient Care and Nursing Practice through Information Systems (3)

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. Co-Requisite: MSN 6100, MSN 6141.

MSN 6200 - Theoretical Foundations of Nursing Administration (3)

This course focuses upon the knowledge and skills required to utilize established theoretical and concepts frameworks to critically analyze clinical and non-clinical leadership issues and apply theory-based principles within the nursing administration setting. Prerequisite: MSN 6100, MSN 6141, MSN 6180.

MSN 6300 - Quality Improvement, Patient Safety and Risk Issues in Patient Care Delivery (3)

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. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6200, MSN 6324, MSN 6340, MSN 6360. Co-Requisite: MSN 6380, MSN 6400.

MSN 6324 - Financial Issues in Nursing Administration (3)

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. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6200. Co-Requisite: MSN 6340, MSN 6360.

MSN 6340 - Compliance with Legal and Regulatory Systems in Patient Care Delivery (3)

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. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6200. Co-Requisite: MSN 6324, MSN 6360.

MSN 6360 - Scope and Practice of Nursing Administration (3)

This course addresses the nurse administrator's responsibility for the overall administration of patient care delivery services and representation of nursing services at the highest

level of the organization and across a wide variety of settings. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6200. Co-Requisite: MSN 6324, MSN 6340.

MSN 6380 - Retaining and Developing a Competent Workforce in Nursing (3)

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. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6200, MSN 6324, MSN 6340, MSN 6360. Co-Requisite: MSN 6300, MSN 6400.

MSN 6400 - Nurse Administrator Residency (3)

This on-site practicum is designed to prepare the student for a career in nursing administration and leadership. The student will participate in focused participative learning activities with nurse leaders at either the executive, director or manager level. A variety of focused nursing administrator residency areas will be available. The student, faculty, and assigned nurse administrator residency preceptor will collaboratively design the residency experience. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6200, MSN 6324, MSN 6340, MSN 6360. Co-Requisite: MSN 6300, MSN 6380.

MSN 6500 - Theoretical Foundations in Nursing Education (3)

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. Prerequisite: MSN 6100, MSN 6141, MSN 6180.

MSN 6520 - Curriculum Development for Nursing Educators (3)

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. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6500. Co-Requisite: MSN 6540, MSN 6560.

MSN 6540 - Measurement of Competence and Outcomes in Nursing Education (3)

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. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6500. Co-Requisite: MSN 6520, MSN 6560.

MSN 6560 - Socialization in the Role of Nursing Educator (3)

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. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6500. Co-Requisite: MSN 6520, MSN 6540.

MSN 6580 - Clinical Nursing Instruction in Higher Education and Community Settings (3)

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. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6520, MSN 6540, MSN 6560. Co-Requisite: MSN 6600, MSN 6700.

MSN 6600 - Nursing Instruction in Higher Education and Community Settings (3)

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. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6500, MSN 6520, MSN 6540, MSN 6560. Co-Requisite: MSN 6580, MSN 6700.

MSN 6700 - Nurse Educator Residency (3)

This on-site practicum is designed to prepare the student for a career in nursing education and scholarship. The student will participate in focused participative learning activities with advanced prepared nurse educators at an academic and/or healthcare service educational setting. A variety of nurse educator residency areas will be available. The student, faculty, and assigned nurse educator residency preceptor will collaboratively design the residency experience. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180, MSN 6500, MSN 6520, MSN 6540, MSN 6560. Co-Requisite: MSN 6580, MSN 6600.

MSN 6800 - MSN Project Development and Implementation (1-4)

Self-directed study under the guidance of the MSN Project Committee. Completion of the MSN project is a graduation requirement for the Master of Science in Nursing degree. Prerequisite: MSN 6100 and MSN 6120.

MSN 6850 - MSN Project Development and Implementation Extension Course (1)

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 MSN 6850 to remain enrolled in the MSN program. Prerequisite: MSN 6800 (4 credit hours), faculty approval.

MSN 6900 - Social Epidemiology, Global Health Issues and Cultural Competency (3)

Elective. This course examines human diversity and healthcare through a global perspective. Various theoretical approaches for understanding a range of issues across populations are examined. The role of social epidemiology in developing proven and potential interventions to improve global health and reduce health disparities will be emphasized. Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180 and completion of Administrator Track courses or Educator Track courses. Elective

MSN 6920 - Evidence Based Practice II (3)

This course will examine the fourth step in the EBP process, moving from a focus on finding, and evaluating the evidence to actively using it to produce quality outcomes. Essentials for implementation of the evidence will include the study of reflection, philosophy and conceptual framework models. Work contextual factors as they relate to EBP linked to overall organizational improvement will be assessed. Implementation project steps and timelines will be discussed.

Prerequisite: MSN 6100, MSN 6120, MSN 6141, MSN 6160, MSN 6180 and completion of Administrator Track courses or Educator Track courses.

MSRS-Master of Science in Radiologic Sciences Courses**MSRS 6100 - Research Methods (3)**

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 MSN 6100.

MSRS 6120 - Research and Statistics (3)

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 MSN 6120.

MSRS 6130 - Functional Hemodynamics (3)

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 (3)

This course covers the concepts, analytical methods and clinical correlation of laboratory values as they relate to radiographic imaging, pathology and patient history.

MSRS 6200 - Health Behavior and Managerial Epidemiology (3)

The course addresses the integration of epidemiology into strategic planning and managerial decision-making in health services organizations. Epidemiological principles and tools of investigation from clinical and managerial perspectives are addressed. 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 6443 - Clinical Pathways (3)

Studying clinical pathways for patients based on disease processes and trauma.

MSRS 6450 - Managing Health Information (3)

Introductory course that provides basic vocabulary and principles of modern information architectures. Computer networking and communication technologies needed to support modern information infrastructures. Differences between integrated and quilted systems are examined. Emphasis on management and use of information to support management decision making. This course is cross-listed with MHA 6450.

MSRS 6463 - Problem Patient Management (3)

Determination of pathological conditions utilizing problem-solving case studies.

MSRS 6473 - Vascular Non-Invasive Imaging Procedures (3)

Patient preparation and performance of medical imaging vascular non-invasive procedures are presented.

MSRS 6863 - Vascular Invasive Imaging Procedures (3)

Patient preparation and performance of medical imaging vascular invasive procedures are presented.

MSRS 6900 - Capstone: Clinical Fellowship & Portfolio (3)

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 6999 - Master's Thesis in Radiologic Sciences (3)

Students will enroll for this course as they complete their Masters 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.

MTAX-Master of Taxation Courses**MTAX 6400 - Tax Research & Communication (3)**

Techniques in effective tax research, planning and communication. Also includes a discussion of tax policy.

MTAX 6410 - International Taxation (3)

Principles of U.S. taxation applicable to inbound and outbound international transactions. Also covers issues related to international tax treaties.

MTAX 6420 - Taxation of Gifts, Estates, & Trusts (3)

Principles of estate & gift taxation and valuation. Also includes wills and intestate succession and income taxation of estates and trusts.

MTAX 6425 - Tax Practice, Procedure & Ethics (3)

Detailed study of tax procedure in the context of a tax practice. Also covers legal and ethical requirements applicable to tax practitioners and their clients in complying with tax laws.

MTAX 6430 - Advanced Individual Taxation (3)

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 6440 - Exempt Entities & State & Local Taxation (3)

Nonprofit corporations, public charities, private foundations, excise taxes, unrelated business income, and compliance issues for tax-exempt entities. State income taxation, nexus, constitutional limitations, sales tax, excise tax, property tax, and other current state and local tax issues.

MTAX 6450 - Real Estate Taxation (3)

In-depth study and analysis of the taxation of real estate transactions. Covers topics such as like-kind exchanges, personal residences, real estate development, passive loss rules, involuntary conversions, casualty losses, and real estate investment trusts.

MTAX 6460 - Advanced Corporate Taxation (3)

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 (3)

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 6480 - Retirement Planning & Employee Benefits (3)

Consideration of tax, insurance, investment and estate planning principles from a retirement perspective. Includes discussion of sources of retirement income and anticipated retirement expenses.

MTAX 6490 - Mergers, Acquisitions and Consolidations (3)

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. Prerequisite: (Recommended) MTAX 6460.

MTHE-Mathematics Education Courses**MTHE 3010 - Methods and Technology for Teaching Secondary Mathematics (3) Sp**

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. Prerequisite: MATH 1220 and at least 6 credit hours of MATH courses numbered 3000 or above.

MTHE 3020 - Methods and Technology for Teaching Advanced Secondary Mathematics (3)

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. Prerequisite: MTHE 3010.

MTHE 3060 - Probability and Statistics for Elementary Teachers (3) Sp

Basic probability and statistics with an emphasis on topics and methods pertinent to prospective elementary school teachers. Prerequisite: MATH 2010 and MATH 2020.

MTHE 3070 - Geometry for Elementary Teachers (3) F

Basic Geometry with an emphasis on the topics and methods pertinent to prospective elementary school teachers. Prerequisite: MATH 2010 and MATH 2020.

MTHE 3080 - Number Theory for Elementary Teachers (3) F

Survey of elementary number theory concepts with applications to topics of interest plus teaching suggestions. Prerequisite: MATH 2010 and MATH 2020.

MTHE 4010 - Capstone Mathematics for High School Teachers (3) F

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. Prerequisite: MATH 3110 and MATH 3120.

MTHE 4020 - Capstone Mathematics for High School Teachers II (3)

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. Prerequisite: MTHE 4010.

MTHE 4040 - Mathematical Problem Solving for Elementary Teachers (3) Sp

Mathematical problem solving, discussion of process, writing solutions, and writing extensions. Prerequisite: MATH 2010 and MATH 2020.

MTHE 4100 - Intuitive Calculus for Elementary Teachers (3)

Prerequisite: MATH 2010 and MATH 2020.

MTHE 4700 - Senior Project in Elementary Mathematics Teaching (3) F, Sp

Projects in preparing, teaching and revising sequential mathematics lessons for elementary students. Prerequisite: MATH 2010 and MATH 2020.

MTHE 5010 - Methods and Technology for Teaching Secondary Mathematics (3)

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.

MTHE 5210 - Calculus with Analytic Geometry (4)

Analytic geometry, differentiation, integration, and applications. Prerequisite: MATH 1050 and MATH 1060 or MATH 1080 or placement test.

MTHE 5220 - Calculus with Analytic Geometry (4)

Transcendental functions, techniques of integration, conic sections, polar coordinates, infinite series, introduction to partial derivatives. Prerequisite: MTHE 5210.

MTHE 5230 - Mathematics Computer Laboratory (1)

Computer solution of mathematics problems. Prerequisite: Approval of instructor. May be taken concurrently with any lower division mathematics course.

MTHE 5310 - Multivariable and Vector Calculus (4)

Vectors, vector valued functions, motion in space, multivariable functions, partial derivatives, multiple integrals, integration in vector fields. Prerequisite: MTHE 5220.

MTHE 5350 - Linear Algebra and Differential Equations (4)

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. Prerequisite: MTHE 5220.

MTHE 6120 - Euclidean and Non-Euclidean Geometry (3)

Axiomatic development of geometry; Euclidean and non-Euclidean. Prerequisite: MTHE 5220.

MTHE 6160 - Number Theory (3)

An overview of beginning number theory including the integers, modulo arithmetic, congruencies, Fermat's theorem and Euler's theorem. Prerequisite: MTHE 5210.

MTHE 6350 - Linear Algebra (3)

Theory and applications of linear algebra including abstract vector spaces and canonical forms of matrices. Prerequisite: MTHE 5350.

MTHE 6410 - Probability and Statistics (3)

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-Requirement: MTHE 5310 or prerequisite of MTHE 5220 and consent of instructor.

MTHE 6420 - Probability and Statistics (3)

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. Prerequisite: MTHE 6410

MTHE 6550 - Introduction to Mathematical Modeling (3)

Formulation, solution and interpretation of mathematical models for problems occurring in areas of physical, biological and social science. Prerequisite: MTHE 5310 and 5350.

MTHE 6610 - Graph Theory (3)

Principles of Graph Theory including methods and models, special types of graphs, paths and circuits, coloring, networks, and other applications. Prerequisite: MTHE 5210.

MTHE 6620 - Enumeration (3)

Principles of Enumeration including counting principles, generating functions, recurrence relations, inclusion-exclusion, and applications. Prerequisite: MTHE 5210.

MTHE 6630 - Boundary Value Problems (3)

Series solutions, Fourier series, separation of variables, orthogonal functions. Prerequisite: MTHE 5350.

MTHE 6640 - Differential Equations II (3)

Matrix approach to linear systems, nonlinear systems, Laplace transforms. Prerequisite: MTHE 5350.

MTHE 6650 - Complex Variables (3)

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. Prerequisite: MTHE 5310 and MTHE 5350.

MTHE 6660 - Modern Algebra I (3)

Logic, sets, and the study of algebraic systems including groups, rings, and fields. Prerequisite: MTHE 5350.

MTHE 6670 - Modern Algebra II (3)

Continuation of MATH 4110: advanced topics from groups, rings, and fields including the Sylow theorems and Galois theory. Prerequisite: MTHE 6660.

MTHE 6680 - Introductory Real Analysis (3)

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. Prerequisite: MTHE 5310 and MTHE 5350

MTHE 6690 - Introductory Real Analysis (3)

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. Prerequisite: MTHE 6680

MTHE 6700 - Topology (3)

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. Prerequisite: MTHE 5310 and MTHE 5350.

MTHE 6710 - Numerical Analysis (3)

Introduction to numerical methods. Use of the digital computer in solving otherwise intractable problems. Prerequisite: MTHE 5350 and CS 1410 or other approved programming language

MTHE 6720 - Numerical Analysis (3)

Introduction to numerical methods. Use of the digital computer in solving otherwise intractable problems. Prerequisite: MTHE 6710

MTHE 6730 - Partial Differential Equations (3)

First order equations, characteristics and classifications, Green's identities, models, transforms. Prerequisite: MTHE 6630.

MTHE 6740 - Mathematics for Teaching - Numbers and Operations (3)

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. Prerequisite: A Bachelor's degree and at least one year of experience teaching elementary or junior high school mathematics.

MTHE 6750 - Mathematics for Teaching - Rational Numbers and Proportional Reasoning (3)

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. Prerequisite: A Bachelor's Degree and at least one year of teaching experience in an elementary or junior high school.

MTHE 6760 - Mathematics for Teaching - Algebraic Reasoning (3)

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. Prerequisite: A Bachelor's Degree and at least one year of teaching experience in an elementary or junior high school.

MTHE 6770 - Mathematics for Teaching - Geometry and Measurement (3)

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. Prerequisite: A Bachelor's Degree and at least one year of teaching experience in an elementary or junior high school.

MTHE 6780 - Mathematics for Teaching - Problem Solving and Data Analysis (3)

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. Prerequisite: A Bachelor's degree and at least one year of teaching experience in an elementary or junior high school.

MUSC-Music Courses**MUSC 1010 CA - Introduction to Music (3)**

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 1030 CA - Introduction to Jazz (3)

A survey of jazz in America, including blues, ragtime, Dixieland, swing, bebop, cool, and fusion. Concert attendance outside of regularly scheduled class time is required.

MUSC 1033 CA - Introduction to American Music (3)

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 (3)

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 1040 CA/DV - Music of World Cultures (3)

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 (3)

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 (3)

An introduction to music in world religions and how it has shaped the history of man. Specific religious works and specific composers from numerous world denominations will be discussed: Judaism, Christianity, Islam, Hinduism, Sikhism, and Buddhism. Major religious works from European art music will be explored.

MUSC 1100 - Fundamentals of Music (2)

Melody, harmony, rhythm, notation, ear training, and sight-singing skills needed to meet entrance requirements for MUSC 1110 & MUSC 1130.

MUSC 1110 - Music Theory I (3)

Elementary harmony, primary and secondary triads with inversions, non harmonic tones, and modulation. Prerequisite: Complete Theory Placement exam with a score of 70% or higher or MUSC 1100 with a grade of "C" or higher. Must be taken concurrently with MUSC 1130, MUSC 1140. Music Majors and Minors only

MUSC 1120 - Music Theory II (3)

Elementary harmony, primary and secondary triads with inversions, non harmonic tones, and modulation. Must be taken concurrently with MUSC 1130, MUSC 1140. Music Majors and Minors only

MUSC 1130 - Sight-Singing & Ear-Training I (1)

Development of aural skills needed to function as a musician and teacher. Emphasis on progressively advancing aural perception using the "fixed do" system. Prerequisite: Complete Theory Placement exam with a score of 70% or higher or MUSC 1100 with a grade of "C" or higher. Must be taken concurrently with MUSC 1110, MUSC 1120. Music Majors and Minors only

MUSC 1140 - Sight-Singing & Ear-Training II (1)

Development of aural skills needed to function as a musician and teacher. Emphasis on progressively advancing aural perception using the "fixed do" system. Must be taken concurrently with MUSC 1110, MUSC 1120. Music Majors and Minors only

MUSC 1143 - Music Theory for Musical Theatre (4)

Development of aural and vocal 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 (1)

Beginning piano instruction with emphasis on reading, technical facility and sound musicianship. Prerequisite: Complete Theory Placement exam with a score of 70% or higher or MUSC 1100 with a grade of "C" or higher. Music Majors and Minors only

MUSC 1160 - Class Piano II (1)

Beginning piano instruction with emphasis on reading, technical facility and sound musicianship. Music Majors and Minors only

MUSC 1321 - Basic Piano for Adults (1)

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 (2)

Beginner and intermediate class instruction in classical guitar, including technique, repertoire, and history of the instrument. May be repeated for credit.

MUSC 1501 - Modern Guitar Styles (1)

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 (1)**MUSC 1503 - Viola Master Class (1)****MUSC 1504 - Cello Master Class (1)****MUSC 1505 - String Bass Master Class (1)****MUSC 1506 - Guitar Master Class (1)****MUSC 1507 - Harp Master Class (1)****MUSC 1510 - Trumpet Master Class (1)****MUSC 1511 - French Horn Master Class (1)****MUSC 1512 - Trombone Master Class (1)****MUSC 1513 - Euphonium/Tuba Master Class (1)****MUSC 1520 - Percussion Master Class (1)****MUSC 1530 - Voice Master Class (1)****MUSC 1540 - Flute Master Class (1)****MUSC 1541 - Oboe Master Class (1)****MUSC 1542 - Clarinet Master Class (1)****MUSC 1543 - Saxophone Master Class (1)****MUSC 1544 - Bassoon Master Class (1)****MUSC 1601 - Private Instruction (1)**

Individual lessons, vocal or instrumental. For those students not pursuing a major or minor in music.

MUSC 1610 - Applied Keyboard: Piano (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1611 - Applied Keyboard: Organ (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1620 - Applied Voice (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1630 - Applied Woodwinds: Flute (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1631 - Applied Woodwinds: Oboe (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1632 - Applied Woodwinds: Clarinet (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1633 - Applied Woodwinds: Saxophone (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1634 - Applied Woodwinds: Bassoon (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1640 - Applied Brass: Trumpet (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1641 - Applied Brass: French Horn (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1642 - Applied Brass: Trombone (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1643 - Applied Brass: Euphonium/Tuba (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1650 - Applied Strings: Violin (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1651 - Applied Strings: Viola (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1652 - Applied Strings: Violoncello (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1653 - Applied Strings: String Bass (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1654 - Applied Strings: Guitar (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1655 - Applied Strings: Harp (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1660 - Applied Percussion (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 1673 - Private Instruction (2)

All performance areas. Two hours instruction/week. Minimum of 18 hours/week practice required. One-half hour special assignment. By consent of instructor only. May be taken for credit up to three times in any area of specialization. May be repeated for credit. Music Majors and Minors only.

MUSC 1730 - Keyboard Ensemble (1)

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 for credit.

MUSC 1740 - Weber State Concert Choir (1)

Fulfills the major ensemble requirement for music majors and minors. Membership by audition or consent of instructor. May be repeated for credit.

MUSC 1741 - Chamber Choir (1)

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 for credit.

MUSC 1743 - Vocal Chamber Ensemble (1)

Training in small vocal groups such as trios, quartets, and sextets. Fulfills the chamber ensemble requirement for music majors. May be repeated for credit.

MUSC 1744 - Musical Theatre (1-2)

Rehearsal and performance of musical theatre productions. By audition only. May be repeated for credit.

MUSC 1745 - Weber State Community Choir (1) (Evening only.)

Membership by audition or consent of instructor. Does not fulfill any ensemble requirement for music majors or minors. May be repeated for credit. Note: This course is not currently active.

MUSC 1750 - Symphonic Band (1)

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 for credit.

MUSC 1751 - Wind Ensemble (1)

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 for credit.

MUSC 1752 - Marching Band (2)

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 for credit.

MUSC 1753 - Jazz Ensemble (1)

Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors. May be repeated for credit.

MUSC 1754 - Percussion Ensemble (1)

Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors. May be repeated for credit.

MUSC 1755 - Instrumental Chamber Ensemble (1)

Training in instrumental chamber ensembles such as trios, quartets, quintets, and sextets. Fulfills the chamber ensemble requirement for music majors. May be repeated for credit.

MUSC 1756 - Pep Band (1)

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 for credit.

MUSC 1760 - Weber State Symphony Orchestra (1)

Membership by audition or consent of instructor. Full symphony orchestra instrumentation. Fulfills the major ensemble requirement for music majors and minors. May be repeated for credit.

MUSC 1761 - Chamber Orchestra (1)

Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors. May be repeated for credit.

MUSC 1762 - Theatre Orchestra (1-2)

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 for credit.

MUSC 1763 - Guitar Ensemble (1)

Membership by audition or consent of instructor. Fulfills the major ensemble requirement for music majors and minors. May be repeated for credit.

MUSC 1901 - Music: The First-Year Experience (1)

Introduction to the music area and its programs, including email usage, department policies and procedures, career options, and curriculum. Music Majors and Minors only

MUSC 1911 - Introduction to Music Technology (1)
Introduction to uses of technology in music teaching and performance, including use of music composition and multimedia software. Music Majors and Minors only

MUSC 2110 - Music Theory III (3)
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. Prerequisite: MUSC 1120 and MUSC 1140 or equivalents. Must be taken concurrently with MUSC 2130, MUSC 2140. Music Majors and Minors only

MUSC 2120 - Music Theory IV (3)
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. Prerequisite: MUSC 1120 and MUSC 1140 or equivalents. Must be taken concurrently with MUSC 2130, MUSC 2140. Music Majors and Minors only

MUSC 2130 - Sight Singing & Ear-Training III (1)
Continuation of Ear-Training & Sight-Singing II. Development of more advanced listening skills and of ability to recognize and correct performance errors. Prerequisite: MUSC 1120 and MUSC 1140 or equivalents. Must be taken concurrently with MUSC 2110, MUSC 2120. Music Majors and Minors only

MUSC 2140 - Sight Singing & Ear-Training IV (1)
Continuation of Ear-Training & Sight-Singing II. Development of more advanced listening skills and of ability to recognize and correct performance errors. Prerequisite: MUSC 1120 and MUSC 1140 or equivalents. Must be taken concurrently with MUSC 2110, MUSC 2120. Music Majors and Minors only

MUSC 2150 - Class Piano III (1)
Continuation of MUSC 1160 with emphasis on advanced reading, further development of technical facility and expanded concepts of musicianship. Prerequisite: MUSC 1160 or placement by audition, and MUSC 1120 and MUSC 1140. Music Majors and Minors only

MUSC 2160 - Class Piano IV (1)
Continuation of MUSC 1160 with emphasis on advanced reading, further development of technical facility and expanded concepts of musicianship. Prerequisite: MUSC 1160 or placement by audition, and MUSC 1120 and MUSC 1140. Music Majors and Minors only

MUSC 2202 - Survey of Music History & Literature I (2)
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. Prerequisite: MUSC 1110 and MUSC 1130. Open to all university students who have completed MUSC 1010. Does not fulfill Creative Arts or Humanities credit. Music Majors and Minors only

MUSC 2212 - Survey of Music History & Literature II (2)
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. Prerequisite: MUSC 1110 and MUSC 1130. Open to all university students who have completed MUSC 1010. Does not fulfill

Creative Arts or Humanities credit. Music Majors and Minors only

MUSC 2321 - Principles of Piano Accompanying I (1)
To learn the art of accompaniment, to become knowledgeable about repertoire and style, and to improve sight reading. Prerequisite: Piano proficiency. Music Majors and Minors only

MUSC 2331 - Principles of Piano Accompanying II (1)
To learn the art of accompaniment, to become knowledgeable about repertoire and style, and to improve sight reading. Prerequisite: Piano proficiency. Music Majors and Minors only

MUSC 2540 - Instrumental Techniques for Choral Majors (2)
A course for Choral Music Education majors that encompasses a practical and analytical approach to the understanding of basic playing and teaching techniques of the band and orchestral instruments. Music Majors and Minors only

MUSC 2610 - Applied Keyboard: Piano (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2611 - Applied Keyboard: Organ (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2620 - Applied Voice (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2630 - Applied Woodwinds: Flute (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2631 - Applied Woodwinds: Oboe (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2632 - Applied Woodwinds: Clarinet (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2633 - Applied Woodwinds: Saxophone (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2634 - Applied Woodwinds: Bassoon (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2640 - Applied Brass: Trumpet (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2641 - Applied Brass: French Horn (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2642 - Applied Brass: Trombone (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2643 - Applied Brass: Euphonium/Tuba (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2650 - Applied Strings: Violin (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2651 - Applied Strings: Viola (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2652 - Applied Strings: Violoncello (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2653 - Applied Strings: String Bass (1)
May be repeated for credit. Music Majors and Minors only.

MUSC 2654 - Applied Strings: Guitar (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 2655 - Applied Strings: Harp (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 2660 - Applied Percussion (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 2673 - Private Instruction (2)

All performance areas. Two hours instruction/week. Minimum of 18 hours/week practice required. One-half hour special assignment. By consent of instructor only. May be taken for credit up to three times in any area of specialization. May be repeated for credit. Music Majors and Minors only.

MUSC 2821 - Percussion Methods I (1)

A practical and analytical approach to teaching and playing percussion instruments, including selection of appropriate repertoire and minor repair. Music Majors and Minors only

MUSC 2822 - Percussion Methods II (1)

A continuation of MUSC 2821. Prerequisite: MUSC 2821. Music Majors and Minors only

MUSC 2841 - Brass Methods I (1)

A practical and analytical approach to teaching and playing brass instruments, including selection of appropriate repertoire and minor repair. Music Majors and Minors only

MUSC 2842 - Brass Methods II (1)

A continuation of MUSC 2841. Prerequisite: MUSC 2841. Music Majors and Minors only

MUSC 2851 - Woodwind Methods I (1)

A practical and analytical approach to teaching and playing woodwind instruments, including selection of appropriate repertoire and minor repair. Music Majors and Minors only

MUSC 2852 - Woodwind Methods II (1)

A continuation of MUSC 2851. Prerequisite: MUSC 2851. Music Majors and Minors only

MUSC 2871 - String Methods I (1)

A practical and analytical approach to teaching and playing string instruments, including selection of appropriate repertoire and minor repair. Music Majors and Minors only

MUSC 2872 - String Methods II (1)

A continuation of MUSC 2871. Prerequisite: MUSC 2871. Music Majors and Minors only

MUSC 2881 - Vocal Workshop (1)

Development of the singing voice with special attention to freedom of tones, purity of vowels, interpretation, diction, and flexibility. Music Majors and Minors only

MUSC 2890 - Cooperative Work Experience (1-6)

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. Music Majors and Minors only

MUSC 2910 - Opera Production (2)

Preparation of operatic scenes and music. Music and staging rehearsal venue for the preparation of fully staged opera productions.

MUSC 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-4)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript Music Majors and Minors only

MUSC 3102 - Counterpoint (2)

Eighteenth century polyphonic techniques including the five contrapuntal species, formal processes, analysis, and compositional application of concepts studied. Prerequisite: MUSC 2120 and MUSC 2140 or equivalents. Music Majors and Minors only

MUSC 3112 - Orchestration (2)

An exploration of principles of arranging music for instrumental sections and instrumental combinations. Prerequisite: MUSC 2120 and MUSC 2140 or equivalents. Music Majors and Minors only

MUSC 3122 - Choral Arranging (2)

An exploration of principles of arranging music for various voice groups. Prerequisite: MUSC 2120 and MUSC 2140 or equivalent. Music Majors and Minors only

MUSC 3205 - Music History I: Medieval and Renaissance Music (2)

A survey of the developments in European art music, ca. 400-1600. The course emphasizes stylistic and critical analysis of representative compositions within historical and cultural contexts. Prerequisite: MUSC 1120 and MUSC 1140.

MUSC 3206 - Music History II: Baroque and Classical Music (3)

A survey of the developments in European art music, ca. 1600-1820. The course emphasizes stylistic and critical analysis of representative compositions within historical and cultural contexts. Prerequisite: MUSC 3205.

MUSC 3207 - Music History III: Music of the 19th through the 21st Centuries (3)

A survey of the developments in European art music, ca. 1800-2000. The course emphasizes stylistic and critical analysis of representative compositions within historical and cultural contexts. Prerequisite: MUSC 3206.

MUSC 3208 - World Music (2)

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. Open to both music and non-music majors. Prerequisite: MUSC 3207 for music majors; MUSC 1010 or MUSC 1040 for non-music majors

MUSC 3302 - Keyboard Literature I-II (2)

Keyboard literature to acquaint the student with historical and stylistic periods of music. Music Majors and Minors only

MUSC 3312 - Keyboard Literature I-II (2)

Keyboard literature to acquaint the student with historical and stylistic periods of music. Music Majors and Minors only

MUSC 3402 - Vocal Literature I (2)

A study of a cross-section of vocal literature leading to knowledge of styles, composers, performance practice, and basic phonetics in commonly-used languages. Prerequisite: Piano proficiency and a minimum of two years of private voice instruction. Music Majors and Minors only

<p>MUSC 3412 - Vocal Literature II (2) A continuation of MUSC 3402. Prerequisite: MUSC 3402. Music Majors and Minors only</p> <p>MUSC 3502 - Violin Master Class (1)</p> <p>MUSC 3503 - Viola Master Class (1)</p> <p>MUSC 3504 - Cello Master Class (1)</p> <p>MUSC 3505 - String Bass Master Class (1)</p> <p>MUSC 3506 - Guitar Master Class (1)</p> <p>MUSC 3507 - Harp Master Class (1)</p> <p>MUSC 3510 - Trumpet Master Class (1)</p> <p>MUSC 3511 - French Horn Master Class (1)</p> <p>MUSC 3512 - Trombone Master Class (1)</p> <p>MUSC 3513 - Euphonium/Tuba Master Class (1)</p> <p>MUSC 3520 - Percussion Master Class (1)</p> <p>MUSC 3530 - Voice Master Class (1)</p> <p>MUSC 3540 - Flute Master Class (1)</p> <p>MUSC 3541 - Oboe Master Class (1)</p> <p>MUSC 3542 - Clarinet Master Class (1)</p> <p>MUSC 3543 - Saxophone Master Class (1)</p> <p>MUSC 3544 - Bassoon Master Class (1)</p> <p>MUSC 3601 - Private Instruction (1) Individual lessons, vocal or instrumental. For those students not pursuing a major or minor in music.</p> <p>MUSC 3610 - Applied Keyboard: Piano (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3611 - Applied Keyboard: Organ (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3620 - Applied Voice (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3630 - Applied Woodwinds: Flute (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3631 - Applied Woodwinds: Oboe (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3632 - Applied Woodwinds: Clarinet (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3633 - Applied Woodwinds: Saxophone (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3634 - Applied Woodwinds: Bassoon (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3640 - Applied Brass: Trumpet (1) May be repeated for credit. Music Majors and Minors only.</p>	<p>MUSC 3641 - Applied Brass: French Horn (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3642 - Applied Brass: Trombone (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3643 - Applied Brass: Euphonium/Tuba (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3650 - Applied Strings: Violin (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3651 - Applied Strings: Viola (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3652 - Applied Strings: Violoncello (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3653 - Applied Strings: String Bass (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3654 - Applied Strings: Guitar (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3655 - Applied Strings: Harp (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3660 - Applied Percussion (1) May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3673 - Private Instruction (2) All performance areas. Two hours instruction/week. Minimum of 18 hours/week practice required. One-half hour special assignment. By consent of instructor only. May be taken for credit up to three times in any area of specialization. May be repeated for credit. Music Majors and Minors only.</p> <p>MUSC 3730 - Keyboard Ensemble (1) 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 for credit. Music Majors and Minors only.</p> <p>MUSC 3740 - Weber State Concert Choir (1) Fulfills the major ensemble requirement for music majors and minors. Membership by audition or consent of instructor. May be repeated for credit.</p> <p>MUSC 3741 - Chamber Choir (1) 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 for credit.</p> <p>MUSC 3743 - Vocal Chamber Ensemble (1) Training in small vocal groups such as trios, quartets, and sextets. Fulfills the chamber ensemble requirement for music majors. May be repeated for credit.</p> <p>MUSC 3744 - Musical Theatre (1-2) Rehearsal and performance of musical theatre productions. By audition only. May be repeated for credit.</p> <p>MUSC 3745 - Weber State Community Choir (1) (Evening only.) Membership by audition or consent of instructor. Does not fulfill any ensemble requirement for music majors or minors. May be repeated for credit. Note: This course is not currently active.</p>
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MUSC 3750 - Symphonic Band (1)

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 for credit.

MUSC 3751 - Wind Ensemble (1)

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 for credit.

MUSC 3752 - Marching Band (2)

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 for credit.

MUSC 3753 - Jazz Ensemble (1)

Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors. May be repeated for credit.

MUSC 3754 - Percussion Ensemble (1)

Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors. May be repeated for credit.

MUSC 3755 - Instrumental Chamber Ensemble (1)

Training in instrumental chamber ensembles such as trios, quartets, quintets, and sextets. Fulfills the chamber ensemble requirement for music majors. May be repeated for credit.

MUSC 3756 - Pep Band (1)

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 for credit.

MUSC 3760 - Weber State Symphony Orchestra (1)

Membership by audition or consent of instructor. Full symphony orchestra instrumentation. Fulfills the major ensemble requirement for music majors and minors. May be repeated for credit.

MUSC 3761 - Chamber Orchestra (1)

Membership by audition or consent of instructor. Fulfills the chamber ensemble requirement for music majors. May be repeated for credit.

MUSC 3762 - Theatre Orchestra (1-2)

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 for credit.

MUSC 3763 - Guitar Ensemble (1)

Membership by audition or consent of instructor. Fulfills the major ensemble requirement for music majors and minors. May be repeated for credit.

MUSC 3822 - Instrumental Conducting I-II (2)

Basic conducting technique and advanced techniques for conducting instrumental ensembles. Prerequisite: MUSC 1120/MUSC 1140. Music Majors and Minors only

MUSC 3823 - Instrumental Conducting I-II (2)

Basic conducting technique and advanced techniques for conducting instrumental ensembles. Prerequisite: MUSC 1120 and MUSC 1140. Music Majors and Minors only

MUSC 3824 - Music for Elementary Teachers (4)

Methods and materials for teaching elementary school music (grades K-6) including skill development on selected elementary classroom instruments.

MUSC 3840 - Form and Analysis (2)

A study of basic musical form with particular emphasis on the most important contrapuntal and homophonic styles from the Baroque Period forward. The course coordinates the study of the forms of individual genres with their history and role in the continuous development of music. Prerequisite: MUSC 2120 and 2140. Music Majors and Minors only

MUSC 3842 - Producing the School Musical (2)

A detailed study of musical theatre and the practical application of skills, techniques, and materials necessary for production in secondary schools. Music Majors and Minors only

MUSC 3851 - Stringed Instrument Pedagogy I (2)

An in-depth study of pedagogical methods employed in teaching the four orchestral stringed instruments to beginning and intermediate level students. Prerequisite: MUSC 2871/MUSC 2872. Music Majors and Minors only

MUSC 3852 - Stringed Instrument Pedagogy II (2)

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. Prerequisite: MUSC 3851. Music Majors and Minors only

MUSC 3872 - Choral Conducting I-II (2)

Basic conducting technique and advanced techniques for techniques for conducting choral ensembles. Prerequisite: MUSC 1120 and MUSC 1140. Music Majors and Minors only

MUSC 3882 - Choral Conducting I-II (2)

Basic conducting technique and advanced techniques for techniques for conducting choral ensembles. Prerequisite: MUSC 1120 and MUSC 1140. Music Majors and Minors only

MUSC 3924 - Music Teaching and Learning in the Elementary School (4)

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. Prerequisite: Completed Piano Proficiency. Music Majors and Minors only

MUSC 3991 - Junior Recital (1)

Applied instruction in preparation for and public performance of a 30 minute recital. Prerequisite: Piano proficiency. Music Majors and Minors only

MUSC 4302 - Keyboard Pedagogy I-II (2)

Comprehensive study of performance pedagogy. Music Majors and Minors only

MUSC 4312 - Keyboard Pedagogy I-II (2)

Comprehensive study of performance pedagogy. Music Majors and Minors only

MUSC 4402 - Vocal Pedagogy I-II (2)

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. Music Majors and Minors only

MUSC 4412 - Vocal Pedagogy I-II (2)

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. Music Majors and Minors only

MUSC 4610 - Applied Keyboard: Piano (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4611 - Applied Keyboard: Organ (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4620 - Applied Voice (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4630 - Applied Woodwinds: Flute (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4631 - Applied Woodwinds: Oboe (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4632 - Applied Woodwinds: Clarinet (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4633 - Applied Woodwinds: Saxophone (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4634 - Applied Woodwinds: Bassoon (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4640 - Applied Brass: Trumpet (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4641 - Applied Brass: French Horn (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4642 - Applied Brass: Trombone (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4643 - Applied Brass: Euphonium/Tuba (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4650 - Applied Strings: Violin (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4651 - Applied Strings: Viola (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4652 - Applied Strings: Violoncello (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4653 - Applied Strings: String Bass (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4654 - Applied Strings: Guitar (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4655 - Applied Strings: Harp (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4660 - Applied Percussion (1)

May be repeated for credit. Music Majors and Minors only.

MUSC 4673 - Private Instruction (2)

All performance areas. Two hours instruction/week. Minimum of 18 hrs/wk practice required. One-half hour special assignment. By consent of instructor only. May be taken for credit up to three times in any area of specialization. May be repeated for credit. Music Majors and Minors only.

MUSC 4771 - Stringed Instrument Literature I (2)

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. Prerequisite: MUSC 2871/MUSC 2872. Music Majors and Minors only

MUSC 4772 - Stringed Instrument Literature II (2)

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. Prerequisite: MUSC 4771.

MUSC 4820 - Pro Tools 101 (1)

This course covers basic Pro Tools principles. It provides everything you need to complete a Pro Tools project—from initial set up to final mixdown. The course focuses on Pro Tools 9 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. Audience: This course is designed for the audio enthusiast with little to no Pro Tools experience. Possession of the following skills is recommended prior to beginning this course: basic familiarity with operating a computer and basic understanding of recording techniques, processes, and equipment.

MUSC 4821 - Pro Tools 110 (1)

This course provides a more detailed look at the Pro Tools system on top of the knowledge learned in Pro Tools 101. It covers all the key concepts and skills needed to operate a Pro Tools system. The course provides the foundation for the later 200-series of courses on Pro Tools music and post production. Audience: This course is designed for end-users with basic Pro Tools skills, including musicians, audio engineers, and sound editors for film or television. Prerequisite: MUSC 4820 (Pro Tools 101).

MUSC 4822 - Junior High/ Middle School Music Methods (2)

Methods of instruction, organization and presentation of appropriate content and musical literature in junior high/ middle school music classes. Prerequisite: Piano proficiency Music Majors and Minors only

MUSC 4830 - Directed Readings (1-3)

To be arranged. May be taken for a maximum of 7 hours of credit. Music Majors and Minors only

MUSC 4842 - High School Music Methods (2)

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. Prerequisite: Piano proficiency and MUSC 4822. Music Majors and Minors only

MUSC 4860 - Internship in Music (1-3)

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. Music Majors and Minors only

MUSC 4890 - Cooperative Work Experience (1-6)

A continuation of MUSC 2890. Open to all students. May be repeated to a maximum of 6 credits. Music Majors and Minors only

MUSC 4910 - Opera Production (2)

Preparation of operatic scenes and music. Music and staging rehearsal venue for the preparation of fully staged opera productions.

MUSC 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-4)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. Music Majors and Minors only

MUSC 4991 - Senior Recital (1)

Private instruction in preparation for and public performance of a one hour recital. Music Majors and Minors only

MUSC 4992 - Senior Project (1)

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. Prerequisite: MUSC 4830. Music Majors and Minors only

NEUR-Neuroscience Courses**NEUR 2050 - Introduction to Neuroscience (3)**

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. Prerequisite: none; recommend some background in basic biology, chemistry, or psychology.

NEUR 3750 - Cognitive and Behavioral Neuroscience (3)

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. Prerequisite: NEUR 2050 or PSY 2730 or instructor approval.

NRSNG-Nursing Courses**NRSNG 2100 - Pharmacology for Nurses 1 (3)**

Basic pharmacological treatments used by the nurse to promote health across the lifespan. Included in the course will be administering medications safely through various routes and specific agents that affect health and wellbeing. Credit hours (3): 3 lecture hours per week. Prerequisite: Admission to the Nursing Program. Co-Requisite: NRSNG 2200 and NRSNG 2250.

NRSNG 2200 - Nursing Foundations (3)

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. Credit hours (3): 3 lecture hours per week. Prerequisite: Admission to the Nursing Program. Co-Requisite: NRSNG 2100 and NRSNG 2250.

NRSNG 2250 - Nursing Foundations Clinical (3)

Guided laboratory and clinical experiences with emphasis on clinical application of nursing process, patient care skills, and professional behaviors. Focus on assessment, promoting wellness, and basic skills. Credit hours (3): 9 clinical hours per week. Prerequisite: Admission to the Nursing Program. Co-Requisite: NRSNG 2100 and NRSNG 2200.

NRSNG 2283 - Directed Readings and Projects (1-3)

(Maximum of 3 semester hours per year). Prerequisite: Instructor approval.

NRSNG 2300 - Patient Centered Nursing Care 1 (3)

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. Credit hours (3): 3 lecture hours per week. Prerequisite: NRSNG 2100, NRSNG 2200, and NRSNG 2250. Co-Requisite: NRSNG 2350 and NRSNG 2400.

NRSNG 2350 - Patient Centered Nursing Care Clinical 1 (3)

Clinical course focused on application of concepts related to nursing care of patients in multiple environments and across the lifespan in the nursing practice lab, simulations, and clinical settings. Credit hours (3): 9 clinical hours per week. Prerequisite: NRSNG 2100, NRSNG 2200, and NRSNG 2250. Co-Requisite: NRSNG 2300 and NRSNG 2400.

NRSNG 2400 - Patient Centered Nursing Care 2 (3)

This course expands the evidence based nursing responsibilities for patient health beliefs and practices which are influenced by concepts related to culture, spirituality, and diversity. Nursing care for specialized populations is emphasized. These specialized populations include individuals in pain; individuals at risk for self-harm or abuse, patients/families needing end-of-life care, and people with mental illnesses. Credit hours (3): 3 lecture hours per week. Prerequisite: NRSNG 2100, NRSNG 2200, and NRSNG 2250. Co-Requisite: NRSNG 2300 and NRSNG 2350.

NRSNG 2500 - Patient Centered Nursing Care 3 (3)

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.

Prerequisite: NRSNG 2300, NRSNG 2350, and NRSNG 2400 or Admission to the PN to RN nursing program. Co-Requisite: NRSNG 2550 and NRSNG 3100.

NRSNG 2550 - Patient Centered Nursing Care Clinical 3 (3)

Clinical course focused on application of concepts related to nursing care of patients in acute care settings and across the lifespan in the nursing practice lab, simulations, and clinical settings. Credit hours (3): 9 clinical hours per week. Prerequisite: NRSNG 2300, NRSNG 2350, NRSNG 2400 or Admission to the PN to RN Program Co-Requisite: NRSNG 2500 and NRSNG 3100.

NRSNG 3100 - Pharmacology for Nurses 2 (3)

Advanced pharmacological treatments used by the nurse to promote health across the lifespan. Included in the course will be administering medications safely through intravenous and other routes along with specific agents that affect health and well-being. Credit hours (3): 3 lecture hours per week. Prerequisite: NRSNG 2300, NRSNG 2350, and NRSNG 2400 or admission to the PN to RN Program. Co-Requisite: NRSNG 2500 and NRSNG 2550.

NRSNG 3200 - Complex Patient Centered Nursing Care 1 (3)

Theory focuses on nursing care of patients with complex changes in health status requiring extensive multifaceted resources. Credit hours (3): 3 lecture hours per week. Prerequisite: NRSNG 2500, NRSNG 2550, and NRSNG 3100. Co-Requisite: NRSNG 3300 and NRSNG 3350.

NRSNG 3300 - Entry Into Nursing Professional Practice (3)

Theory focuses on synthesis of nursing knowledge and skills necessary for entrance into registered nursing practice and includes preparation for licensing exams and synthesis of previous concepts. Credit hours (3): 3 lecture hours per week. Prerequisite: NRSNG 2500, NRSNG 2550, and NRSNG 3100. Co-Requisite: NRSNG 3200 and NRSNG 3350.

NRSNG 3350 - Entry Into Nursing Professional Practice Preceptorship (3)

Clinical preceptorship focuses on synthesis of nursing knowledge, skills, and conduct necessary for entrance into registered nursing practice. Credit hours (3): 9 clinical hours per week. Prerequisite: NRSNG 2500, NRSNG 2550, and NRSNG 3100. Co-Requisite: NRSNG 3200 and NRSNG 3300.

NRSNG 4000 DV - Culture and Health Care (2)

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. Prerequisite: Admission to Weber State University; recommended for nursing students, Licensed Nurses, and other healthcare providers.

NRSNG 4001 DV - Clinical Experience Related to Culture and Health Care of Nurses (1-3)

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 NRSNG 4000 will assist the student to put into practice the concepts learned. Credit hours (1-3). Lab hours depend on the country visited. Co-requisite or prerequisite: NRSNG 4000 related to area being visited.

NRSNG 4010 - Interdisciplinary Health Care Teams (3)

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.

NRSNG 4050 - Nursing Assessment Across the Life Span (3)

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.

NRSNG 4060 - Oncology Nursing (3)

Investigate and analyzes broad epidemiological and biological origins of cancer. Then individual common cancers are studied including etiology, therapies and specific nursing interventions. (Hybrid) Prerequisite: NRSNG 3010, NRSNG 3020, NRSNG 4050, NRSNG 3031, NRSNG 3035. Co-Requisite: NRSNG 3040, NRSNG 4061 (NRSNG 4060 and NRSNG 4061 must be taken concurrently.)

NRSNG 4070 - Threats and Crises: Nursing Response (3)

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) Prerequisite: NRSNG 3010 Co-Requisite: NRSNG 3040

NRSNG 4080 - Nursing: High Risk Adult (3)

Advanced theories and concepts of nursing practice are explored in relation to adults experiencing life threatening alterations in health. (Hybrid) Prerequisite: NRSNG 3010 Co-Requisite: NRSNG 3040

NRSNG 4090 - Nursing: High Risk Family (3)

At-risk families need multiple interventions from knowledgeable care givers to assist them through the intricacies of obtaining quality health care. Students identify, then integrate, complex nursing strategies in situations involving parents, infants, and children in high risk childbearing populations. (Hybrid) Prerequisite: NRSNG 3010 Co-Requisite: NRSNG 3040

NRSNG 4100 - Complex Patient Centered Nursing Care 2 (3)

In this course, students will learn theory and concepts in the nursing care of chronically ill patients, as well as illness implications for patients and families. The evidence-based family caregiving and symptom management is a major focus and basis for nursing interventions with patients and families. The course will address variations of care, the increased complexity, and the increased use of healthcare resources inherent in caring for patients who are vulnerable. Focus will be on patients with chronic conditions and disabilities affecting functional status and family relationships.

NRSG 4200 - Scholarship for Evidence-Based Practice (3)

This course 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 examine the knowledge and skills required for translating reliable evidence into evidence-based practice and clinical judgments. The course will 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 (3)

This course 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 of equity, access, affordability, and social justice. Students will learn to identify, analyze and problem-solve variables affecting nursing decisions and healthcare policy encountered in nursing practice. Topics will be presented that provide an overview of legal and ethical principles and theories, emphasizing the role of ethics and healthcare policy in nursing.

NRSG 4400 - Population Health in Nursing (4)

This course 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. This will include assisting individuals, families, groups, communities, and populations to prepare for and minimize negative health consequences. Students will examine frameworks of community and public health, assess and analyze prevalent population-based health issues, and explore population-based interventions.

NRSG 4500 - Nursing Management and Leadership (3)

The main focus of this course is to help the student learn the role and functions of the nurse leader, explore and examine personal and professional characteristics of the nurse leader, prepare to lead through principle-based leadership, and collaborate with interdisciplinary teams ultimately advancing the profession of nursing through change and anticipation of nursing's future.

NRSG 4600 - Communication, Collaboration, and Information Management in Healthcare (3)

Advanced knowledge and skills in information management, patient care technology, and effective interpersonal communication modalities are critical in preparing nurses to deliver quality patient care in a variety of healthcare settings. In this course, 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. Key concepts related to information and computer literacy will be emphasized in this course.

NRSG 4830 - Directed Theoretical Readings (Variable hours)

Involves a contract with faculty to include reading and writing of materials relevant to baccalaureate level nursing. Subject emphasis arranged with faculty.

NRSG 4840 - Departmental Honors in Nursing Seminar (3)

Completion of this course is required for students participating in the honors program in nursing. Students explore scholarly activity in nursing through the guided completion of one of three different learning options: creating a research proposal, writing a scholarly paper, or performing a service project. Learning through active and individualized scholarly inquiry is the focus of this class. Prerequisite: NRSG 3020 .

NRSG 4850 - Study Abroad (1-6) Variable Title

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.

NTM-Network Technology & Business Multimedia (previously TBE)**NTM 1040 - Speedbuilding Keyboarding (1) F**

Intensive computerized approach for improving speed and accuracy. Keyboarding 25 wpm recommended.

NTM 1501 TA - Word Processing Competency Exam (.5) Su, F, Sp

The computer competency exam for this course is a hands-on examination verifying a student's skills at using word processing software. 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. Call Carole Barrios Lapine for more information about the CIL requirement at 801-626-7384 (clapine@weber.edu).

NTM 1502 TB - Operating Systems and Digital Presentations Competency Exams (.5) Su, F, Sp

The computer competency exam for this course is a hands-on examination verifying a student's skills at using Microcomputers, Operating Systems, and Electronic Presentations. 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. Call Carole Barrios Lapine for more information about the CIL requirement at 801-626-7384 (clapine@weber.edu).

NTM 1503 TC - Spreadsheets Competency Exam (.5) Su, F, Sp

The computer competency exam for this course is a hands-on examination verifying a student's skills at using spreadsheet software. 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. Call Carole Barrios Lapine for more information about the CIL requirement at 801-626-7384 (clapine@weber.edu).

NTM 1504 TD - Information Literacy Competency Exam (.5) Su, F, Sp

This exam verifies a student's information literacy competency. Web tutorials are available for students to study for this exam at their own pace. Sample questions and a practice test are available online. Students may also request assistance

with studying for this exam at the library reference desk. The exam must be completed during the semester registered. Repeats of the exam may be taken during the semester with an additional fee charged. The grade for this course is credit/no credit. Call Carole Barrios Lapine for more information about the CIL requirement at 801-626-7384 (clapine@weber.edu).

NTM 1700 TE - Introduction to Microcomputer Applications (3) Su, F, Sp

Use of microcomputers and software including basic components of word processing, Windows, email, Internet, spreadsheets, graphic presentations, information security, ethics, and international issues. Keyboarding 25 wpm recommended.

NTM 1701 TA - Introduction to Word Processing (1) Su, F, Sp

Basic components of word processing including creating, retrieving, editing documents and importing graphics. Keyboarding 25 wpm recommended.

NTM 1702 TB - Operating Systems and Digital Presentations (1) Su, F, Sp

Use of microcomputers and software including basic components: Windows, email, Internet, electronic presentations, information security, ethics, and international issues. Keyboarding 25 wpm recommended.

NTM 1703 TC - Introduction to Spreadsheets (1) Su, F, Sp

Basic components of spreadsheets for creating, manipulating, and applying formulas and creating graphs. Keyboarding 25 wpm recommended.

NTM 2010 - Business English Applications (3) F

Includes Business English essentials: grammar, punctuation, and proofreading. Keyboarding 40 wpm recommended. Prerequisite: NTM 1700 or NTM 1701/NTM 1501.

NTM 2080 - Database Applications (1) F

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. Prerequisite: NTM 1700 or NTM 1702/NTM 1502.

NTM 2200 - Microcomputer Operating Systems (3) F, Sp

Study of hardware and software components through managing programs, directories, files, and disks. Includes integrating applications, customizing windows, and managing printing. Prerequisite: NTM 1700 or NTM 1702/NTM 1502 or instructor approval.

NTM 2300 - Introduction to LAN Management (3) F, Sp

Local area networking concepts including needs analysis, applications, topologies and configurations, and troubleshooting using hands-on labs. Prerequisite: Pre/co-requisite: NTM 2200 or instructor approval.

NTM 2334 - Introduction to Multimedia Web Animation (3) F

This course introduces various types of current motion-related technologies. Students discuss technical issues affecting animation such as speed and compression. Students also go in-depth into Macromedia Flash to create animations for the web and simple web games. Prerequisite: NTM 1700 or NTM 1701/NTM 1501 and NTM 1702/NTM 1502 and NTM 1703/NTM 1503.

NTM 2415 - Cisco TCP/IP Routing Protocols and Router Configuration (3) F

This course is the first in a two-course series designed to prepare students to pass the examinations for Cisco Certified Network Associate (CCNA). This course covers the OSI model, network components and topologies, IP addressing, beginning router configuration and routing protocols. Prerequisite: NTM 2300 or CS 2705.

NTM 2435 - Cisco Advanced LAN and WAN Switching and Routing Theory and Design (3) Sp

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, national SCANs skills, and threaded case studies. Prerequisite: NTM 2415.

NTM 2531 - Exploring Multimedia Applications (3) F

Capabilities and limitations of multimedia technology, evaluation of multimedia products, and creation of a multimedia portfolio. Prerequisite: NTM 1700 or NTM 1701/NTM 1501.

NTM 2532 - Web Page Design and Development (3) Su, F, Sp

Build familiarity with features of software in order to plan, design, and implement a successful web site, and to understand the technicalities of the World Wide Web and the Internet. Prerequisite: NTM 1700 or NTM 1701/NTM 1501.

NTM 2533 - Image Editing Solutions (3) F, Sp

In this course you will be introduced to the fundamentals of a bitmap image editing program such as Adobe Photoshop. You will work primarily with digital photos and scanned images. The following image editing workflow will be learned: image capture, cropping, color correction, tonal adjustments, noise reduction, retouch, creative effects, and exporting. You will merge images into a collage using masking, blend modes, and adjustment layer techniques. Prerequisite: NTM 1700 or NTM 1701/NTM 1501 and NTM 1702/NTM 1502.

NTM 2534 - Video Editing Techniques (3) F

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. Prerequisite: NTM 1700 or NTM 1701/NTM 1501 and NTM 1702/NTM 1502 and NTM 1703/NTM 1503.

NTM 2610 - NetWare Administration (3)

This is the introductory course to Novell Administration involving setting up, managing, and using basic network services, including file systems, network printing, security, and Z.E.N. Works. After completing this course and successfully passing the Novell test, the candidate becomes a Certified Novell Administrator (CNA). Prerequisite: NTM 1700 or NTM 1701/NTM 1501 and NTM 1702/NTM 1502 and NTM 1703/NTM 1503.

NTM 2710 - Switching and Transmission Network Systems Management (3) F

Management of switching and transport systems and their technologies from industry carrier systems to private business networks. Complete hands-on labs focusing on TDM voice,

data, and transport network systems equipment. Basic IP labs are also completed. Prerequisite: NTM 2300.

NTM 2720 - Transport Media & Emerging Technologies (3) F

Investigation into the common types of telecommunications transport media, including the typical uses, operating characteristics, business applications, and emerging technologies in the marketplace. Prerequisite: NTM 2300.

NTM 2730 - Transmission Network Applications (3) Sp

Hands-on labs working with fiber, Ethernet, TDM, and IP voice, data, and transport network systems. Installation and troubleshooting of multiplexers, switches, routers, VoIP equipment, etc. Run applications over Internet and private LAN/WAN networks. Discussion of new technologies. Prerequisites or Co-requisites: NTM 2710 and NTM 2720.

NTM 2860 - Business Systems Technologies Practicum (1-6)

Open to all students who meet the minimum requirements of the department for business-related on-the-job experiences. Approval of instructor and employer is required. Amount of credit will be determined by the department.

NTM 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-4)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

NTM 3000 - Advanced Word Processing (1) Sp

Use of word processing software including sorts, tables, columns, reports, merges, graphics, and macros. Prerequisite: NTM 1700 or NTM 1701/NTM 1501.

NTM 3070 - Advanced Spreadsheet Applications (1) F, Sp

Use of spreadsheet software including macros, sorts, advanced formulas, graphs, and creative presentations. Prerequisite: NTM 1700 or NTM 1703/NTM 1503.

NTM 3090 - Advanced Electronic Presentations (2) F, Sp

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. Prerequisite: NTM 1700 or NTM 1701/NTM 1501 and NTM 1702/NTM 1502 and NTM 1703/NTM 1503.

NTM 3100 - Desktop Publishing (3) F, Sp

Use of desktop publishing software including analyzing, designing, creating, and editing brochures, flyers, and other publications. Prerequisite: NTM 1700 or NTM 1701/NTM 1501 and NTM 1702/NTM 1502 and NTM 1703/NTM 1503.

NTM 3200 - Linux Systems Administration (3) F

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. Prerequisite: NTM 2200 or instructor approval.

NTM 3210 - Advanced Linux Systems Administration (3) Sp

This course presents advanced administrative skills common to mid- to senior-level administrators in an enterprise environment. Students learn how to apply security to network users and resources, manage and compile the Linux kernel, and troubleshoot network processes and services. Prerequisite: NTM 3200.

NTM 3250 - Business Communication (3) Su, F, Sp

Application of oral and written communication, including diversity and international aspects of communication. Prerequisite: ENGL 2010.

NTM 3300 - Advanced LAN Security Management (3) Sp

Advanced concepts of Local Area Network management including performance, maintenance, security, and TCP/IP protocols using hands-on labs. Course will utilize common security tools for all current operating systems. Extensive use of Linux network security tools will be used. Prerequisite: NTM 2435 or instructor permission.

NTM 3310 - Network Server Administration (3) F

Students will learn how to install, configure, manage, and troubleshoot hardware and applications in a Server environment. 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. Prerequisite: NTM 2300.

NTM 3400 - Training the Trainer (3) Sp

Real-world strategies and techniques to provide better employee training, including development of materials and methods to enhance the learning process. Prerequisite: NTM 1700 or NTM 1701, NTM 1702, and NTM 1703, or NTM 1501, NTM 1502, and NTM 1503.

NTM 3415 - Cisco CCNPB-Advanced Router Configuration (3)

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). Prerequisite: NTM 2435 or CCNA Certification or CS 3705.

NTM 3425 - Cisco CCNP-Building Cisco Switched Networks (3)

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. Prerequisite: NTM 2435 or CCNA Certification.

NTM 3435 - Cisco CCNP--Remote Access Networks (3)

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. Prerequisite: NTM 2435 or CCNA Certification.

NTM 3532 - Internet/Database Integration (3) F

With the basic knowledge of both web design software and database software, students in this course take the knowledge to the next level using web technology such as ASP and XML. Advanced database material using Visual Basic and SQL combined with the web technology create dynamic and active web pages. Prerequisite: NTM 2532 or equivalent.

NTM 3534 - Advanced Multimedia Applications (3) Sp

Students will design and produce advanced multimedia projects applicable for business and industry. These projects will be produced by combining animation, audio, graphics, video, and text into interactive multimedia presentations. Prerequisite: NTM 1700 (or NTM 1701/NTM 1501 and NTM 1702/NTM 1502 and NTM 1703/NTM 1503) and NTM 2334.

NTM 3535 - Creating Computer Illustrations (3) F

In this course you will learn the fundamentals of a vector drawing program such as Adobe Illustrator. You will become skilled using the Pen Tool to create vector drawings and will learn various techniques for applying color, attributes, styles, and effects to your artwork. You will also create, edit, and format type to add to your artwork. At the end of the course you will create a project that integrates vector and bitmap images. Prerequisite: NTM 2533.

NTM 3550 - Supervising Information Technology (3) F

Analyzing Information Technology (IT) systems and procedures including planning and implementation, departmental structure and operations, and the responsibilities and productivity of IT personnel. Prerequisite: NTM 2300 or NTM 2534.

NTM 3600 - Principles of Business/Marketing Education (3) Sp

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. Prerequisite: NTM 1700; or NTM 1701/NTM 1501 and NTM 1702/NTM 1502 and NTM 1703/NTM 1503.

NTM 3610 - Methods of Teaching Business/Marketing Education Subjects (3) F

Analysis and research into methods of teaching business and marketing subjects with emphasis on teaching demonstrations and practices, objectives, outcome measurements, testing, and grading. Prerequisite: NTM 1700 or NTM 1701/NTM 1501 and NTM 1702/NTM 1502 and NTM 1703/NTM 1503.

NTM 3634 - Computer Animation and Motion (3) Sp

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. Prerequisite: NTM 2534 or approval of instructor.

NTM 3720 - Advanced Transport Media (3) F

An examination of the growing wireless technologies, fiber optics, their roles within the telecommunications data and media industries and to introduce associated fiber optic technical skills. Prerequisite: NTM 2710 and NTM 2720.

NTM 3730 - Cyber Policy and Ethics (3) F

Explores how the structural, competitive, economic, environmental, and ethical forces affect the continuing transformation of the telecommunications industry both domestically and internationally. Discussion of the impact of contemporary issues on the provider and the consumer of telecommunications services including the legal and ethical requirements and ramifications of electronic privacy. Prerequisite: NTM 2710 and NTM 2720.

NTM 4700 - Data Network Design (3) Sp

Architecture, technologies, and standards associated with the design and management of modern data networks. Hands-on experience in configuring and troubleshooting various network components and architectures. Prerequisite: NTM 2710 and NTM 2720.

NTM 4710 - Traffic Technology & Voice Network Design (3) Sp

Develop an understanding of network facilities and their uses. Understand and use correct network design principles in stand-alone and multi-PBX environments. Prerequisite: NTM 2710, NTM 2720, and MATH 1050 or MATH 1040.

NTM 4760 - Network/Telecommunications Internship (1-4) Su, F, Sp

Must be completed senior year in a network/telecommunications environment with company placement and objectives approved by the department. Prerequisite: NTM 4700 and NTM 4710. Simultaneous enrollment in NTM 4790 is required.

NTM 4790 - Network/Telecommunications Senior Project (2) Su, F, Sp

Capstone project applying the principles of network/telecommunications to the development of a network/telecommunications system within a company. Prerequisite: NTM 4700 and NTM 4710 Simultaneous enrollment in NTM 4760 is required.

NTM 4800 - Independent Research (1-4) Su, F, Sp

Directed research and study on an individual basis. Prerequisite: Permission of instructor.

NTM 4860 - Business/Multimedia Technologies Internship (3) F, Sp

Student works in a business/multimedia technologies environment. The student fulfills at least four objectives and a major capstone project that has been approved by a business/organization supervisor and a faculty advisor. Must have Senior standing or approval of instructor.

NTM 4890 - Multimedia e-Portfolio (3) Sp

This capstone project-based course allows the student to demonstrate the concepts learned in the business/multimedia program by creating a multimedia portfolio as well as demonstrating proficiency using a variety of publishing devices. Prerequisite: NTM 2532, NTM 2533, NTM 2534, and NTM 3634.

NTM 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

NTM 4990 - Senior Project (3)

Research, analysis, presentation, and discussion of topics relative to graduating majors and minors. Prerequisite: NTM 2860 or equivalent.

**NTM 6600 - Principles of Business/
Marketing Education (3) Sp**

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. NTM 6600 may be substituted for NTM 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. Prerequisite: NTM 1700; or NTM 1701/NTM 1501, NTM 1702/NTM 1502, and NTM 1703/NTM 1503 and a bachelor's degree.

**NTM 6610 - Methods of Teaching Business/
Marketing Education (3) F**

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. NTM 6610 may be substituted for NTM 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. Prerequisite: NTM 1700; or NTM 1701/NTM 1501, NTM 1702/NTM 1502, and NTM 1703/NTM 1503; and a bachelor's degree.

NUCM-Nuclear Medicine Courses**NUCM 4103 - Radiopharmaceuticals and Dosages (3)**

Radiopharmacology, characterization of radiopharmaceuticals used in performing examinations and calculation of dosages.

NUCM 4203 - Scanning and Imaging Procedures I (3)

Organ concentration, excretion and absorption, measurements and imaging.

**NUCM 4213 - Scanning and Imaging
Procedures II (3)**

Organ concentration, excretion and absorption, measurements and imaging.

NUCM 4223 - Nuclear Cardiology (3)

Pathology, indications for examination and procedures in nuclear cardiology.

**NUCM 4303 - Radionuclide Physics
& Instrumentation (3)**

Production and properties of radionuclides, decay schemes, radiation measurements and special characteristics of radiopharmaceuticals.

NUCM 4333 - Quality Assurance (3)

Nuclear Medicine departmental policies and procedures.

NUCM 4861 - Clinical Education (3)

A minimum of 24 hours per week in an active Nuclear Medicine department.

NUCM 4862 - Clinical Education (3)

A minimum of 24 hours per week in an active Nuclear Medicine department.

NUCM 4863 - Clinical Education (3)

A minimum of 24 hours per week in an active Nuclear Medicine department.

NUCM 4912 - Comprehensive Review (2)

Review of learned material.

NUCM 4991 - Seminar (1)

New technology, procedures and equipment.

NUTR-Nutrition Education Courses**NUTR 1020 LS - Science and Application of Human
Nutrition (3) Su, F, Sp (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.

(Cross listed with HLTH 1020) *This course is taught Web enhanced.*

**NUTR 2220 - Prenatal and Infant Nutrition
(2) Su, F, Sp (available online only)**

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. Prerequisite: NUTR 1020/HLTH 1020. (Cross listed with HLTH 2220)

**NUTR 2320 - Food Values, Diet Design
and Health (3) F, Sp, Su**

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. Prerequisite: NUTR 1020/HLTH 1020. This course is taught Web enhanced.

**NUTR 2420 - Childhood and Adolescent Nutrition
(2) Su, F, Sp (available online only)**

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. Prerequisite: NUTR 1020/HLTH 1020. (Cross listed with HLTH 2420)

NUTR 3020 - Sports Nutrition (3) F, Sp (online only)

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. Prerequisite: NUTR 1020/HLTH 1020 and NUTR 2320.

**NUTR 3220 - Foundations in Diet Therapy
(2) F, Sp, Su (online only)**

Nutritionally related medical conditions in which diet is crucial for control of the disease will be the foundation for developing skills in case management. The use of several nutritional alternatives and supplements will be incorporated into the curriculum as they pertain to the dietary management of the condition. Prerequisite: NUTR 1020/HLTH 1020 and NUTR 2320 (ZOOL 2200 or HTHS 1110/HTHS 1111 are recommended).

NUTR 3320 - Health and Nutrition in the Older Adult (3) Su, F, Sp (online only)

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. Prerequisite: NUTR 1020/HLTH 1020. (Cross listed with HLTH 3320)

NUTR 3420 DV - Multicultural Health & Nutrition (3) F, Sp

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. Prerequisite: NUTR 1020/HLTH 1020 and NUTR 2320. (Cross listed with HLTH 3420) This course is taught Web enhanced.

NUTR 4320 - Current Issues in Nutrition (2) F, Sp

Technology-aided literature review of the nutritional and medical sciences provides the information for presentation to peers in both written and oral forms. Prerequisite: NUTR 1020/HLTH 1020 and NUTR 2320 or consent of instructor.

NUTR 4420 - Nutrition and Fitness (3) F, Sp

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. Prerequisite: NUTR 1020/HLTH 1020 and NUTR 2320. This course is taught Web enhanced.

NUTR 4520 - Directed Undergraduate Nutrition Research (1-4) F, Sp

This course will provide undergraduate students an opportunity to engage in research processes and participate in ongoing nutrition research projects. Prerequisite: NUTR 4320 or HPHP Majors with NUTR 1020/HLTH 1020 and Permission of Instructor.

NUTR 6320 - Current Issues in Nutrition (2) F, Sp

Technology-aided literature review of the nutritional and medical sciences provides the information for presentation to peers in both written and oral forms. Prerequisite: NUTR 1020/HLTH 1020 and NUTR 2320 or consent of instructor.

NUTR 6420 - Nutrition and Fitness (3) F, Sp

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. Prerequisite: Consent of instructor. This course is taught Web enhanced.

NUTR 6520 - Directed Graduate Nutrition Research (1-4)

This course will provide graduate students an opportunity to engage in research processes and participate in ongoing nutrition research projects. Prerequisite: NUTR 4320 or HPHP Majors with NUTR 1020/HLTH 1020 and Permission of Instructor. Graduate students taking this class as 6520 must have completed a statistical methods course.

PAR-Emergency Care (Paramedic) Courses**PAR 1000 - Emergency Medical Technician - Basic (2)**

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. There are 46 lessons in the core curriculum. 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 - Basic Lab (4)

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 USDOT/EMT Basic curriculum. 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 - EMT-Basic Field Experience- I (3)

Minimum 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. Prerequisite: PAR 1000/PAR 1001 and HTHS 1101, HTHS 1110/HTHS 1111 or HTHS 1115 and 70% minimum on EMT-B assessment exam. Department permission required.

PAR 1006 - EMT-Basic Field Experience - II (3)

Minimum 120 hours of continued supervised EMT-Basic patient care experience provided through assigned shifts on the ambulance and/or pre-hospital setting. A preceptor evaluates basic life support knowledge, skills and affective abilities. Prerequisite: PAR 1005, ENGL 1010, and MATH 0990 or MATH 1010.

PAR 1010 - Emergency Medical Technician - Intermediate Introduction (2)

Introduction of Intermediate EMT concepts of basic and advanced life support utilizing cognitive knowledge objects using the State Department of Health and current National Standard EMT-I Curriculum. Application of pre-hospital care will be demonstrated through written assignments and exams. Course may be challenged for credit. Course is required, or equivalent work experience, before admission into the paramedic program. Prerequisite: Must have Basic EMT certification. PAR 1010 combined with PAR 1011 will provide a certificate of 60 hours of continuing medical education hours toward recertification requirements for the Utah State Department of Health.

PAR 1011 - Emergency Medical Technician - Intermediate Introduction Lab (2)

This course requires clinical hours with an emergency facility and ambulance as scheduled. Application of basic EMT skills involving pre-hospital care with staged and real emergencies

and demonstration of psychomotor skills through laboratory, ambulance riding time, and clinical assignments. Clinical activities are adapted to previous documented work experiences. This course may be challenged for credit. This course is required, or equivalent work experience, before admission into the paramedic program. Prerequisite: Must have Basic EMT certification. PAR 1010 combined with PAR 1011 will provide a certificate of 60 hours of continuing medical education hours toward recertification requirements for the Utah State Department of Health.

PAR 1020 - Emergency Medical Technician - Intermediate (2)

Curriculum includes but is not limited to the US Department of Transportation National Standard Curriculum for the EMT-Intermediate. This course consists of the cognitive knowledge and theory components of the USDOT Curriculum and builds upon the EMT Basic knowledge. State certification eligibility of EMT Intermediate upon successful completion of both PAR 1020 and PAR 1021. Students will demonstrate mastery of cognitive knowledge skills through written assignments and examinations. Course format consists of didactic lecture. Paramedic Program application, faculty review, and committee selection are required to be admitted to this course. Prerequisite: PAR 1011 or equivalent.

PAR 1021 - Emergency Medical Technician - Intermediate Lab (2)

Curriculum includes but is not limited to the U.S. Department of Transportation National Standard Curriculum for the EMT-Intermediate. Builds upon the EMT Basic psychomotor skills. State certification eligibility of EMT I upon successful completion of both PAR 1020 and PAR 1021. This course consists of clinical instruction and supervised field experiences in an advanced life support rescue unit which functions under a medical command authority. Students will demonstrate their mastery of the educational psychomotor skills through practical exams and staged and real emergencies. Must have department approval by application process involving an admissions committee final selection. Prerequisite: PAR 1020 or equivalent.

PAR 1030 - Pediatric Advanced Life Support (PALS) (1)

Subject and case based approach to American Heart Association protocols and skills required for successful resuscitation of child and infant. The cognitive and psychomotor skills needed to resuscitate and stabilize infants and children in respiratory failure, shock, or cardiopulmonary arrest. Prerequisite: Basic Life Support course completion card.

PAR 1031 - Advanced Cardiac Life Support (ACLS) (1)

Subject and case based approach to American Heart Association protocols and skills required for successful resuscitation of the adult. This course is designed to help all participants succeed in acquiring the cognitive knowledge psychomotor skills needed by medical professionals in adult resuscitation attempts.

PAR 2000 - Introduction to Paramedic Practice (4) F

Introduces the paramedic student to basic pathophysiology, pharmacology, airway management, plus patient interaction and assessment skills. Includes professional considerations for the individual practitioner and patient. Basic knowledge of medical incident command, rescue awareness, hazardous materials incidents, and crime scene awareness is included. Prospective students must be EMT-B certified, accomplish Dumke College of Health Professions advising, complete the department application process, and then be accepted to the program prior to registration. Prerequisite: PAR 1006 may be used as an experience prerequisite for PAR 2000.

PAR 2010 - Medical Emergencies (6) F

Prepares the student to recognize, assess and provide paramedic interventions related to medical emergencies within the circulatory, respiratory, nervous, endocrine, digestive, and urinary systems. Toxicology and environmental topics will be discussed. Current AHA standards will be utilized. Prerequisite: PAR 2000.

PAR 2020 - Traumatic Emergencies (3) Su, Sp

Prepares the student to recognize, assess and provide paramedic interventions related to bodily traumatic injuries. Current PHTLS/BTLS/ABLS principles are utilized. Prerequisite: PAR 2000 and PAR 2010.

PAR 2030 - Special Considerations in Paramedic Practice (3) Su, Sp

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 chronic care patient is discussed. Current AHA/PEPP standards are utilized. Prerequisite: PAR 2000 and PAR 2010.

PAR 2040 - Paramedic Clinical Lab I (4) F, Sp

Clinical application of the theory of paramedic practice. Students must pass all skills before advancing into clinical rotations. Prerequisite: PAR 2000. (\$98 lab fee)

PAR 2100 - Advanced Paramedic Practice (4) Su, Sp

Pathophysiology and advanced concepts applied to recognition of Advanced Live 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. Prerequisite: PAR 2000, PAR 2010, PAR 2020, PAR 2030, PAR 2040. (\$98 lab fee)

PAR 2110 - Paramedic Clinical II (3) F, Sp

Clinical rotations in various medical settings provide the student with the opportunity to perform skills and apply knowledge of paramedic practice. Includes, but not limited to, areas in operating room, emergency department, labor and delivery, and pediatrics. Prerequisite: PAR 2000, PAR 2010, PAR 2020, PAR 2030, PAR 2040.

PAR 2120 - Paramedic Internship (9) F, Sp

Rotations with various paramedic agencies provide rescue vehicle response to advance the skills and performance of Paramedic practice. Successful evaluation of professionalism, interpersonal relationships, skills, and knowledge must be completed for recommendation of certification. National Registry EMT-P testing is required. Prerequisite: PAR 2000, PAR 2010, PAR 2020, PAR 2030, PAR 2040.

PAR 3110 - Critical Care Transport Course (6)

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. Prerequisite: Paramedic or registered nurse (2-3 years experience nominal) or department approval.

PAR 3120 - Tactical Emergency Medicine (3)

This rigorous course provides the principles of tactical medicine. Topics include instruction in the tenets of tactical emergency medicine, particularly in providing acute care in tactical combat situations and the medical operations support of tactical teams. This course is designed to provide the EMS provider with a variety of skills necessary to support a tactical law enforcement team. Prerequisite: EMT-Basic certification

PAR 4110 - Emergency Medical Services Management Topics (3)

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.

PAR 4120 - Emergency Medical Service Teaching Topics (3)

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 classroom and skill lab environment. Prerequisite: EMT-Basic certification.

PAR 4850 - Study Abroad (1-6) Variable Title

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.

PE-Physical Education Activity Courses

PE 1010 - Aerobics, Level I (1)

PE 1011 - Aerobics, Level II (1)

PE 1012 - Aerobics, Level III (1)

PE 1040 - Walking for Fitness, Level I (1)

PE 1041 - Walking for Fitness, Level II (1)

PE 1042 - Walking for Fitness, Level III (1)

PE 1043 - Jogging, Level I (1)

PE 1044 - Jogging, Level II (1)

PE 1045 - Jogging, Level III (1)

PE 1057 - Hatha Yoga, Level I (1)

PE 1070 - Cross Training For Fitness, Level I (1)

PE 1071 - Cross Training For Fitness, Level II (1)

PE 1072 - Cross Training For Fitness, Level III (1)

PE 1080 - Strength Training, Level I (1)

PE 1081 - Strength Training, Level II (1)

PE 1082 - Strength Training, Level III (1)

PE 1098 - Fitness for Life (1)

PE 1100 - Tennis, Level I (1)

PE 1101 - Tennis, Level II (1)

PE 1102 - Tennis, Level III (1)

PE 1105 - Badminton, Level I (1)

PE 1106 - Badminton, Level II (1)

PE 1110 - Racquetball, Level I (1)

PE 1111 - Racquetball, Level II (1)

PE 1112 - Racquetball, Level III (1)

PE 1130 - Golf, Level I (1)

PE 1131 - Golf, Level II (1)

PE 1132 - Golf, Level III (1)

PE 1135 - Archery, Level I (1)

PE 1136 - Archery, Level II (1)

PE 1137 - Archery, Level III (1)

PE 1140 - Marksmanship (1)

PE 1145 - Bowling, Level I (1)

PE 1146 - Bowling, Level II (1)

PE 1147 - Bowling, Level III (1)

PE 1150 - Billiards, Level I (1)

PE 1151 - Billiards, Level II (1)

PE 1152 - Billiards, Level III (1)

PE 1155 - Fencing, Level I (1)

PE 1156 - Fencing, Level II (1)

PE 1157 - Fencing, Level III (1)

PE 1200 - Basketball, Level I (1)

PE 1201 - Basketball, Level II (1)

PE 1202 - Basketball, Level III (1)

PE 1210 - Volleyball, Level I (1)

PE 1211 - Volleyball, Level II (1)

PE 1212 - Volleyball, Level III (1)

PE 1225 - Softball (1)

<p>PE 1230 - Soccer, Level I (1)</p> <p>PE 1231 - Soccer, Level II (1)</p> <p>PE 1232 - Soccer, Level III (1)</p> <p>PE 1265 - Water Sports (1)</p> <p>PE 1300 - Swimming, Level I (1)</p> <p>PE 1301 - Swimming, Level II (1)</p> <p>PE 1302 - Swimming, Level III (1)</p> <p>PE 1310 - Water Aerobics, Level I (1)</p> <p>PE 1311 - Water Aerobics, Level II (1)</p> <p>PE 1312 - Water Aerobics, Level III (1)</p> <p>PE 1340 - Lifeguarding (2) 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. Prerequisite: Skills screening will be required. Please note: The Lifeguard Training certificate includes certification in first aid.</p> <p>PE 1350 - Scuba Diving I (1) Offered through Continuing Education only.</p> <p>PE 1400 - Self Defense, Level I (1)</p> <p>PE 1401 - Self Defense, Level II (1)</p> <p>PE 1402 - Self Defense, Level III (1)</p> <p>PE 1410 - TaiChi, Level I (1)</p> <p>PE 1411 - TaiChi, Level II (1)</p> <p>PE 1412 - TaiChi, Level III (1)</p> <p>PE 1435 - Kempo, Level I (1)</p> <p>PE 1436 - Kempo, Level II (1)</p> <p>PE 1437 - Kempo, Level III (1)</p> <p>PE 1445 - Tae Kwon-do, Level I (1)</p> <p>PE 1446 - Tae Kwon-do, Level II (1)</p> <p>PE 1447 - Tae Kwon-do, Level III (1)</p> <p>PE 1510 - Fishing, Level I (1)</p> <p>PE 1511 - Fishing, Level II (1)</p> <p>PE 1512 - Fishing, Level III (1)</p> <p>PE 1515 - Sailboating (1)</p>	<p>PE 1520 - Hiking, Level I (1)</p> <p>PE 1521 - Hiking, Level II (1)</p> <p>PE 1522 - Hiking, Level III (1)</p> <p>PE 1527 - Rock Climbing, Level I (1)</p> <p>PE 1528 - Rock Climbing, Level II (1)</p> <p>PE 1529 - Rock Climbing, Level III (1)</p> <p>PE 1557 - Bicycling, Level I (1)</p> <p>PE 1558 - Bicycling, Level II (1)</p> <p>PE 1559 - Bicycling, Level III (1)</p> <p>PE 1610 - Skiing, Level I (1) (CR/NC)</p> <p>PE 1611 - Skiing, Level II (1) (CR/NC)</p> <p>PE 1612 - Skiing, Level III (1) (CR/NC)</p> <p>PE 1620 - Snowboarding, Level I (1) (CR/NC)</p> <p>PE 1621 - Snowboarding, Level II (1) (CR/NC)</p> <p>PE 1622 - Snowboarding, Level III (1) (CR/NC)</p> <p>PE 1630 - Cross Country Skiing, Level I (1) (CR/NC)</p> <p>PE 1631 - Cross Country Skiing, Level II (1) (CR/NC)</p> <p>PE 1632 - Cross Country Skiing, Level III (1) (CR/NC)</p> <p>PEP-Physical Education Major/ Minor Courses</p> <p>PEP 2000 - Foundations of Physical Education (3) F, Sp Examination of history, philosophy, career opportunities, issues, and trends in physical education. Emphasis on professional preparation requirements and competencies.</p> <p>PEP 2100 - Introduction to Coaching Sport (3) F, Sp 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.</p> <p>PEP 2200 - Foundations of Human Performance Management Professions (2) F, Sp Designed to orient and acquaint students with the goals, objectives, scope, professional preparation, career opportunities, and trends in human performance management professions.</p>
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PEP 2300 - Health/Fitness Evaluation and Exercise Prescription (3) F, Sp

Skills and competencies for prospective health fitness instructors, personal fitness trainers, and nutrition educators to deliver preventive exercise programs. Prerequisite: HLTH 1030 and NUTR 1020.

PEP 2480 - Fitness for Life Concepts (1) F, Sp

Prescribe individualized programs for weight control, cardiovascular endurance, strength and flexibility.

PEP 2500 - Skills, Drills, and Strategies for Coaches (3) F, Sp

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 (3) F, Sp

Description of the structural and functional principles of human growth and development. Introduction of motor learning principles with emphasis on their application to pedagogy. Prerequisite: PEP 2000 or concurrent enrollment in PEP 2000.

PEP 2800 - Individual Projects (1-4) F, Sp

A comprehensive study of a significant problem in the field of physical education. Hours to be arranged.

PEP 2890 - Cooperative Work Experience (1-6) F, Sp

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.

PEP 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4) As Needed

Consult the semester class schedule for current offering under this number. The specific title and credit authorized will appear on the student transcript.

PEP 3240 - Skill Development and Methods of Teaching Field Sports (3) Su, F

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). Prerequisite: PEP 2000 and PEP 2600 or concurrent enrollment in either PEP 2000 or PEP 2600.

PEP 3242 - Skill Development and Methods of Teaching Court Sports (3) Sp

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). Prerequisite: PEP 2000 and PEP 2600 or concurrent enrollment in either PEP 2000 or PEP 2600.

PEP 3260 - Teaching Lifelong Leisure Activities (2) F

Designed to give students a broad variety of noncompetitive/nonconventional activities and sports that are beneficial as lifetime sports. Prerequisite: PEP 2000, PEP 2600 or concurrent enrollment in PEP 2000 or PEP 2600.

PEP 3262 - Skill Development and Methods of Teaching Individual Sports (3) Sp

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). Prerequisite: PEP 2000 and PEP 2600 or concurrent enrollment in either PEP 2000 or PEP 2600.

PEP 3264 - Skill Development and Methods of Teaching Racket Sports (3) F

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, racketball, and tennis/pickleball). Prerequisite: PEP 2000 and PEP 2600 or concurrent enrollment in either PEP 2000 or PEP 2600.

PEP 3270 - Teaching Aerobic Conditioning (2) F, Sp

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. Prerequisite: PEP 2000, PEP 2600 or concurrent enrollment in PEP 2000 or PEP 2600.

PEP 3280 - Teaching Neuromuscular Conditioning (2) F, Sp

Examine, evaluate and practice neuromuscular 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 neuromuscular conditioning programs. Two lecture/labs per week. Prerequisite: PEP 2000, PEP 2600 or concurrent enrollment in PEP 2000 or PEP 2600.

PEP 3290 - Skill Development and Methods of Teaching Fitness for Life (3) F, Sp

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. Prerequisite: PEP 2000 and PEP 2600 and HLTH 2300 or concurrent enrollment in either PEP 2000 or PEP 2600 and HLTH 2300.

PEP 3310 - Techniques for Teaching Aquatics (2) Sp

Practice of swimming and related aquatic skills, teaching techniques for all levels of swimming, and the acquisition of materials to use for teaching swimming. Course leads to American Red Cross certification as a Water Safety Instructor. Prerequisite: Skills screening will be required.

PEP 3320 - Techniques for Teaching Lifeguarding (2) As Needed

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.

PEP 3500 - Kinesiology (3) F, Sp

A study of muscle structure and motion of the human body with emphasis on kinesiological and mechanical analysis. Prerequisite: Quantitative Literacy (a) MATH 1050 or MATH 1060 ONLY or (b) > or = 70 ACCUPLACER or (c) > or = 3 on AP Calculus/Statistics Requirement; and grade C or better in PEP 2600 (for PE majors) or PEP 2300 (for Human Performance Management majors).

PEP 3510 - Exercise Physiology (3) F, Sp

A study of various physiological and environmental factors which affect performance of exercise and sport during acute exercise and physiological adaptations to chronic exercise. Prerequisite: HTHS 1110 or ZOOL 1020 or ZOOL 2200.

PEP 3520 - Curriculum Development/ Instructional Strategies (3) F, Sp

Emphasis on materials, strategies, activities, and techniques for instruction and curriculum development necessary to meet the diverse needs of the students. Prerequisite: PEP 2600 and two Skill Development and Methods of Teaching courses.

PEP 3540 - Physiological Aspects of Human Performance (2) F

Examine, evaluate, and apply the latest physiological concepts and ideas in conditioning practices for improving human performance. Prerequisite: PEP 2000 or PEP 2200 and 3 hours of General Education Life Science (LS).

PEP 3550 - Issues in Sport (2) Sp

Examine and evaluate both psychological and sociological aspects and practices of human performance. Prerequisite: PEP 2000, PEP 2500, and 6 hours of General Education Social Science (SS).

PEP 3600 - Measurement for Evaluation and Research (3) F, Sp

The selection, administration, and interpretation of measurement techniques and statistical procedures for the purpose of evaluation and research as related to human performance, health promotion and education. Prerequisite: Meet WSU Quantitative Literacy requirement and complete NTM 1700.

PEP 3610 - Assessment/Technology in Physical Education (3) F

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. Prerequisite: A minimum of 3 Skill Development and Methods of Teaching Courses.

PEP 3630 - Physical Education K-6 (3) Su,F,Sp

The course is designed to provide students with instructional methods, activities and skills for teaching Physical Education K-6. 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. Prerequisite: EDUC 3140 or PEP 2600.

PEP 3660 - Physical Education for Students with Disabilities (2) F, Sp

Physical education for students with disabilities course is designed to provide a unique approach to instructional strategies and activity modifications for differing abilities. This course will also include a practicum experience at a public school in the area of adaptive physical education. Prerequisite: PEP 3520 and two Skill Development and Methods Teaching courses.

PEP 3700 - Recreation and Sports Facilities and Events Management (3) F

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. Prerequisite: PEP 2200.

PEP 4370 - Exercise Management for Special Populations (2) Sp

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. Prerequisite: PEP 2300 and PEP 3510.

PEP 4620 - Leadership Concepts for Human Performance Management (3)

Students will study the current philosophical leadership concepts and the principles, practices, and issues of administration. Prerequisite: PEP 2200.

PEP 4800 - Individual Projects (1-4) Su, F, Sp

A comprehensive study of a significant problem in the field of physical education. Hours to be arranged. For seniors only.

PEP 4830 - Directed Readings (1-3) As Needed

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.

PEP 4860C - Field Experience Coaching (3) F, Sp

Work experience which applies prior academic learning in a supervised setting. Prerequisite: PEP 2600, Junior/Senior status and department approval.

PEP 4890 - Cooperative Work Experience (1-6) Su, F, Sp

A continuation of PEP 2890.

PEP 4920 - Short Courses, Workshops, Institutes and Special Events (1-4) As Needed**PEP 4990 - Field Experience/Senior Seminar (2) F, Sp**

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. Prerequisite: PEP 3520, 12-14 hours Skill Development and Methods of Teaching Courses, Junior/Senior status and department approval. No substitutions can be made for this course.

PEP 6010 - Leadership in Physical Education (3) As Needed

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.

PEP 6100 - Current Trends in Health and Physical Education (3) As Needed

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.

PEP 6300 - Advanced Biomechanics (3) As Needed

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.

PEP 6370 - Exercise Management for Special Populations (2) As Needed

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. Prerequisite: PEP 2300 and PEP 3510.

PEP 6400 - Advanced Exercise Physiology (3) As Needed

Understanding the physiological changes associated with exercise and training and the reasons for change are the paramount directives of this course. Concurrent with the lecture component is the practicum laboratory experience of equipment operation and individual assessment of physiological parameters.

PEP 6420 - Curriculum in Physical Education (3) As Needed

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.

PEP 6520 - Improving Physical Education (3) As Needed

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.

PEP 6540 - Physiological Aspects of Human Performance (2) As Needed

Examine, evaluate, and apply the latest physiological concepts and ideas in conditioning practices for improving human performance. Prerequisite: PEP 2000 or PEP 2200 and 3 hours of General Education Life Science (LS).

PEP 6830 - Motor Learning (3) As Needed

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.

PHIL-Philosophy Courses**PHIL 1000 HU - Introduction to Philosophy (3)**

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 1120 HU - Contemporary Moral Problems (3)

An introduction to ethical theories and their application to contemporary moral issues, such as human cloning, abortion, and physician-assisted suicide.

PHIL 1250 HU - Critical Thinking (3)

An introduction to informal logic, focusing on issues of logical form, standards of good and bad reasoning, and argumentative writing.

PHIL 2200 QL - Deductive Logic (3)

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. Prerequisite: MATH 0990 or placement test eligible for MATH 1010.

PHIL 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3)

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.

PHIL 3010 - History of Philosophy: Classical & Medieval (3)

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 (3)

A topical survey of the major philosophers and issues from the seventeenth century to the beginning of the nineteenth century (Descartes to Kant).

PHIL 3100 - Philosophy of Language (3)

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 3150 - Existentialism (3)

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 (3)

An examination of the ideals of and justifications for democratic institutions.

PHIL 3300 - Great Issues in Philosophy (3) Variable Title Course

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.

PHIL 3350 - Medical Ethics (3)

A survey of fundamental moral issues arising from the practice of medicine and from advances in medical science.

PHIL 3400 - Great Thinkers of Philosophy (3) Variable Title Course

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 taken twice with a different philosopher.

PHIL 3500 - Philosophy of Western Religion (3)

A survey of topics in the philosophy of religion, especially as they pertain to Judaism, Christianity, and Islam.

PHIL 3550 DV - Philosophy of Eastern Religion (3)

An examination of classic philosophical issues in Eastern religious thought, with a special emphasis on Hinduism, Buddhism, Taoism, and Confucianism.

PHIL 3600 - Ethical Theory (3)

An in-depth study of western ethical theories, including utilitarianism, Kantian ethics, virtue ethics, and social contract theory.

PHIL 3650 - Aesthetics (3)

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 4250 - Philosophy of Law (3)

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 4510 - Metaphysics (3)

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 (3)

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 4830 - Directed Readings (1-2)

Individually designed tutorial for philosophy minors and majors, intended to satisfy program requirements not available through scheduled class offerings.

PHIL 4900 - Senior Capstone Seminar (3)

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 (1-3)

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.

PHYS-Physics Courses**PHYS 1010 PS - Elementary Physics (3) Su, F, Sp**

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 (3) Su, F, Sp

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 1360 PS - Principles of Physical Science (3) F

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 (5) Su, F, Sp

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). Prerequisite: MATH 1060.

PHYS 2015 - College Physics I Lab (1) Su, F, Sp

One 3-hour lab per week. Co-Requisite: PHYS 2010. Enrollment limited to transfer students.

PHYS 2020 - College Physics II (5) F, Sp

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). Prerequisite: PHYS 2010.

PHYS 2025 - College Physics II Lab (1) Su, F, Sp

One 3-hour lab per week. Co-Requisite: PHYS 2020. Enrollment limited to transfer students.

PHYS 2040 - Principles of Observational Astronomy (3) F

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.* Prerequisite: MATH 1060 (minimum grade of C).

PHYS 2090 - Environmental Physics - Energy and Power (3)

An interdisciplinary course dealing with the chemical and physical concepts of energy and power. Emphasis will be placed on the emerging energy crisis, effects upon the environment and the quality of life.

PHYS 2210 PS - Physics for Scientists and Engineers I (5) F, Sp

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: MATH 1210.

PHYS 2215 - Physics for Scientists and Engineers I Lab (1) F, Sp

One 3-hour lab per week. Co-Requisite: PHYS 2210. Enrollment limited to transfer students.

PHYS 2220 - Physics for Scientists and Engineers II (5) F, Sp

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). Prerequisite: PHYS 2210. Co-Requisite: MATH 1220.

PHYS 2225 - Physics for Scientists and Engineers II Lab (1) F, Sp

One 3-hour lab per week. Co-Requisite: PHYS 2220. Enrollment limited to transfer students.

PHYS 2300 - Scientific Computing for Physical Systems (3) F

An introduction to computer programming and fundamental numerical algorithms as used for problem solving and visualization in the natural sciences. Applications may include non-linear dynamics, chaos, many-particle systems, and Monte Carlo techniques. Prerequisite: PHYS 2210, MATH 1200, and MATH 1210.

PHYS 2600 - Laboratory Safety (1) F, Sp

An interdisciplinary, team-taught 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.

PHYS 2710 - Introductory Modern Physics (3) F

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. Prerequisite: PHYS 2220, MATH 1200, and MATH 1220.

PHYS 2800 - Introductory Individual Research Problems (1-3) Su, F, Sp

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. Prerequisite: Consent of instructor. Cross-listed with ASTR 2800.

PHYS 2830 - Introductory Readings in Physics/Astronomy (1-3) Su, F, Sp

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. Prerequisite: Consent of instructor. Cross-listed with ASTR 2830.

PHYS 2890 - Cooperative Work Experience (1-6) Su, F, Sp

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 (1-4)

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

PHYS 3160 - Stellar and Planetary Astrophysics (3) Sp (odd years only)

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. Prerequisite: PHYS 2220 and MATH 1200. Cross-listed with ASTR 3160.

PHYS 3170 - Galaxies and Cosmology (3) Sp (odd years only)

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. Prerequisite: PHYS 2220 and MATH 1200. *Cross-listed with ASTR 3170.*

PHYS 3180 - Thermal Physics (3) Sp

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. Prerequisite: PHYS 2220, MATH 1200 and MATH 1220.

PHYS 3190 - Applied Optics (3) F (odd years only)

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. Prerequisite: PHYS 2220, MATH 1200 and MATH 1220.

PHYS 3300 - Advanced Computational Physics (3) Sp (alternate years - even)

This course extends the computational skills developed in PHYS 2300 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. Prerequisite: PHYS 2220 and PHYS 2300.

PHYS 3410 - Electronics for Scientists (4) F

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. Prerequisite: PHYS 2220.

**PHYS 3420 - Data Acquisition and Analysis
(3) Sp (alternate years - odd)**

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. Prerequisite: PHYS 2020 or PHYS 2220, and MATH 1200.

PHYS 3500 - Analytical Mechanics (3) F

Particle motion, oscillating systems; planetary motion, stability of orbits; collisions; Euler's equations, gyroscopic motion; Lagrange's equations, Hamilton's equations, theory of vibrations. Prerequisite: PHYS 2220, MATH 1200 and MATH 2280.

PHYS 3510 - Electromagnetic Theory (3) F

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. Prerequisite: PHYS 2220, MATH 1200, MATH 2210 and MATH 2280.

**PHYS 3540 - Mechanical and
Electromagnetic Waves (3) Sp**

Periodic motions, free and forced vibrations; resonance; normal modes; dispersion; boundary conditions; electromagnetic waves and light; the Fresnel equations; electromagnetic radiation from accelerating charges. Prerequisite: PHYS 3500, PHYS 3510.

PHYS 3570 - Foundations of Science Education (3)

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 (3) Sp

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. Prerequisite: PHYS 2710.

**PHYS 4200 - The Physics of Materials (3)
Sp (alternate years - even)**

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. Prerequisite: (May also be taken concurrently): PHYS 2710, PHYS 3180, CHEM 1220.

PHYS 4400 - Advanced Physics Laboratory (2) Sp

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. Four hours of lab per week. Prerequisite: PHYS 2220; either PHYS 3190 or PHYS 3410.

**PHYS 4410 - Materials Characterization
Laboratory (2) F (even years only)**

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. Prerequisite: PHYS 2220 and PHYS 3410.

**PHYS 4570 - Secondary School Science
Teaching Methods (3) F**

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. Prerequisite: Admission to the Teacher Education Program.

PHYS 4610 - Quantum Mechanics (3) Sp

Wave-particle duality, Schrodinger equation, wave function, quantization rules, one-dimensional motion, one-electron atoms, spin and orbital angular momentum. Prerequisite: PHYS 2710, MATH 2270. Co-Requisite: PHYS 3500; MATH 3710.

PHYS 4620 - Advanced Quantum Mechanics (3) Sp

Approximation methods and other selected topics in pure and applied quantum mechanics. Prerequisite: PHYS 4610.

**PHYS 4800 - Individual Research
Problems (1-3) Su, F, Sp**

Time and credit to be arranged. Open to qualified students for one or more semesters. Prerequisite: consent of instructor. Cross-listed with ASTR 4800.

**PHYS 4830 - Readings in Physics/
Astronomy (1-3) Su, F, Sp**

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. Prerequisite: consent of instructor. Cross-listed with ASTR 4830. May be repeated.

**PHYS 4890 - Cooperative Work
Experience (1-6) Su, F, Sp**

A continuation of PHYS 2890. Open to all students.

**PHYS 4920 - Short Courses, Workshops,
Institutes and Special Programs (1-4)**

Consult the class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

PHYS 4970 - Senior Thesis (2) Su, F, Sp

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. Prerequisite: senior class standing and consent of departmental committee.

PHYS 4990 - Seminar in Physics (1) F, Sp

Joint sessions of faculty and students devoted to current topics in physics. Students taking this course for credit will make a presentation based on individual library research of a topic agreed on with the faculty advisor. One credit required for physics majors. May be taken twice for credit. Prerequisite: previous upper division physics course.

PHYS 5030 - Physics for Teachers (2-3)

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.

POLS-Political Science Courses**POLS 1010 - Introduction to Political Science (3)**

The purpose of this course is to define the discipline of political science. By discipline we mean the way in which political science has developed over the past 150 years. We will assess the basic sub-disciplines of political science: American, Comparative, International Relations, Political Theory, Public Administration and Public Law.

POLS 1100 AI - American National Government (3)

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 2060 - Freedoms (3)

An examination, at an introductory level, of the American judiciary and basic constitutional guarantees. Many of the specific cases used as examples will be drawn from the constitutionally fertile area of "school law." This course will have theoretical and practical dimensions.

POLS 2100 SS - Introduction to International Politics (3)

Examines international politics by juxtaposing the traditional Realist model (power, state sovereignty, Balance of Power) emphasizing state competition and the newer Liberal model (potential nuclear catastrophe, environmental dangers, global economic interdependence) emphasizing global cooperation.

POLS 2200 SS - Introduction to Comparative Politics (3)

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 (3)

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 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

POLS 3060 - Mock Trial (2)

An introduction to some of the basic principles of trial advocacy. Students will prepare for participation on the Weber State University Mock Trial team. May be repeated for a total of four hours.

POLS 3140 - Foreign Policy of the United States (3)

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 - Model United Nations (2)

A study of the issues before the current General Assembly of the United Nations as well as preparation for a particular nation's (or nations') position(s) on these issues in preparation for the Model United Nations of the Far West. May be repeated for 4 hours.

POLS 3210 - Politics and Governments of Europe (3)

A study of European political systems with special emphasis on the politics and governments of the United Kingdom, France, and Germany.

POLS 3220 - Politics and Governments of Asia (3)

A study of politics and governments of the major states in the area with particular reference to India, Japan, and China.

POLS 3290 - Introduction to Politics and Governments of Developing Nations (3)

A survey of the political patterns of human beings in the process of modernization by studying the role of colonialism, charismatic leader, political parties, ideologies, military, civil service, and social and economic structures, and the impact of development on stability and integration of nations in Africa, Asia, and Latin America.

POLS 3330 - American Political Thought (3)

Historical examination of American thought with stress on its influences on the development of the American Government.

POLS 3600 - Political Parties (3)

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 (3)

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 (3)

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 3630 DV - Identity Politics (3)

A study of the nature of identity politics and its role in the political process. This course examines the interaction among diverse social groups and emphasizes the effect of socio-demographic differences on political decisions.

POLS 3700 - Introduction to Public Administration (3)

Presents basic theories, concepts, and analysis of current practices and problems in governmental administration.

POLS 3750 - Urban Government and Politics (3)

A study of local government organization and policy problems, with an emphasis on problems of the metropolitan areas.

POLS 3760 - State Government and Politics (3)

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 3990 - Quantitative Analysis (3)

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 - American Constitutional Law I: Governmental Powers (3)

An introduction to many of the basic doctrines of American Constitutional Law relating to government power including: Essential questions in constitutional theory; the role of the federal judiciary – particularly the United States Supreme Court; congressional power under the Constitution; executive authority under the Constitution; and federalism.

POLS 4030 - American Constitutional Law II: Civil Liberties and Civil Rights (3)

An introduction to many of the basic doctrines of American Constitutional Law relating to civil rights and civil liberties including: The process of selective incorporation - why and how the Bill of Rights applies to the states; property rights in the United States, those rights afforded to criminal defendants; First Amendment liberties – freedom of speech, press, and freedom of religion; the rights and liberties that have emerged from the equal protection clause of the Fourteenth Amendment; and, finally, the controversial and evolving “right of privacy.”

POLS 4060 - Elements of Law (3)

An introduction to the study of law and the United States' legal system. The course is divided into four fundamental areas of study: The function, development, and history of the law; judicial process; the legal profession; and specific areas of the law.

POLS 4070 DV - Sex Roles and the Law (3)

An examination of the ways law affects men and women differently and the way law is changing to reflect economic and political change.

POLS 4160 - Topics in World Politics (3)

The study of selected contemporary problem areas in world politics to assess their impact within the international arena. Diversity credit is available when the selected topic is “Topics in World Politics: Third World Women.” A maximum of 6 hours will be counted toward the hours required for Political Science majors and only 4 hours will be counted toward the political science minor requirement.

POLS 4180 - International Law and Organization (3)

An examination of the basic principles of international law and organization. Emphasis is given to the sources and evolution of international law, and a study of the League of Nations and the United Nations.

POLS 4190 - Theories of International Politics (3)

An analysis of traditional and contemporary theories offered to explain politics in the international arena.

POLS 4280 - Foreign Policies of Major Powers (3)

An examination of the foreign policies of major powers including the United States, Britain, China, France, Germany, India, Japan, and Russia.

POLS 4360 - Classical Political Thought (3)

An examination of ideas of God, human nature, society, the state, the problem of evil, etc., from Ancient Greece to the middle ages.

POLS 4380 - Modern Political Thought (3)

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 (3)

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 4640 - American Presidency (3)

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 4700 - Politics of Administration (3)

A study of public administration from a conflict/power perspective rather than authority. A survival course for public managers.

POLS 4750 - Public Policy Analysis (3)

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 4800 - Individual Projects and Research (1-3)

A maximum of 6 hours may be counted toward the major or 3 hours toward the minor. Prerequisite: Department approval required.

POLS 4830 - Directed Readings (1-3)

A maximum of 6 hours may be counted toward the major or 3 hours toward the minor. Prerequisite: Department approval required.

POLS 4860 - Internships (1-6)

A maximum of 6 hours may be counted toward the major or 3 hours toward the minor. Prerequisite: Department approval required.

POLS 4870 - Internship in Perspective (3)

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: POLS 4860.

POLS 4880 - Internship Research (3)

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. Prerequisite: POLS 4860.

POLS 4920 - Short Courses, Workshops, Institutes and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

POLS 4940 - Topics in American Politics & Thought (1-3)

The study of selected contemporary problem areas in American politics and thought to assess the impact and implication within the U.S. domestic arena. This course may be taken twice (in different topics). This course may count once to satisfy a subfield requirement at the discretion of the department chair.

POLS 4990 - Senior Seminar/Senior Thesis (3)

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. Prerequisite: POLS 1010. Department approval required. Note: Political Science BS students must take POLS 3990 before POLS 4990.

PSY-Psychology Courses**PSY 1010 SS - Introductory Psychology (3)**

Introduction to the scientific study of human behavior.

PSY 1050 - Careers in Psychology (1)

Presents information and the critical thinking/decision making methods and activities necessary for the exploration of careers in Psychology. Students learn life planning, career planning, and educational planning methods. The course requires students to develop their own plans and design an educational program.

PSY 1540 - Psychology of Adjustment and Growth (3)

This course is designed to introduce students to psychological concepts that are involved with understanding their identity, psychological adjustment, and potential for growth. Students will have an opportunity to learn the psychological principles and processes underlying psychological health and apply the issues in the course to their personal lives. Topics include: managing stress, love and intimacy, relationships, gender issues, sexuality, work and recreation, loneliness and solitude, death and loss, meaning and values, and personal growth.

PSY 2000 SS - Interpersonal Relationships (3)

The systematic analysis of interpersonal relationships is used to teach the skills and attitudes necessary for relationship development, maintenance, and repair. The acquisition of effective relationship skills and the communication styles that support them throughout various types of developmental stages and situations in modern life, will be emphasized.

PSY 2010 - Science and Profession of Psychology (3)

The purpose of this course is to build upon Introductory Psychology so that students may better understand the discipline as both a science and a profession. 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. Prerequisite: PSY 1010.

PSY 2370 DV - Psychology of Women and Gender (3)

The philosophical, theoretical, and empirical issues of psychology of gender. Issues include gender differences, stereotypes, androgyny, sexuality, health issues, achievement motivation, gender stereotypes, global women's issues, sexual orientation, issues for women with disabilities, and violence. Prerequisite: PSY 1010.

PSY 2730 - Biopsychology (3)

Biological basis of human & animal behavior, with emphasis upon sensory and nervous system processes underlying motivation, learning, perception, emotion, & abnormal behavior. Prerequisite: PSY 1010.

PSY 2800 - Projects and Research (1-3)

Supervised participation in faculty research projects in various areas of psychology. Repeatable for a maximum of 4 hours. Written report required at end of semester; oral report assigned at discretion of faculty supervisor. Prerequisite: PSY 1010 and permission of the instructor.

PSY 2830 - Directed Readings (1-3)

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. Repeatable for a maximum of 4 credit hours. A paper written in APA style and oral report are required at the end of the term. Prerequisite: PSY 1010 and faculty mentor permission.

PSY 2890 - Cooperative Work Experience (1-2)

Open to all students who meet the following requirements. 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 4380 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. Prerequisite: PSY 1010. May be repeated for up to four semester hours.

PSY 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3) Variable Title

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript. Prerequisite: PSY 1010.

PSY 3000 - Child Psychology (3)

Principles and theories of physiological, psychological, emotional, cognitive, personality and social child development and parent-child relations and developmental problems.

PSY 3010 - Abnormal Psychology (3)

An overview of abnormal human behavior, its etiology, symptoms and treatment as seen by current psychological paradigms.

PSY 3020 - Child and Adolescent Psychopathology (3)

An overview of the etiology, diagnosis, developmental course, treatment, and prevention of disorders first evident in childhood and adolescence. Prerequisite: PSY 1010.

PSY 3100 DV - Psychology of Diversity (3)

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.

PSY 3140 - Psychology of Adolescence (3)

Principles and theories of physiological, psychological, emotional, cognitive, personality and social adolescent develop-

ment and parent-adolescent relations and developmental problems.

PSY 3200 - Psychology of Sport, Injury & Rehabilitation (3)

This course is designed to provide a basic understanding of the psychology of sport, injury, and rehabilitation. Topics covered include: emotion, motivation, mental skills training and use, psychological antecedents of injury, psychology of injury and rehabilitation, 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. Prerequisite: PSY 1010 or HLTH 1110. Cross-listed with AT 3200.

PSY 3250 - Conditioning & Learning (3)

Principles of behavioral conditioning and higher-order learning in humans and animals. Emphasizes the role of heredity, environment, and experiences in the acquisition and modification of behavior. Prerequisite: PSY 1010.

PSY 3270 - Motivation and Emotion (3)

Theories, content areas, research methods, measurement and practical applications in the psychology of motivation and emotion. Prerequisite: PSY 1010.

PSY 3300 - Applied Behavior Intervention (3)

Principles and procedures of behavior intervention, modification, and management based upon scientifically validated behavior learning theory. Practical applications for diverse populations and age groups in a variety of settings and environments (e.g., home, school, work) will be covered. Prerequisite: PSY 1010 or equivalent.

PSY 3430 - Theories of Personality (3)

A survey of the major theories of personality. Prerequisite: PSY 1010.

PSY 3450 - Psychology of Language (3)

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. Prerequisite: PSY 1010 or ENGL 3010.

PSY 3460 - Social Psychology (3)

An empirically based survey of the effects of social influence on the basic psychological processes of individuals. Included are the individual in culture and society, the development of attitudes, and the impact of the group. Prerequisite: PSY 1010.

PSY 3500 - Cognition (3)

Principles of cognition and thinking including attention, memory, concept learning, decision making, and problem solving. Prerequisite: PSY 1010.

PSY 3550 - Psychology of Consciousness (3)

The study of the nature, origins, evolution, and functions of brain, mind and consciousness as these pertain to sensation, perception, learning, memory, cognition, motivation, emotion, behavior, and social relationships from a contemporary neuro-cognitive science perspective. Prerequisite: Introductory Psychology (PSY 1010), Biopsychology (PSY 2730) and instructor consent required; recommend some background in Introductory Philosophy, Perception, and/or Cognition.

PSY 3560 - Group Dynamics and Counseling (3)

Principles of effective small group behavior. Awareness of group forces and pressures and development of insights into personal relationships in groups. Theoretical and experiential approaches to Group Counseling. Prerequisite: PSY 1010.

PSY 3600 - Statistics in Psychology (3)

Techniques of data collection and analysis for application to experimental research in Psychology. Prerequisite: MATH 1010 or equivalent.

PSY 3605 - Psychology Statistics Lab (1)

This course covers the application of statistical, database, and graphical software for psychological research analysis and presentation. Pre-requisite or co-requisite: PSY 3600 or equivalent.

PSY 3610 - Research Methods in Psychology (4)

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. Prerequisite: PSY 1010 and PSY 3600 or equivalent with prior approval from the Department Chair. Prerequisite/co-requisite: PSY 3605 or equivalent with prior approval from the Department Chair.

PSY 3710 - Physiological Psychology (3)

Basic neuroanatomy and neurophysiology at a molecular level with emphasis on cell membranes, receptors, neurotransmitters, drug and hormonal actions. Analysis of motor and regulatory systems, cognitive processes of learning, memory and language. An emphasis on neural structures and functions relating to normal and abnormal behavior. Prerequisite: PSY 2730 or ZOO 2100 or equivalent; or permission of instructor.

PSY 3730 - Perception (3)

Sensory and perceptual processes whereby living organisms acquire information about the world through the sensory structures, and then select, organize and interpret that information. Prerequisite: PSY 1010.

PSY 3740 - Drugs and Behavior (3)

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. Prerequisite: NEUR 2050 or PSY 2730 or instructor approval.

PSY 4000 - Advanced General (3)

A senior level review of modern concepts in all the major areas of psychology. Designed to help a student prepare for the advanced part of the GRE in psychology. Strongly recommended for those who plan to teach psychology. Prerequisite: PSY 1010.

PSY 4050 - Evolutionary Psychology (3)

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. Prerequisite: PSY 1010.

PSY 4090 - History and Systems of Psychology (3)

Early philosophical origins and contributions to psychology; critical contrasts of systems and schools on major issues. Prerequisite: PSY 1010.

PSY 4310 - Introduction to Counseling Theories (3)

A didactic 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. Prerequisite: (Required) PSY 1010 and PSY 3010.

PSY 4340 - Skills and Techniques of Counseling (3)

Provides skills and techniques for counselors, ministers, social workers, and other professionals who serve a helping function. Three hours of lecture and two hours of lab/week. Prerequisite: (Recommended) PSY 4310 or equivalent and permission of the instructor.

PSY 4380 - Practicum (2)

Placement of students in state and community agencies for the purpose of providing supervised practice in application of psychological skills and knowledge. A maximum of four credit hours counted toward the psychology major and minor from the following courses: PSY 2890, PSY 4890, 4380 and PSY 4390. Prerequisite: 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.

PSY 4390 - Practicum (2)

Placement of students in state and community agencies for the purpose of providing supervised practice in application of psychological skills and knowledge. A maximum of four credit hours counted toward the psychology major and minor from the following courses: PSY 2830, PSY 4890, PSY 4380 and 4390. Prerequisite: 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.

PSY 4510 - Industrial and Organizational Behavior (3)

The psychological aspects of the work setting including selection, training, motivation, attitudes, and the effects of the organization. Prerequisite: (Recommended) PSY 1010.

PSY 4760 - Tests and Measurements (3)

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. Prerequisite: PSY 1010, PSY 3600 and PSY 3010.

PSY 4800 - Projects and Research (1-3)

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. Prerequisite: PSY 1010, PSY 3600 (Statistics), and PSY 3610 (Research Methods) or equivalent, and faculty mentor permission. Repeatable for a maximum of 6 credit hours.

PSY 4830 - Directed Readings (1-3)

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. Repeatable for a

maximum of 6 credit hours. A paper written in APA style and oral report are required at the end of the term. Prerequisite: PSY 1010, PSY 3600 (Statistics), PSY 3610 (Research Methods) or equivalent, and faculty mentor permission. PSY 3610 may be taken concurrently with PSY 4830.

PSY 4890 - Cooperative Work Experience (1-2)

Open to all students. 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, 4890, PSY 4380 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. Prerequisite: PSY 1010. May be repeated for up to 4 semester hours.

PSY 4900 - Selected Topics in Psychology (2-3) Variable Title

An in-depth exploration of selected topics and issues in the discipline, designed as an upper division course. Repeatable for a maximum of 6 hours.

PSY 4910 - Capstone Research Project (3)

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.

PSY 4920 - Workshops, Institutes and Special Programs (1-3) Variable Title

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

PSY 4990 - Seminar (1) Variable Title

Readings and active discussions of selected psychological topics. Repeatable for up to a total of 2 hours.

QUAN-Econ/Quantitative Courses**QUAN 2400 - Business Calculus (3) F, Sp**

Emphasis on applications of quantitative tools to problems in business. Topics include profit maximization, cost functions, demand analysis, and output maximization with budget constraints and resource allocation. Prerequisite: MATH 1050 with a "C" or higher grade (or CR if taken on a CR/NC basis) or equivalent as determined by the Math Department.

QUAN 2600 - Business Statistics I (3) F, Sp

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. Prerequisite: MATH 1050 with a "C" or higher grade (or CR if taken on a CR/NC basis) or equivalent as determined by the Math Department.

QUAN 3610 - Business Statistics II (3) F, Sp

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. Prerequisite: QUAN 2600.

RADT-Radiography Courses**RADT 1022 - Introduction to Radiologic Technology (2)**

Program orientation, elementary radiation protection and basic darkroom procedures.

RADT 1303 - Principles of Radiographic Exposure I (3)

Theory of x-ray production; image production and radiographic equipment.

RADT 1502 - Radiographic Anatomy and Positioning I (2)

Terminology, pathology and radiographic positioning.

RADT 1512 - Radiographic Anatomy and Positioning II (3)

Continuation of RADT 1502. Prerequisite: RADT 1502.

RADT 1522 - Radiographic Anatomy and Positioning III (2)

Continuation of RADT 1512.

RADT 1532 - Radiographic Anatomy and Positioning IV (3)

Continuation of RADT 1522. Prerequisite: RADT 1522.

RADT 1601 - Laboratory Experience (2)

Patient positioning, darkroom experience and review of radiographic quality.

RADT 1621 - Laboratory Experience (2)

Continuation of RADT 1601. Prerequisite: RADT 1601.

RADT 1641 - Laboratory Experience (1)

Continuation of RADT 1621.

RADT 1661 - Laboratory Experience (1)

Continuation of RADT 1641.

RADT 2043 - Patient Care and Assessment I (2)

Patient care and management in radiology.

RADT 2272 - Basic Sectional Anatomy (2)

The anatomical appearance of each organ system and common pathology on sectional medical images.

RADT 2403 - Principles of Radiographic Exposure II (2)

Radiographic imaging, instrumentation, image production and factors affecting radiologic quality.

RADT 2803 - Independent Research (1-3)

Individualized projects.

RADT 2833 - Directed Readings and Research (1-3)

Selected readings and/or a research project on medical imaging procedures.

RADT 2861 - Clinical Education (3)

Experience gained in a health care facility. Prerequisite: Acceptance into the program.

RADT 2862 - Clinical Education (3)

Continuation of RADT 2861.

RADT 2863 - Clinical Education (3)

Continuation of RADT 2862.

RADT 2864 - Clinical Education (3)

Continuation of RADT 2863.

RADT 2865 - Clinical Education (2)

Continuation of RADT 2864.

RADT 2866 - Final Competency Evaluation (2)

Demonstration of competency performing the procedures required by the certification agency.

RADT 2913 - Comprehensive Review (2)

Review of didactic and clinical applications.

RADT 2921 - Workshop, Conferences and Telecourses (1-3)**RADT 2942 - Career Planning and New Technology (2)**

Assistance with career planning and an introduction to specialized imaging procedures and new and future imaging procedures.

RADT 2992 - Seminar (1-2)

Patient case studies and critical care situations.

RADT 3003 DV - Psycho-Social Medicine (3)

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 (3)

Medical ethics and law and case studies in medical imaging and radiation therapy.

RADT 3123 - Sectional Anatomy (3)

Anatomical study of the body in the sagittal, transverse and coronal imaging planes.

RADT 3143 - Imaging Pathophysiology (3)

Imaging adaptations and alterations in anatomy and physiology with variation outside of the normal range.

RADT 3243 - Patient Care and Assessment II (3)

System analysis and advanced level of patient care, assessment and management in radiology.

RADT 3253 - Patient Care and Assessment III (3)

Intravenous therapy, patient care procedures and monitoring during imaging studies.

RADT 3263 - Diagnostic Services Pharmacology (3)

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 (3)

Effects of ionizing radiation on the human body, patient and personnel protection, exposure monitoring health physics and oncology.

RADT 3423 - Federal Regulations (3)

Regulations governing health care, equipment and application of ionizing radiation.

RADT 3443 - Quality Assurance in Radiology (3)

Development of a quality assurance program and manual to meet accreditation requirements.

RADT 3463 - Computerized Imaging (3)

Digital radiography, image acquisition, image processing and digital image management.

RADT 3563 - Managing Clinical Information (3)

Digital and volumetric imaging, emerging technologies, secure computerized management practice, and patient privacy regulations.

RADT 3863 - Clinical Internship (2-6)

Experience in a radiology specialty area. Consent of instructor is required.

RADT 4203 - Patient Education in Radiology (3)

Skills necessary to assess, plan and evaluate a variety of educational programs specific to radiology patients.

RADT 4213 - Supervision and Staff Development (3)

Federal regulations, developing department protocol, designing departments personnel supervision and quality of care assessment.

RADT 4223 - Promotional Strategies (3)

Assessment of needs, development and implementation of promotional strategies for Radiology Departments.

RADT 4233 - Fiscal Analysis in Radiology (3)

Justification, acquisition and leasing of imaging equipment and accessories, staffing formulas and review of maintenance contracts.

RADT 4243 - Quality Management in Radiology (3)

Concepts and principles of quality management, collection and analysis of data.

RADT 4253 - Risk Management (3)

Study of management of risk associated with the delivery of health care in clinical and non-clinical settings.

RADT 4303 - Cardiology (3)

Detailed study of the heart: anatomy, physiology, pathophysiology, pharmacology, EKGs and imaging modalities.

RADT 4313 - Visceral, Pelvic and Extremity Angiography (3)

Anatomy, pathology, protocols and interventional procedures of abdominal viscera, extremities and pelvis.

RADT 4333 - Head and Neck Angiography (3)

Anatomy, pathology, protocols and interventional procedures of the aortic arch, brachiocephalic, thyroid and other facial and neck arteries.

RADT 4343 - Thoracic and Venous Procedures (3)

Anatomy, pathology, protocols and interventional procedures of the venous and cardiac systems.

RADT 4403 - Imaging Pathology (3)

Radiographic presentation of pathological conditions, abnormalities and anomalies.

RADT 4413 - Forensic Radiology (3)

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 (3)

Digital imaging and communication standards, PACS administration, image quality, and emerging technology standards.

RADT 4443 - Imaging Informatics (3)

Analyzing system needed, project management, quality improvement, bioinformatics, clinical informatics, and medical informatics.

RADT 4543 - Bone Densitometry (3)

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 (3)

Normal breast anatomy and physiology compared to pathological conditions.

RADT 4563 - Mammographic Positioning/Imaging Techniques (3)

Routine positions, risk versus benefit; tissue variations, specialized procedures and imaging modalities.

RADT 4572 - Patient Education and Clinical Examination (2)

Breast disease and reconstruction methods, breast examination, rehabilitation, medical-legal considerations.

RADT 4573 - The Female Patient and Medical Imaging (3)

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 (3)

Equipment operation, technical factors and quality assurance procedures in mammography.

RADT 4603 - Magnetic Resonance Imaging Physics and Instrumentation (3)

Physical principles and theories of magnetic resonance, instrumentation, imaging sequences and methods in normal and abnormal tissue, and computer parameters of magnetic resonance.

RADT 4613 - Computed Tomography of the Torso and Limbs (3)

Sectional anatomy, pathology and imaging protocols of the abdominal viscera, pelvis, thorax and extremities.

RADT 4623 - Advanced MRI Procedures and Safety (3)

Evaluation of organ function and diagnosis of disease process using advanced MRI procedures with emphasis on spectroscopy and functional MR. Includes an in-depth study of MRI safety.

RADT 4633 - Magnetic Resonance Imaging of the Central Nervous System (3)

Sectional anatomy, pathology and imaging protocol of the head, spine and central nervous system.

RADT 4643 - Magnetic Resonance of the Torso and Limbs (3)

Sectional anatomy, pathology and imaging protocols of the abdominal viscera, pelvis, thorax and extremities.

RADT 4653 - Computed Tomography of the Central Nervous System (3)

Sectional anatomy, pathology and imaging protocols of the head, spine and central nervous system.

RADT 4663 - Computed Tomography Physics and Instrumentations (3)

Interactions of electromagnetic waves, instrumentation, imaging sequences and computer parameters of computerized tomography imaging.

RADT 4803 - Individual Research (1-3)

Research projects developed for district, state, regional or national presentation.

RADT 4833 - Directed Readings and Research (3)

Synthesis and analysis of journal articles resulting in a research paper for the purpose of publication.

RADT 4850 - Study Abroad (1-6) Variable Title

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.

RADT 4861 - Clinical Internship (2)

Experience in a radiology specialty area. Consent of instructor is needed.

RADT 4862 - Clinical Internship (2)

Experience in a radiology specialty area. Consent of instructor is needed.

RADT 4863 - Clinical Internship (2-4)

Experience in a radiology specialty area. Consent of instructor is needed.

RADT 4911 - Comprehensive Review/CT (2)

Preparation for advanced certification examination.

RADT 4912 - Comprehensive Review/MRI (2)

Preparation for advanced certification examination.

RADT 4913 - Comprehensive Review/CIT (2)

Preparation for advanced certification examination.

RADT 4914 - Comprehensive Review/M (2)

Preparation for advanced certification examination.

RADT 4915 - Comprehensive Review/QM (2)

Preparation for advanced certification examination.

RADT 4922 - Workshop, Conferences and Telecourses (2)**RADT 4933 - Research Methods (3)**

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 - Current Issues and Trends (2)

Current issues and trends in the health care industry and environment affecting radiology.

RADT 4943 - Baccalaureate Thesis (3)

Research in health professions utilizing the scientific inquiry method.

RADT 4992 - Seminar (1-2)

New developments and procedures in imaging and therapy and preparing for the future.

RADT 5403 - Evaluation of the Osseous System (3)

Imaging evaluation of pathological conditions, abnormalities and anomalies of the osseous system.

RADT 5413 - Evaluation of the Chest (3)

Imaging evaluation of pathological conditions, abnormalities and anomalies of the chest.

RADT 5423 - Evaluation of the Abdomen and G I System (3)

Imaging evaluation of pathological conditions, abnormalities and anomalies of the abdomen and gastrointestinal system.

RADT 5433 - Evaluation of the Genitourinary System (3)

Imaging evaluation of pathological conditions, abnormalities and anomalies of the genitourinary system.

RADT 5443 - Clinical Pathways (3)

Studying clinical pathways for patients based on disease processes and trauma. Prerequisite: RADT 5403 and RADT 5413.

RADT 5453 - Evaluation/CNS and Facial Structures (3)

Imaging evaluation of pathological conditions, abnormalities and anomalies of the central nervous system and facial structures.

RADT 5463 - Problem Patient Management (3)

Determination of pathological conditions utilizing problem-solving case studies.

RADT 5473 - Invasive Imaging Procedures (3)

Patient preparation and performance of medical imaging invasive procedures are presented.

RADT 5861 - Clinical Preceptorship (3)

Experience in a radiology department. Consent of instructor needed.

RADT 5862 - Clinical Preceptorship (3)

Continuation of RADT 5861.

RADT 5863 - Clinical Preceptorship (3)

Continuation of RADT 5862.

RADT 5864 - Clinical Preceptorship (3)

Continuation of RADT 5863.

RADT 5865 - Clinical Preceptorship (3)

Continuation of RADT 5864.

RADT 5867 - Competency Assessment/Residency (3)

Assessment of competency knowledge and skills in the clinical setting.

RADT 5868 - Final Competency Assessment (3)

Review and evaluation of student competencies.

RATH-Radiation Therapy Courses**RATH 4330 - Radiation Therapy Physics (3)**

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 (3)

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 (3)

Pathology of cancer; combined therapy and surgery; chemotherapy and radiation therapy; clinical application of treatment techniques; and case studies.

RATH 4412 - Radiation Oncology II (3)

Pathology of cancer; combined therapy and surgery; chemotherapy and radiation therapy; clinical application of treatment techniques; and case studies.

RATH 4414 - Radiation Oncology III (3)

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 (3)

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 (3)

Establishment of a quality assurance program for linear accelerators, simulators and therapeutic isotopes.

RATH 4448 - New Technology in Radiation Therapy (3)

Exploration of the emerging technology and new equipment used in radiation therapy. Prerequisite: Graduate of an approved Radiography Program or equivalent.

RATH 4861 - Clinical Education I (3)

Clinical education designed to facilitate transference of didactic instruction to practical clinical practice.

RATH 4862 - Clinical Education II (3)

Clinical education designed to facilitate transference of didactic instruction to practical clinical practice.

RATH 4863 - Clinical Education III (3)

Clinical education designed to facilitate transference of didactic instruction to practical clinical practice.

RATH 4913 - Comprehensive Review (3)

Review of all didactic and clinical courses and competencies. Guest lecturer and multiple mock registry examinations will be presented.

REC-Recreation Courses**REC 2890 - Cooperative Work Experience (1-9) Su, F, Sp**

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.

REC 3050 - Recreation and Leisure (3) F

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.

REC 3600 - Outdoor Adventure Recreation (3) Sp

Outdoor recreation agencies/businesses/organizations, site visits, services delivery, environmental impacts, legal issues, management. Skills: backpacking/hiking/camping/ropes course leadership, and use of technology in leisure research and programming. Overnight Outing(s) and Field Trips required.

REC 3610 - Outdoor Survival (2) F

Provide the necessary opportunity for a student to acquire skills needed to survive and to live off the land. One lecture and 3 hour field trip are required each week.

REC 3810 - Recreation Leadership & Management (3) Sp

Customer/client-based leisure services, role delineation, settings, site visits, extended "laboratory" experience, programming, pricing, pitching. Skills: Feasibility analysis, assessment.

REC 3840 - Therapeutic and Social Recreation (3) F

Therapeutic recreation concepts & practices, certification & licensure, individual and group games, leadership methods, team building activities and processing, group dynamics, New Games, hands-on leadership experiences with various age groups, special populations, and multicultural perspectives.

REC 4550 - Outdoor Education Philosophies & Principles (2) Sp

Provides basic concepts of outdoor education, and direct, firsthand experience with learning resources beyond the classroom.

REC 4800 - Individual Projects (1-3) Su, F, Sp

A comprehensive study of a significant problem in the field of recreation. Hours to be arranged. For seniors only.

REC 4890 - Cooperative Work Experience (1-6) Su, F, Sp

A continuation of REC 2890.

REC 4930 - Outdoor Education Workshop (2) Su

A broad inter-disciplinary approach to the methodology of outdoor education teaching techniques; experiential learning-course taught almost totally outdoors.

REC 6930 - Outdoor Education Workshop (2) Su

A broad interdisciplinary approach to the methodology of outdoor education teaching techniques; experiential learning-course taught almost totally outdoors.

REST-Respiratory Therapy Courses**REST 1540 - Survey of Respiratory Therapy (1) F, Sp**

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 (1) F, Sp

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 (3) F

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 (3) Sp

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 (3) F

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 (2) F

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 (2) Sp

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 (4) Sp

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 appli-

cation of diagnostic findings and utilizes case studies, class discussions, and extensive study guides.

REST 2300 - Basic Modalities in Respiratory Care I (3) F

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. Concurrent enrollment in REST 2140.

REST 2310 - Basic Modalities in Respiratory Care II (3) F

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 (2) Sp

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.

REST 2330 - Entry Level Respiratory Therapy Review (1) Sp

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 (1) F, Sp

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. Prerequisite: 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 (3) Sp

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, 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. Prerequisite: 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 (2) Sp

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. Prerequisite: 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 (2) Sp

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. Prerequisite: REST 2500/REST 3500 and REST 2502/REST 3502 or medical terminology, human anatomy and human physiology.

REST 2505 - Therapeutics of Managing Sleep Apnea (2) Sp

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. Prerequisite: REST 2501/REST 3501 and REST 2502/REST 3502 or medical terminology, human anatomy and human physiology.

REST 2520 - Principles of Pharmacology (2) Sp

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 - Clinical Applications (4) F

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. Concurrent enrollment in REST 2140.

REST 2710 - Specialty Clinical Experiences (1) Sp

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. Concurrent enrollment in REST 2160.

REST 2720 - Clinical Applications (3) Sp

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. Concurrent enrollment in REST 2160.

REST 2800 - Independent Projects (1-3) F, Sp

Projects must meet departmental and professional goals and standards and must have instructor approval prior to beginning project; enrollment by permission only.

REST 2830 - Directed Readings (1-2) F, Sp

Readings must meet departmental and professional goals and standards and must have instructor approval prior to beginning; enrollment by permission only.

REST 2920 - Short Courses, Workshops, Institutes and Special Programs (1-3) F, Sp

Consult semester schedule for current offerings. The specific title and credit authorized will appear on student transcript.

REST 3210 - Advanced Cardiopulmonary Anatomy and Physiology (2) F

Cardiopulmonary anatomy and physiology specifically for the therapist-level practitioner. Includes advanced anatomical considerations of the cardiac, pulmonary, and renal systems.

REST 3220 - Advanced Cardiopulmonary Pathophysiology (2) Sp

Pathophysiology and diagnosis of coronary artery disease, fungal lung disease, neoplasms, HIV, ARDS, chest injuries, shock in relation to the care of the trauma patient, and a differentiation of the intracellular and extracellular fluid compartments.

REST 3230 - Advanced Cardiopulmonary Technology (2) Sp

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 (2) F, Sp

Pediatric and neonatal respiratory care with emphasis on intensive care activities, therapeutic procedures, life support modalities and fetal, neonatal, pediatric pathophysiology.

REST 3270 - Adult Critical Care (2) F, Sp

Advanced adult respiratory intensive care, including hemodynamic monitoring, ventilation/perfusion monitoring, pulmonary assessment and airway management.

REST 3280 - Patient Care Continuum/Quality Management (3) F, Sp

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 (1) F, Sp

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. Prerequisite: 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 (3) Sp

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. Prerequisite: 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 (2) Sp

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. Prerequisite: 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 (2) Sp

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. Prerequisite: REST 2500/REST 3500 and REST 2502/REST 3502 or medical terminology, human anatomy and human physiology.

REST 3504 - Laboratory Practice of Instrumentation in Polysomnography (1)

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. Prerequisite: REST 3502/REST 2502 or medical terminology, human anatomy and human physiology. Concurrent enrollment with REST 3503.

REST 3505 - Therapeutics of Managing Sleep Apnea (2) Sp

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. Prerequisite: REST 2501/REST 3501 and REST 2502/REST 3502 or medical terminology, human anatomy and human physiology.

REST 3506 - Advanced Technical Procedures (3)

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. Prerequisite: REST 3502 and REST 3503.

REST 3507 - Event Recognition and Polysomnography Scoring (3)

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. Prerequisite: REST 3501 and REST 3502.

REST 3508 - Sleep Center Management (1)

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 (2)

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. Prerequisite: REST 3502 and REST 3505.

REST 3510 - Clinical Practice I in Polysomnography (2)

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. Prerequisite: REST 3502. Concurrent enrollment in REST 3503 and REST 3504.

REST 3511 - Clinical Practice II in Polysomnography (2)

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. Prerequisite: REST 3502 and REST 3510. Concurrent enrollment in REST 3505.

REST 3512 - Clinical Practice III in Polysomnography (4)

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. Prerequisite: REST 3502, REST 3510, and REST 3511. Concurrent enrollment in REST 3506.

REST 3760 - Clinical Applications of Neonatal/Pediatric Respiratory Care (4) F, Sp

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 - Clinical Applications of Adult Critical Care (4) F, Sp

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. To be taken concurrently with REST 3270.

REST 3780 - Clinical Applications (2) F, Sp

Clinical experiences related to REST 3280: rehabilitation, extended care, home care agencies, polysomnography, patient assessment and planning for discharge, and quality management. To be taken concurrently with REST 3280.

REST 3900 - Clinical Simulation Seminar (3) Su, F, Sp

Problem-based clinical concepts course: comprehensive program review including written and clinical simulation examinations. Prerequisite: Enrollment in baccalaureate respiratory therapy program; CRT credential, or equivalent.

REST 4610 - Advanced Patient Assessment (1-2) Su, F, Sp

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 (1-2) Su, F, Sp

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 (1-2) Su, F, Sp

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 (1-6) Su, F, Sp

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.

REST 4830 - Directed Readings (1-3) F, Sp

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.

REST 4850 - Study Abroad (1-6) (Variable Title)

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.

REST 4990 - Senior Seminar (2) Sp

Moderated discussion and/or laboratory experiences relating to current events in health care, legislative and ethical issues, and emergent technologies in respiratory care.

SCM-Supply Chain Management Courses**SCM 3050 - Operations and Logistics Management (3) F, Sp**

This course considers the management of an organization's chain of value adding activities, from procurement of resources and transformation into manufactured goods and service outputs, through distribution to customers. Topics include operations strategy, quality, product and service design, process selection and layout, capacity, production scheduling, inventory, location, supply chain management, procurement, transportation, and other related issues and models. Prerequisite: Business Foundations; BSAD 2899.

SCM 3500 - Computer Models/Applications (3) F, Sp

This course concentrates on the use of computer software to aid in the solution and interpretation of operations management and logistics models. Emphasis is placed on problem identification, problem setup, computer solution, and interpretations of solution results. A significant portion of the course deals with sensitivity analysis which involves using different scenarios of inputs to see how sensitive the model solution is to variation. Prerequisite: Business Foundations; BSAD 2899; QUAN 3610; SCM 3050.

SCM 3720 - Transportation and Global Supply Chain Management (3) F

Examination of transportation principles, practices, and modes in domestic and international contexts; governmental and infrastructure issues; role of intermediaries; international logistics and import/export practices; and shipper, carrier, and intermodal strategies that facilitate efficient global commerce. Prerequisite: Business Foundations; BSAD 2899; SCM 3050.

SCM 4050 - Contemporary Supply Chain Management Practices (3) Sp

This course incorporates readings, site visits, and case analysis to convey state-of-the-art and emerging operations management and logistics practices. Development of leading-edge strategies which promote a firm's ability to differentiate itself in terms of its supply chain performance is emphasized. Field trips required. Prerequisite: Business Foundations; BSAD 2899; SCM 3050.

SCM 4100 - Quality Management and Productivity (3) F, Sp

A survey of quality management principles and practices whereby manufacturing and service organizations achieve customer satisfaction and competitive advantage. Emphasis is on internal/ external customers, employee involvement, service quality, quality planning and design, process management and improvement, problem-solving tools, variation and statistical thinking, statistical process control, and quality management systems. Prerequisite: Business Foundations; BSAD 2899; QUAN 3610; SCM 3050; or Instructor Permission.

SCM 4410 - Materials and Inventory Management (3) Sp

This course emphasizes materials requirements planning and the logistics processes which support production. Topics include MRP, MRPII, JIT, and classical inventory models. Prerequisite: Business Foundations; BSAD 2899; QUAN 3610, SCM 3050.

SCM 4600 - Simulation (3) F

This course explores simulation modeling beginning with the basics of simulating a discrete distribution to construction of simulation models using spreadsheets to the use of complex production and logistical simulation models. Emphasis is placed on problem recognition, problem set-up, simulation model construction, and application and interpretation results. Prerequisite: Business Foundations; BSAD 2899; SCM 3050.

SCM 4730 - Purchasing and Supply Management (3) F

Strategic and procedural issues in the acquisition of materials, equipment, and services by industry. Emphasis is on the integration of the purchasing function into corporate strategy and the value-added contributions of a progressive supply function. Topics include procurement policies, supplier selection, B2B marketplaces, cost analysis and pricing, contract types, negotiation, and supplier management. Prerequisite: Business Foundations; BSAD 2899, SCM 3050, or instructor permission.

SCM 4800 - Independent Research (1-3) Su, F, Sp

Directed research and study on an individual basis. Prerequisite: Business Foundations; BSAD 2899; Senior Standing; Written Instructor Approval. May be repeated until a total of 4 hours credit is accumulated.

SCM 4850 - Supply Chain Management Study Abroad (1-3)

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). Prerequisite: BSAD 2899. Can be repeated once up to 6 credits.

SCM 4860 - Supply Chain Management Internship (3) Su, F, Sp

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. Prerequisite: Business Foundations; BSAD 2899; Senior Standing; Instructor approval.

SOC-Sociology Courses**SOC 1010 SS/DV - Introduction to Sociology (3)**

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/DV - Social Problems (3)

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 2810 - Experimental Course Offerings (2-3)**SOC 2920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)**

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

SOC 3000 - Social Psychology (3)

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. Prerequisite: SOC 1010 or SOC 1020.

SOC 3010 DV - Social Inequality (3)

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. Prerequisite: SOC 1010 or SOC 1020.

SOC 3030 - Classical Sociological Theory (3)

A study of the classical tradition of sociological thought in late 18th to early 20th century Europe and 19th to early 20th century U.S. The course introduces the main theories of Comte, Martineau, Marx, Weber, Simmel, Durkheim, and others, including early theorists of gender and race. To be taken before SOC 4030. Prerequisite: SOC 1010 or SOC 1020.

SOC 3110 - Sociology of Family (3)

Analyzes family arrangements and structure, changes in such arrangements over time, and contemporary issues facing families in our ever-changing world. Emphasis is placed on variations in family experiences with regard to race, gender, social class, and sexual orientation. Family, as it relates to other social institutions such as politics, religion, and the economy, is also explored.

SOC 3120 DV - Sex/Gender Roles: Past, Present, Future (3)

An overview of the differences and similarities in human sex roles cross-culturally and over time, with special emphasis on the influences of biology, socialization, and ecology in their origin, perpetuation, and change. (Cross listed with ANTH 3700.)

SOC 3130 - Sociology of Gender (3)

This course is an examination as to how and why communities create gender categories as well how 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. Prerequisite: SOC 1010 or SOC 1020 or WS 1500 or permission of instructor.

SOC 3250 - Deviance and Social Control (3)

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. Prerequisite: SOC 1010 or SOC 1020.

SOC 3260 - Juvenile Delinquency (3)

Juvenile delinquency as a social phenomenon and its causes involving definitions, agencies of law enforcement, and the courts. Prerequisite: SOC 1010 or SOC 1020.

SOC 3270 - Criminology (3)

Study of the nature, extent, causes, and treatment of crime. Prerequisite: SOC 1010 or SOC 1020.

SOC 3300 - Environment and Society (3)

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 and Social Movements (3)

The factors which change society and how society changes, emphasizing technological innovations and its implications, social movements, and the role of individuals. Prerequisite: SOC 1010 or SOC 1020.

SOC 3410 - Sociology of Religion (3)

Examination of religion and religious activities globally from the theoretical perspectives of Sociology.

SOC 3420 - Sociology of Education (3)

Analysis of the structure and function of education as a central social institution in contemporary society.

SOC 3430 - Medicine and Healthcare in Society (3)

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 3540 - Small Groups & Leadership (3)

The formation, structure, and functioning of small groups in terms of group processes and group products. This course will also examine authority, leadership principles and skills, decision making processes, and motivation.

SOC 3550 - Organizations in Society (3)

Surveys the nature and structure of organizations in general and modern formal organizations and globalization in specific. How organizations work, function and affect contemporary society and individuals' lives and behavior. Sociological theories about modern organizations and globalization will be examined. Prerequisite: SOC 1010.

SOC 3600 - Social Statistics (3)

Introduction to descriptive and inferential statistical analysis techniques and the presentation of results. Prerequisite: Social Science General Education course; meet WSU Quantitative Literacy Requirement.

SOC 3660 - Sociological Research (3)

Examines the scientific foundations of Sociology and methods of Sociological Research. Prerequisite: SOC 1010 or SOC 1020.

SOC 3840 - Cities and Urban Life (3)

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 DV - American Minorities in Urban Settings (3)

Examines the social conditions of ethnic and racial minorities in the United States, based primarily on current statistical and ethnographic data. Includes a survey of theories of the causes and dynamics of ethnic and race relations.

SOC 4030 - Contemporary Sociological Theory (3)

The works of major contemporary theorists (Mead, Parsons, Merton, Goffman, Garfinkel, etc.) and the emergence of current schools of sociological thought. Prerequisite: SOC 1010 and SOC 3030.

SOC 4120 - Socialization over the Life Course (3)

Study of how social environment, institutions, groups, and interactive networks influence and shape human behavior through the life course.

SOC 4270 - Sociology of Law (3)

A study of the interchange between law and society, where society creates the law, yet law regulates society. Prerequisite: SOC 1010 or SOC 1020.

SOC 4410 DV - Sociology of Globalization (3)

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 4550 DV - Sociology of Work (3)

Explores the relationship between work and social class, gender, technology, race, and ethnicity. Additionally, the nature of occupational subcultures is analyzed.

SOC 4810 - Experimental Course Offerings (2-3)

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.

SOC 4830 - Readings and/or Projects (1-3)

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.) Prerequisite: SOC 1010, senior standing, permission of instructor, approval of program coordinator.

SOC 4890 - Internship (1-6)

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. Prerequisite: SOC 1010, junior or senior status, approval of program coordinator.

SOC 4900 - Senior Capstone Course (3)

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. Prerequisite: SOC 1010, SOC 3030, SOC 3600, SOC 3660, senior standing.

SOC 4920 - Short Courses, Workshops, Institutes, and Special Programs (1-3)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

SOC 4990 - Seminar in Sociology (3) Variable Title

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. Prerequisite: SOC 1010 or consent of instructor. (Maximum of 6 hours may be applied toward graduation.) (Formerly Contemporary Issues.)

SST-Sales & Service Technology Courses

SST 1143 - Fundamental Selling Techniques (3) Su, F, Sp

A retail, wholesale, and direct selling course. Emphasis upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstrations required.

SST 1303 - Sales Channels (3) Su, F, Sp

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.

SST 1401 - Introduction to Sales and Service Technology (1) Su, F, Sp

This course is designed to help those new SST majors or those exploring the SST 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.

SST 1503 - Introduction to Fashion Merchandising (3) Su, F, Sp

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.

SST 1890 - Work Experience (1-3) F, Sp

Open to all first year declared majors in Sales & Service. 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.

SST 2182 - Credit and Collection Methods (2) Su, F, Sp

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.

SST 2383 - Retail Merchandising and Buying Methods (3) Su, F, Sp

The study of the retail buyer's duties, different buying organizations, and techniques, procedures of purchasing merchandise for resale and retail merchandising strategies.

SST 2443 - Advertising Methods (3) Su, F, Sp

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.

SST 2603 - Advanced Selling Techniques (3) Su, F, Sp

Study of advanced techniques including, opening, investigating, demonstrating capability and obtaining commitment of the consultative and strategic seller.

SST 2703 - Internet Sales and Service (3) Su, F, Sp

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.

SST 2890 - Work Experience II (1-3) F, Sp

Open to second year declared majors in Sales and Service. A continuation of SST 1890. May be repeated a maximum of 3 times or until a maximum of 6 credit hours is reached.

SST 2903 - Professional Selling on the Internet (3) Su, F, Sp

The study of selling and customer service techniques as they are applied to web site development and Internet sales.

SST 2991 - Sales/Service Technology Seminar (1-3) Sp

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.

SST 3103 - Sales Personalities and Profiles (3) Su, F, Sp

Utilization of personality profiling and behavioral styles profiling assessment instruments as applied to account representatives, retail salespersons, sales engineers, industrial product salespersons non-technical and service salespersons. Prerequisite: SST 1143.

SST 3203 - Customer Service Techniques (3) Su, F, Sp

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.

SST 3363 - Contract and Sales Negotiation Techniques (3) Su, F, Sp

Principles, techniques and analysis of strategies involved in contract and sales negotiations. Development of integrated strategies through group and individual interaction. Prerequisite: SST 1143.

SST 3403 - Pharmaceutical and Medical Device Sales (3) Sp

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. Prerequisite: SST 1143 and SST 2603.

SST 3503 - Sales Planning and Forecasting (3) Su, F, Sp

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. Prerequisite: SST 1143, SST 2603, SST 3103.

SST 3563 - Principles of Sales Supervision (3) Su, F, Sp

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.

SST 3702 - Developing Team Leadership Skills (2) Su, F, Sp

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. Prerequisite: SST 3563.

SST 3803 - Sales Proposals (2 contact, 1 lab) Su, F, Sp

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. Prerequisite: SST 3563.

SST 3903 - Sales Presentation Strategies and Techniques (3) Su, F, Sp

Principles and practices for the five major categories of professional sales consultants. Prerequisite: SST 1143 and SST 3803.

SST 4203 - Ethical Sales and Service (3) Su, F, Sp

Principles, techniques and analysis of ethics in the sales and service professions. Utilizes group interaction, individualized hands-on experiences and a field based experience.

SST 4610 - Senior Project I (3) Su, F, Sp

A capstone project for students in their final year of the technical 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. Prerequisite: SST 3103, SST 3363, SST 3903.

SST 4620 - Senior Project II (3) Su, F, Sp

A continuation of SST 4610. Prerequisite: SST 3103, SST 3363, SST 3903.

SST 4830 - Directed Readings (1-3) F, Sp

Individual readings supervised by a faculty member. Prerequisite: Approval of instructor.

SST 4920 - Short Courses, Workshops, etc (1-2) F, Sp

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

SST 4993 - Sales Career Seminar (3) Su, F, Sp

Research and discussion of sales and service related problems. Also designed to prepare sales and service majors for the job market and career opportunities.

SW-Social Work Courses**SW 1010 SS - Introduction to Generalist Social Work (3)**

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 - Human Behavior and the Social Environment I (3)

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. Prerequisite: SW 1010. (It is suggested that LS1020 be taken before or concurrently with SW 2100.)

SW 2200 DV - Issues in Diversity (3)

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 (1-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized for these elective courses will appear on the student transcript.

SW 3000 - Death and Dying (3) Sp

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 (2)

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. Prerequisite: SW 1010, SW 2100 and formal admittance to the Social Work Program.

SW 3120 - Aging: Adaptation and Behavior (3) F

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 (2)

A historical and contemporary examination of child and family welfare issues, and social work intervention strategies. Prerequisite: SW 1010.

SW 3320 DV - Ethnicity and Older Women in the American Society (3) F

The importance of special populations (ethnic, racial and women) as they relate to the aging process. Prerequisite: Cross-listed with GERT 3320.

SW 3500 - Social Welfare & Gerontological Policy Development and Service (3)

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. Prerequisite: SW 1010 or GERT 1010. (SW/GERT 3500 must be completed before entering Field Practice.)

SW 3600 - Social Statistics (3)

Introduction to analysis and presentation of data. Prerequisite: Meet WSU Quantitative Literacy requirement. Cross-listed with GERT 3600.

SW 3700 - Social Work Research (3)

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. Prerequisite: SW 1010. (Must be completed before entering SW 4861.) Recommended prerequisite: completion of social statistics class.

SW 3800 - Writing in Social Work (3)

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. Prerequisite: University Composition (ENGL 2010 or equivalent). (It is recommended that this course be taken concurrently with SW 3700 and/or SW 4860.)

SW 3900 - Social Work Methods, Values, and Ethics (3)

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. Prerequisite: 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 (3)

An intensive knowledge-based generalist course concentrating on micro social work intervention skills combining lecture and hands-on experiences. Prerequisite: Formal admittance to the social work program. (May be taken prior to or concurrently with SW 3900.)

SW 3920 - Social Work Practice II (3)

A generalist course directed at understanding and demonstrating the principles, concepts and techniques of planned change in mezzo settings including families and small groups. Prerequisite: SW 3910. (Must be taken concurrently with SW 3930 and SW 4860.)

SW 3930 - Social Work Practice III (3)

A generalist course designed to illustrate the principles, concepts and techniques of planned change in macro settings including institutions, organizations, and communities. (Must be taken concurrently with SW 3920.)

SW 4140 - Perspectives on Drug Use and Substance Abuse (3)

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 IV-TR (3)

This elective course is designed to familiarize the social work student with the Diagnostic Statistical Manual for Mental Disorders (DSM IV-TR classification). The DSM IV-TR provides the practitioner with a systematic diagnostic tool for practice and research.

SW 4220 - Societal Responses to Aging (3) F

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 4250 - Medical Social Work (3)

This elective course explores the process and dynamics of the provision of social work services within the medical service delivery system.

SW 4500 - Interventions for Populations at Risk (3)

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. Prerequisite: SW 3910.

SW 4600 - Social Work in Special Settings (2-4)

This elective course is designed to accommodate special topic areas in Social Work practice. (Maximum hours toward graduation 4.)

SW 4650 - Retirement: Adjustment/Planning (3) Sp

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 (1-3)

This elective course allows for supervised projects and primary research in various areas of social work. Limited to senior students. Repeatable for a maximum of 3 credit hours. Prerequisite: Consent of department chair and instructor.

SW 4810 - Experimental Courses (2-3)

This elective course is designed to accommodate new courses under an experimental format.

SW 4830 - Directed Readings (1-3)

This elective course is an individual readings for seniors who are majoring in social work. Repeatable for a maximum of 4 credit hours. 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.

SW 4860 - Social Service Field Experience I (4)

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. Prerequisite: SW 3200 and SW 3500/GERT 3500. Formal admittance to Field Experience required. (Must be taken concurrently with SW 3920 and SW 3930.)

SW 4861 - Social Service Field Experience II (4)

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. Prerequisite: SW 3700, SW 4860, GERT 3600/PSY 3600/SOC 3600. (To be taken concurrently with SW 4990.)

SW 4890 - Cooperative Work Experience (1-3)

This TBA elective course provides opportunity for students to earn academic credits for on-the-job experiences. Prerequisite: SW 3910 and consent of department chair and instructor.

SW 4920 - Short Courses, Workshops, Institutes, and Special Programs (2-4)

Consult the semester class schedule for the current offering under this number. The specific title and credit authorized for these elective courses will appear on the student transcript.

SW 4990 - Social Work Senior Seminar (2)

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. Prerequisite: SW 4860. (Must be taken concurrently with SW 4861.)

SW 5010 - Professional Development: Human Development in the Social Environment (3)

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.*

SW 5020 - Professional Development: Social Welfare Policy (3)

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 (3)

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 res-

olution of ethical dilemmas. The course also includes content on the evaluation of practice and programs. *Credit/No credit.*

THEA-Theatre Arts Courses

THEA 1013 CA - Introduction to Theatre (3) Su, F, Sp

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 (3) Su, F, Sp

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. A lab fee is required for this class.

THEA 1030 - Voice and Movement for the Actor (3) F

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. Prerequisite: THEA 1033. (Theatre majors only).

THEA 1033 CA - Acting I (3) Su, F, Sp

An overview of dramatic creativity that uses the human body, intellect and spirit to explore, interpret and present dramatic scripts. Course includes fundamentals of acting and stage comportment. 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 (3) F, Sp

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: Musical Theatre majors are strongly encouraged to enroll in this class fall semester.

THEA 1051 - Freshman (New Student) Seminar (1) F

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 CA - Introduction to Technical Production (3) F, Sp

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 1223 - Stage Makeup (2) Sp

A practical investigation of stage makeup techniques and skills of design and application. Class meets the 1st block of spring semester. A lab fee is required for this class.

THEA 1713 - Script Analysis (3) Sp

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. Co-Requisite: (Recommended) THEA 1033.

THEA 2012 - Stage Scenery (2) F

Introduction to stage scenery: lecture/demonstration of basic materials, shop and stage equipment, construction principles, and elementary technical drawing and design procedures. Class meets the 1st block of fall semester.

THEA 2022 - Stage Costume (2) F

Introduction to stage costume: lecture/demonstration of basic materials, fabrics, costume construction methods, elementary design principles, costume history, research and procedures for theatrical costumes. Class meets the 1st block of fall semester.

THEA 2032 - Stage Lighting (2) Sp

Lecture/demonstration of principles and practical use of electricity, lighting equipment, control systems, elementary technical drawing, and lighting design practice as applied to the stage. Class meets the 1st block of spring semester.

THEA 2033 - Acting II (3) F

Applies the principles learned in Acting I on a more intense level. Includes two arranged acting studio hours per week. Prerequisite: THEA 1030, THEA 1033, and by audition.

THEA 2203 - Costume Technology (3) Sp odd

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. Prerequisite: (Recommended) THEA 2022. Offered spring semester every odd-numbered year.

THEA 2403 - Production and Stage Management (3) F

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 (3) F

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. Prerequisite: THEA 2033 and admittance to the Musical Theatre program.

THEA 2920 - Short Courses, Workshops, Institutes and Special Programs (1-6)

Consult the semester class schedule for the current offering under this number. The department will determine the specific title and credit authorized.

THEA 3033 - Advanced Acting (3) Sp

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. Prerequisite: THEA 2033, and by audition.

THEA 3103 - Directing I (3) F

Theory and practical application of directing approaches. Prerequisite: THEA 1033, THEA 1013 and THEA 1713.

THEA 3212 - Scenic Design (2) Sp even

Scenic Design will provide a practical exploration of the methods and materials of scenic design for the theatre. The course includes instruction in visual research, conceptual sketching, rendering, hand and computer aided drafting for theatre, and requires some outside class production contribution. Prerequisite: THEA 2012. Class meets the 2nd block of spring semester every even-numbered year.

THEA 3222 - Stage Lighting Design (2) Sp odd

This course is a practical exploration of the equipment, materials, and processes of stage lighting and stage lighting design. The course includes instruction in mechanical drawing by hand and by computer aided design systems. Production work outside of class is required. Prerequisite: THEA 2012 and THEA 2032. Class meets the 2nd block of spring semester every odd-numbered year.

THEA 3232 - Scene Painting (2) F

Applied training in basic scene painting/scenic artist techniques for theatre. Surface preparation, priming, base painting, blending and scumbling, texture and detailing lessons are applied in producing finished demonstration flats including wall surfaces, wallpaper, bricks, rocks, wood grain and molding, marble, foliage, and copying a selected original. Prerequisite: THEA 2012 and THEA 2032. Class meets the 2nd block of fall semester.

THEA 3243 - Costume History (3) F

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 3303 - History and Literature of Theatre I (3) F

A study of theatre and drama from their Pre-Ancient Greek origins through the Renaissance about 1700. The predominantly lecture format course includes significant readings in theatrical practice, historically significant plays, and basics of dramatic criticism. Additional research assignments are required.

THEA 3313 - History and Literature of Theatre II (3) Sp

A study of theatre and drama from about 1700 until the present. The predominantly lecture format course includes significant readings in theatrical practice, historically significant plays, and basics of dramatic criticism. Additional research assignments are required.

THEA 3323 HU - History and Literature of Contemporary Theatre (3)

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 (3) Sp even

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 (3) Sp

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. Prerequisite: admittance to the Musical Theatre program.

THEA 3443 - Scene Study for Musical Theatre (3) Sp

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 dusts, group scenes, and production numbers. Selected composer and lyricists will also be addressed. Prerequisite: THEA 2443 and admittance to the Musical Theatre program.

THEA 3505 - Playwriting (3)

This course will be a practical study of dramatic structure and the process of playwriting, including writing assignments with monologues, scenes, and one-act plays. Extensive writing is required. Prerequisite: ENGL 1010 and ENGL 2010.

THEA 3991 - Junior Seminar (1) F

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. Prerequisite: Theatre major - junior standing.

THEA 4002 - Special Studies in Theatre (2)

Allows for the advanced study of a changing series of pertinent theatre topics. All Special Studies in Theatre courses are half-semester.

THEA 4002C - Special Studies in Theatre: Stage Combat (2)

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.

THEA 4002D - Special Studies in Theatre: Auditioning (2) F

A practical exploration of professional audition techniques including cold reading, prepared monologues, improvisation and portfolio preparation. Class meets the 2nd block of fall semester.

THEA 4002H - Special Studies in Theatre: Contemporary Topics (2)

A diversified exploration of pertinent theatre topics. May be repeated for upper division credit. All Special Studies in Theatre courses are half-semester.

THEA 4103 - Directing II (3) Sp odd

Advanced theory and application of directing approaches. Prerequisite: THEA 3103, and by audition. Offered spring semester every odd-numbered year.

THEA 4143 - Directing and Choreographing for Musical Theatre (3) Sp even

Theory and practical application of directing and choreographing approaches as they pertain to Musical Theatre. Prerequisite: THEA 3103. Offered spring semester every even-numbered year.

THEA 4203 - Costume Design (3) Sp even

A practical application of the techniques of visual communication used to create costume renderings for dramatic scripts. Prerequisite: (Recommended) THEA 2022 and THEA 3243. Offered spring semester every even-numbered year.

THEA 4220 - Design Seminar (1-3)

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. Prerequisite: at least one Theatre Area design course - THEA 3212 or THEA 3222 or THEA 4203, and permission of the instructor.

THEA 4230 - Performance Seminar (1-3)

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. Prerequisite: THEA 1033, THEA 2033, THEA 3103 and permission of the instructor.

THEA 4603 - Creative Drama (3) F odd

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 (1) F, Sp

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 for credit.

THEA 4713 - Teaching Theatre in the Secondary School (3) F even

Application of pedagogy to teaching theatre arts in secondary schools. Requires field experiences supervised by Theatre Arts Faculty. Prerequisite: ENGL 2010 and THEA 1033.

THEA 4830 - Directed Readings (1-3)

Advanced level, independent study under the direction of faculty member. Prerequisite: Permission of supervising instructor required for credit.

THEA 4851 - Design/Tech Practicum (1)

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 for credit.

THEA 4861 - Performance Practicum (1) F, Sp

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. Prerequisite: Audition and permission of the instructor/director. May be repeated for credit.

THEA 4890 - Cooperative Work Experience or Internship (1-3) F, Sp

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. P Prerequisite: permission of supervising instructor required for credit.

THEA 4900 - Senior Project (1) F, Sp

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. Prerequisite: Faculty approval of the proposal and a faculty advisor and the student must have completed a minimum of 90 credit hours.

THEA 4920 - Short Courses, Workshops, Institutes and Special Programs (1-6)

Consult the semester class schedule for the current offering under this number. The department will determine the specific title and credit authorized.

THEA 4950 - Theatre Festival Participation (1)

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. Prerequisite: Audition and Permission of Instructor. May be repeated for credit.

UNIV-University Courses

UNIV 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.

UNIV 2900 - Career Planning and Exploration (2)

This course is a comprehensive approach to career development, planning, and selection. It assesses personal strengths and identification of job skills, and provides strategies for successfully entering the job market upon graduation. The course assists students to design their future through clarification of personal values and attitudes, identification of career interests and job skills, development of decision-making skills, and labor market information, in making good career decisions and selecting a major course-of-study at Weber State University.

UNIV 3170 - First Year Experience Mentor Leadership Seminar (2)

In this seminar course, FYE Peer Mentors are taught to effectively help Foundations of College Success (UNIV 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.

WS-Women's Studies Courses

WS 1500 SS/DV - Introduction to Women's Studies (3)

An introduction to the discipline of women's studies using multicultural sources based on current feminist scholarship.

In this course, we will examine the diversity of women's experiences, perspectives, critiques, and theories across the categories of race, ethnicity, and class.

WS 2900 - Topics in Women's Studies (1-3)

Varied topics as described in the semester schedule. Topics will be drawn from issues related to women's studies. This course may be taken more than once with different course content.

WS 3050 DV - Introduction to Feminist Theories 1700 -- Present (3)

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.

WS 3090 DV - Gender and Communication (3)

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. Prerequisite: Junior or Senior standing required or instructor permission. Cross listed with COMM 3090.

WS 4050 - Research Methodologies (2)

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. Prerequisite: WS 3050 (or equivalent coursework) or permission of instructor.

WS 4060 - Research Project (2)

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.) Prerequisite: WS 4050 (or equivalent coursework) and permission of instructor.

WS 4830 - Directed Readings (1-3)

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. Prerequisite: WS 1500 (or equivalent coursework) and permission of instructor.

WS 4860 - Internship in Women's Studies (1-2)

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. Prerequisite: completion of WS 4050 (or equivalent coursework) and permission of the instructor. This course may be repeated once for credit toward the minor. When taken to fulfill a program requirement, students must register for 2 credit hours.

WS 4900 - Topics in Women's Studies (1-3)

Varied topics as described in the semester schedule. Topics will be drawn from issues related to women's studies. This course may be taken more than once with different course content.

WS 4990 - Senior Seminar (2)

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. Prerequisite: completion of the women's studies core (or equivalent) courses and permission of the instructor.

ZOOL-Zoology Courses**ZOOL 1010 LS - Animal Biology (3) F, Sp**

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 (3) F, Sp

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 (3) F, Sp

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 1110 - Principles of Zoology I (4) F, Sp

A major's introduction to the study of genetics, inheritance, and evolutionary processes. In addition, the diversity and comparative biology of non-vertebrate animals will be examined. Three hours of lecture and one 2-hour lab a week.

ZOOL 1120 - Principles of Zoology II (4) F, Sp

A major's introduction to cellular processes and the diversity and comparative biology of vertebrate animals. Three hours of lecture and one 2-hour lab a week. Prerequisite: ZOOL 1110 or permission of instructor.

ZOOL 1370 LS - Principles of Life Science (3)

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 1990 - Zoology Orientation (1)

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. This course should be taken concurrently with ZOOL 1110 or ZOOL 1120.

ZOOL 2100 - Human Anatomy (4)

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 2200 - Human Physiology (4)

Functional consideration of the human body. Recommended for all curricula for which a basic understanding of body functions is required. Three lecture hours and one 2-hour lab a week.

ZOOL 2800 - History of Life Sciences (3)

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.

ZOOL 2900 - Topics in Zoology (1-4)

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. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 2920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult class schedule for offerings under this number. The specific title and credit authorized will appear on the student transcript. Prerequisite: vary and are determined by instructor.

ZOOL 3200 - Cell Biology (4) F, Sp

The study of the molecular composition of cells, their evolutionary origins, structural organization, functional variation, and regulatory control. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110 and either the CHEM 1110 and CHEM 1120 series or the CHEM 1210 and CHEM 1220 series, or approval of instructor.

ZOOL 3300 - Genetics (4) F, Sp

Principles and concepts of genetics with with an emphasis on animals, including humans. Includes classical genetics, molecular genetics, cytogenetics, and population genetics. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110 and MATH 1050 (or equivalent), or approval of instructor.

ZOOL 3340 - Information Resources in the Life Sciences (2)

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. Prerequisite: ENGL 2010. Cross listed in Botany, Library Sciences and Microbiology.

ZOOL 3450 - Ecology (4) F, Sp

Study of the relationships of organisms and their environment. Three lecture hours and one 3-hour lab or field trip a week. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor. Writing intensive course.

ZOOL 3470 - Zoogeography (3)

The study of factors controlling the distribution of animals with emphasis on the vertebrates. Three lecture hours a week.

Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 3500 - Conservation Biology (3)

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 lecture hours a week. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 3570 - Foundations of Science Education (3)

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.

ZOOL 3600 - Comparative Physiology (4) F, Sp

A comparative and evolutionary approach to the study of the way animals function in a variety of environments. Three lecture hours and one three-hour lab a week. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 3720 - Evolution (3) F, Sp

The patterns and processes involved in changes in natural populations. Three lecture hours a week. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 3730 - Population Biology (3)

Principles of genetics and ecology at the population level. Three lecture hours a week. Prerequisite: ZOOL 1110, ZOOL 1120, and ZOOL 3300, or approval of instructor.

ZOOL 4050 - Comparative Vertebrate Anatomy (4)

Dissection-based, in-depth comparative study of vertebrate functional anatomy. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4100 - Vertebrate Embryology (4)

A study of the principles and processes of embryological development in animals. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4120 - Histology (4)

Microanatomical study of the structure and function of vertebrate tissues and organs, with an emphasis on human systems. Prerequisite: ZOOL 1110, ZOOL 1120, either ZOOL 2100 or ZOOL 4050, or approval of instructor.

ZOOL 4210 - Advanced Human Physiology (4)

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. Prerequisite: ZOOL 1110, ZOOL 1120, and ZOOL 2200, or approval of instructor; a minimum of one year of (preferably Organic) Chemistry.

ZOOL 4220 - Endocrinology (4)

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. Prerequisite: ZOOL 1110 and ZOOL 1120, and either ZOOL 2200 or ZOOL 3600, or approval of instructor.

ZOOL 4250 - Radiation Biology (4)

The study of harmful effects of radiation and practical applications of radioactive tracer techniques to biological problems. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110, ZOOL 1120, and beginning courses in chemistry and physics, or approval of instructor.

ZOOL 4300 - Molecular Genetics (4)

A laboratory-based investigation of the molecular properties of the genetic material, including its structure, expression and evolution. Emphasis on applications and the genetics of humans. Three lecture/lab hours and one 3-hour lab per week. Prerequisite: ZOOL 3300, CHEM 1210 and CHEM 1220, or approval of instructor.

ZOOL 4350 - Animal Behavior (4)

Principles and concepts of animal behavior emphasizing evolution of behavior, and the role of behavior in adaptations of animals to their environment. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4470 - Wildlife Ecology and Management (4)

Principles of wildlife ecology and the techniques of wildlife population analysis and manipulation. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110, ZOOL 1120, and ZOOL 3450, or approval of instructor. Writing intensive course.

ZOOL 4480 - Aquatic Ecology (4)

Study of the physical, chemical, and biological interactions of freshwater and marine ecosystems. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110, ZOOL 1120, and ZOOL 3450, or approval of instructor. Writing intensive course.

ZOOL 4490 - Tropical Marine Ecology (4)

Study of the physical, chemical and biological interactions of tropical marine ecosystems, including open oceans, mangrove forests, seagrass beds, and coral reefs. Intensive, three-week, full-time field course taught in the tropics. Independent projects required. Must be able to snorkel or SCUBA dive. Prerequisite: ZOOL 1110, 1120, and 3450, or approval of instructor.

ZOOL 4500 - Parasitology (4)

Survey of representative external and internal parasites of humans, domestic animals, and wildlife. Emphasis is on their ecology and epidemiology. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4570 - Secondary School Science Teaching Methods (3)

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. Prerequisite: Admission to the Teacher Education Program.

ZOOL 4600 - Protozoology (4)

Structure, function and evolutionary relationships of unicellular organisms. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4640 - Entomology (4)

Classification and biology of insects as well as their economic importance. Three lecture hours and one 3-hour lab a week.

Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4650 - Ichthyology (4)

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. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4660 - Herpetology (4)

Structure, function and evolutionary relationships of amphibians and reptiles. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4670 - Ornithology (4)

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. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4680 - Mammalogy (4)

An introduction to the mammals with special reference to species found in Utah. Three lecture hours and one 3-hour lab a week. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4800 - Problems in Zoology (1-4)

Directed individual research in zoology guided by faculty member. Prerequisite: ZOOL 1110 and ZOOL 1120, and approval of instructor. No more than 4 hours of ZOOL 4800 may count toward the major.

ZOOL 4830 - Readings in Zoology (1-4)

Directed individual readings in the general area of zoology. Specific topic selected in consultation with faculty member. Prerequisite: ZOOL 1110 and ZOOL 1120, and approval of instructor. ZOOL 4830 and ZOOL 4890 do not count toward the major but may count toward the upper division credit requirements for the Bachelor of Science degree.

ZOOL 4890 - Cooperative Work Experience (1-4)

Academic credit for employment in career area related to zoology guided by specific written contract design by student, employer, and Zoology Department Chair. Open to all students; requires approval by Department Chair. ZOOL 4830 and ZOOL 4890 do not count toward the major but may count toward the upper division credit requirements for the Bachelor of Science degree.

ZOOL 4900 - Topics in Zoology (1-4)

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. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4920 - Short Courses, Workshops, Institutes and Special Programs (1-4)

Consult class schedule for offerings under this number. The specific title and credit authorized will appear on the student transcript. Prerequisite: vary and are determined by instructor.

ZOOL 4950 - Field Zoology (1-3)

Study conducted on an extended, supervised field trip. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 4970 - Thesis (2)

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. Prerequisite: thesis committee approved research proposal, advanced class standing, and ZOOL 1110 and ZOOL 1120.

ZOOL 4980 - Research Design (2)

A basic course in the design and analysis of scientific experiments. Two lecture hours a week. Prerequisite: minimum of two upper division Zoology courses.

ZOOL 4990 - Seminar (1)

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. Prerequisite: ZOOL 1110 and ZOOL 1120, or approval of instructor.

ZOOL 5030 - Zoology for Teachers

Science content course for teachers in the MEd Science Emphasis Program. To register, select another Zoology course and develop a contract detailing additional work required for graduating credit. Course may be repeated. Contract must be approved by instructor, Department Chair, and Director of the Master of Education Program.