This publication has been authorized by the Board of Trustees. The provisions of this publication are not to be regarded as an irrevocable contract between the student and Western State Colorado University. The information presented is based on commonly accepted practices at Western State Colorado University, but the University reserves the right to change any provision or requirement at any time within the student’s term of attendance.

For further information, phone or write:
Office of Admissions
Western State Colorado University
Gunnison, CO 81231
(970) 943-2119
1-800-876-5309

Main Switchboard (970) 943-0120
www.western.edu • admissions@western.edu

June 2013
Published by Western State Colorado University, Gunnison, Colorado 81231
Western State Colorado University is an affirmative action, equal opportunity institution and employer. We encourage applications for admission or employment and participation in other University programs and activities by all individuals.

The University does not discriminate on the basis of race, sex, creed, color, age, religion, national origin, marital status, sexual orientation, or disability in admission or access to, or treatment or employment in, its educational programs or activities. Inquiries concerning Title VI, Title IX, ADA, and Section 504 may be referred to the Affirmative Action Officer (970 943-3140) or to the Office for Civil Rights, U.S. Department of Education, 1244 Speer Boulevard, Suite 300, Denver, Colorado 80204.

No qualified handicapped person shall, on the basis of handicap, be excluded from participation in, or be denied the benefits of, or otherwise be subjected to discrimination, under any academic research, occupational training, housing, health insurance, counseling, financial aid, physical education, athletics, recreation, transportation, other extracurricular or other post-secondary education program or activity to which this sub part applies (Section 504, Rehabilitation Act of 1973, 29 USC 706, Title 45, Section # [84.3.1]).

**Accessibility for Individuals with Disabilities**

Western’s policies insuring equal access to its facilities and services can be reviewed in the Disability Services office. For further information, phone or write: Disability Services, Academic Resource Center, Western State Colorado University, Gunnison, CO 81231, (970) 943-7056.
# Table of Contents

- President’s Message ........................................................................................................ 1
- General Information ........................................................................................................ 2
  - Institutional Mission ................................................................................................. 2
  - Institutional Accreditation ..................................................................................... 2
  - Governance ............................................................................................................... 2
  - History of Western ................................................................................................. 3
  - Leslie J. Savage Library ......................................................................................... 4
  - The Western State Colorado University Foundation ........................................... 4
  - List of Degree Programs ......................................................................................... 6
- Student Programs and Services ................................................................................... 7
- Financial Assistance ..................................................................................................... 8
- Admissions Policies & Procedures for Undergraduates ............................................. 9
  - Criteria for Admission of First-Time Freshmen .................................................... 9
  - Criteria for Admission of Transfer Students and Students Seeking an Additional Bachelor’s Degree ................................................................. 9
  - Admission of International Students .................................................................... 10
  - Students Seeking an Additional Degree .................................................................. 10
  - Non-Degree Admission ........................................................................................... 10
  - Concurrent High School Student Enrollment ....................................................... 10
  - Deferral Policy for Offers of Admission ..................................................................... 11
  - Re-admission of Former Students ........................................................................... 11
  - Transfer Credit, AP Credit, CLEP, Other Credit .................................................... 11
  - Resolution of Transfer Disputes Among Colorado Institutions ............................ 13
- Undergraduate Tuition and Fees .................................................................................. 14
  - Tuition ....................................................................................................................... 14
  - Mandatory Fees ....................................................................................................... 14
  - Room and Board Costs ......................................................................................... 14
  - Residence Life Requirement .................................................................................. 15
  - Student Injury and Sickness Insurance .................................................................... 15
  - Payment of Charges ............................................................................................... 15
  - Refund of Charges ................................................................................................. 16
  - Colorado Residency ............................................................................................... 16
- Financial Assistance ..................................................................................................... 17
  - Applying for Aid ....................................................................................................... 17
  - Programs Available ................................................................................................. 17
- Student Programs and Services .................................................................................. 18
  - Co-curricular Programs ......................................................................................... 18
  - Education and Career-related Services .................................................................... 20
  - Recreational and Athletic Programs ...................................................................... 22
  - Special Services ....................................................................................................... 22
  - Student Handbook ................................................................................................... 23
- Undergraduate Academic Policies .............................................................................. 24
  - Unit of Credit ............................................................................................................ 24
  - Course Numbering System ..................................................................................... 24
  - Student Classification by Class Level ..................................................................... 24
  - Academic Load ........................................................................................................ 25
  - Registration ............................................................................................................. 25
  - Class Attendance and Participation ........................................................................ 26
  - Variable Credit Courses ......................................................................................... 26
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internships</td>
<td>27</td>
</tr>
<tr>
<td>Withdrawal from Individual Courses</td>
<td>28</td>
</tr>
<tr>
<td>Withdrawal from University</td>
<td>28</td>
</tr>
<tr>
<td>Academic Leave of Absence</td>
<td>28</td>
</tr>
<tr>
<td>Grades and Grade Point Average</td>
<td>29</td>
</tr>
<tr>
<td>Academic Standing</td>
<td>30</td>
</tr>
<tr>
<td>Graduation Requirements</td>
<td>33</td>
</tr>
<tr>
<td>Academic Integrity</td>
<td>35</td>
</tr>
<tr>
<td>Academic Due Process for Students</td>
<td>36</td>
</tr>
<tr>
<td>General Education</td>
<td>38</td>
</tr>
<tr>
<td>Under-Graduate Academic Programs</td>
<td>42</td>
</tr>
<tr>
<td>Accounting (ACC)</td>
<td>42</td>
</tr>
<tr>
<td>Anthropology (ANTH)</td>
<td>48</td>
</tr>
<tr>
<td>Art (ART)</td>
<td>51</td>
</tr>
<tr>
<td>Biology (BIOL)</td>
<td>65</td>
</tr>
<tr>
<td>Business Administration (BUAD)</td>
<td>73</td>
</tr>
<tr>
<td>Chemistry (CHEM)</td>
<td>85</td>
</tr>
<tr>
<td>Communication Arts (COM)</td>
<td>91</td>
</tr>
<tr>
<td>Computer Information Science (CIS)</td>
<td>100</td>
</tr>
<tr>
<td>Economics (ECON)</td>
<td>106</td>
</tr>
<tr>
<td>Education (EDUC)</td>
<td>111</td>
</tr>
<tr>
<td>English (ENG)</td>
<td>119</td>
</tr>
<tr>
<td>Environment and Sustainability (ENVS)</td>
<td>128</td>
</tr>
<tr>
<td>Exercise and Sport Science (ESS)</td>
<td>134</td>
</tr>
<tr>
<td>French (FREN)</td>
<td>145</td>
</tr>
<tr>
<td>Geography (GEOG)</td>
<td>147</td>
</tr>
<tr>
<td>Geology (GEOL)</td>
<td>149</td>
</tr>
<tr>
<td>Headwaters Regional Studies (HWTR)</td>
<td>156</td>
</tr>
<tr>
<td>History (HIST)</td>
<td>157</td>
</tr>
<tr>
<td>Honors Program (HNRS)</td>
<td>163</td>
</tr>
<tr>
<td>Interdisciplinary Studies / Liberal Arts (IDLA)</td>
<td>168</td>
</tr>
<tr>
<td>Latin American Studies (LAS)</td>
<td>175</td>
</tr>
<tr>
<td>Mathematics (MATH)</td>
<td>170</td>
</tr>
<tr>
<td>Music (MUS)</td>
<td>177</td>
</tr>
<tr>
<td>Philosophy (PHIL)</td>
<td>190</td>
</tr>
<tr>
<td>Physics (PHYS)</td>
<td>193</td>
</tr>
<tr>
<td>Politics and Government (POLS)</td>
<td>196</td>
</tr>
<tr>
<td>Psychology (PSY)</td>
<td>203</td>
</tr>
<tr>
<td>Recreation and Outdoor Education (ROE)</td>
<td>209</td>
</tr>
<tr>
<td>Science (SCI)</td>
<td>216</td>
</tr>
<tr>
<td>Sociology (SOC)</td>
<td>217</td>
</tr>
<tr>
<td>Spanish (SPAN)</td>
<td>223</td>
</tr>
<tr>
<td>Graduate Studies</td>
<td>227</td>
</tr>
<tr>
<td>General Information</td>
<td>193</td>
</tr>
<tr>
<td>Admission Policies</td>
<td>196</td>
</tr>
<tr>
<td>Program Costs</td>
<td>203</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>209</td>
</tr>
<tr>
<td>Academic Policies</td>
<td>216</td>
</tr>
<tr>
<td>Graduate Academic Programs</td>
<td>227</td>
</tr>
<tr>
<td>Master of Arts in Education</td>
<td>216</td>
</tr>
<tr>
<td>Master of Environmental Management</td>
<td>216</td>
</tr>
</tbody>
</table>
Master of Fine Arts in Creative Writing................................................................. 216
Publishing Certificate......................................................................................... 216
University Personnel.......................................................................................... 227
  Faculty ........................................................................................................... 216
  Administration ............................................................................................... 216
  Emeritus Faculty and Staff ............................................................................. 216
Index .................................................................................................................... 227
President’s Message

Dear students:

Welcome to the Western State Colorado University community. I want you to know that, by becoming a Western student, you are joining a more than 100 year legacy of education, experience, and discovery. Tens of thousands of students before you have ventured into the world after taking advantage of Western’s outstanding liberal arts, professional, pre-professional and graduate programs. As President, I am excited to begin the 2013-14 academic year, and I wish you great success.

The degree you will earn from Western and the experience you have here will have an enormous impact on the rest of your life. A college education equips you for a future career. College graduates on average earn more than twice as much in their lifetime as high school graduates. But the Western experience is about more than money and a career. A liberal arts education prepares you to better understand our complex and ever changing world. During your time at Western, you will gain awareness, knowledge, and self confidence by learning about nature and the environment, social sciences, and ultimately, about yourself and your possibilities. This is the beginning of an exciting journey for you, and we here at Western are honored to be a part of it.

So what’s different about Western? You’ll find that our small class sizes will allow you easy access to some of the best faculty members in the country. Ninety percent of our professors have earned the highest degree they can obtain in their field from some of the best universities in the country. During your time at Western, you’ll find your professors are approachable and genuinely care about your personal path to discovery through learning.

At Western, you have outstanding opportunities to get involved in scholarship and research within your academic area of interest. You will also have many opportunities for involvement outside the classroom-join a student club; get involved with sports; act in a play; volunteer in the community; become a peer academic leader and take advantage of the wonderful recreational activities in the Gunnison Valley.

The following pages of the Catalog are an excellent resource for you on your academic journey. Included in the Catalog are student programs and services, special services, academic policies, degree requirements, and course descriptions. There are many offerings that you may wish to sample. Use this book, your academic advisor, and the faculty and staff to support your goals on your road to success. We are here for you.

Welcome to the Western Community.

Sincerely,

Brad Baca
President, Western State Colorado University


**GENERAL INFORMATION**

**Institutional Mission**

Western State Colorado University fulfills its statutory mission by promoting intellectual maturity and personal growth in its students and graduates citizens prepared to assume constructive roles in local, national, and global communities. Western helps its students to develop the skills and commitments needed to continue learning for the rest of their lives and strives to elucidate the connections unifying academic domains which have traditionally existed separately: the sciences, the liberal arts, and professional programs. The University provides students with a solid foundation of skills in written and spoken communication, problem solving, critical thinking, and creativity. Our programs encourage a breadth and depth of knowledge, which will serve as a foundation for a professional career or graduate study, and an appreciation of values appropriate to a liberally educated individual. Western’s distinctive character emerges from its unity among academic and professional disciplines, its high standards of scholarship, and its unique environment in the mountains of western Colorado.

**Institutional Accreditation**

Indicators of the status of an university are the agencies from which it has sought and gained recognition. Western State Colorado University is accredited by The Higher Learning Commission and is a member of the North Central Association.

The Higher Learning Commission  
230 South LaSalle Street, Suite 7-500  
Chicago, IL 60604-1413  
(312) 263-0456   (800) 621-7440  

Individual academic programs have been accredited, approved, or recognized by discipline-specific professional or governmental agencies, including the following:  
Music: National Association of Schools of Music  
Teacher Education: Colorado Department of Education; Colorado Commission on Higher Education; Teacher Education Accreditation Council  

Institutional accreditation may be reviewed in the Office of the Vice President for Academic Affairs.

**Governance**

The Colorado Commission on Higher Education (CCHE) is a nine-member board appointed by the Governor and confirmed by the Colorado State Senate that acts as a policy and coordinating board for all public institutions of higher education in Colorado.  
Colorado Commission on Higher Education  
1560 Broadway, Suite 1600  
Denver, CO 80202  
(303) 866-2723  

Western is governed by the Western State Colorado University Board of Trustees, a nine-member lay board. The trustees are appointed by the Governor to four-year terms. One faculty trustee and one student trustee are elected by their constituents and serve one-year terms.
History of Western

Western was established in 1901. It was the first college on Colorado’s Western Slope and is the fourth-oldest public institution in the state.

The school actually opened for classes in 1911 as the Colorado State Normal School. Originally a preparatory college for teachers, Western’s role changed when it became Western State College of Colorado in 1923. Though for many years Western was known for its graduates who became teachers, it was, in fact, the first Colorado college designed to teach a primarily liberal arts curriculum, and the liberal arts have remained at the core of Western’s academic mission ever since.

Some of Western’s most cherished buildings—hallmarks of its lasting durability—were constructed during the lean years of the Depression. Savage Library, the President’s House, and Ute Hall are architecturally striking and add character to the campus.

During the post-war years of the 1940s, Western’s enrollment soared as veterans took advantage of the GI Bill and new programs were added.

By the 1970s, enrollment was exceeding 3,000, crowding the institution so much that new freshmen often slept in the halls of their dorms for the first few days until rooms became available. During the 1980s, Western began to focus on undergraduate education in three core areas: the liberal arts, teacher education, and professional programs.

Entering its second century of service, Western continues its tradition of providing a high quality education of value while addressing new initiatives, such as campus sustainability. Western is actively engaged in improving environmental awareness and resource efficiency, and students are spearheading many of the sustainability efforts. Starting with the Borick Business Building, which opened in 2007, all new construction on campus adheres to energy efficiency and environmentally sustainable building practices.

The academic year is full of opportunities for students to learn from and become acquainted with outstanding scholars, great thinkers, fine performers, and others from throughout the world. Just as importantly, summer in Gunnison is full of educational opportunities, such as the Summer Teacher Institute.

Western offers a broad range of courses of study in a beautiful mountain setting. Many degree programs take advantage of this environment, which has been called “one of the world’s greatest natural laboratories.” Western offers students opportunities to study in a wide range of fields, such as business, computer information science, communications, the social and behavioral sciences, outdoor leadership, the arts, the sciences, and teacher education.

Western’s excellence also reaches other arenas. Western hosts the only nationally certified university mountain rescue team, and a wilderness pursuits program offers students ample opportunities for self-discovery while exploring the mountains, rivers, and forests that surround the University. The University’s vibrant theatre and fine arts departments provide a cultural center for the entire Gunnison Valley.

In athletics, Western traditionally has one of the country’s finest small university athletic programs. Western’s teams are consistently ranked among the top in the NCAA Division II. Athletic opportunities also include competitive club sports and intramural teams.

Throughout its history, Western has been a source of innovation and excellence, which is reflected in the quality of its programs and in the success and achievements of its graduates. Now in its second century, Western continues to build on its long tradition of excellence.

Governor John Hickenlooper signed HB 1331 on Monday, June 4, 2012 officially changing Western’s name to Western State Colorado University. The name change took effect on August 1, 2012.
The Western State Colorado University Foundation

The Western State Colorado University Foundation, Inc., is a private non-profit corporation founded in 1975 to advance the mission and goals of Western State Colorado University. The Foundation is the primary depository of private gifts from alumni, friends, corporations, and foundations. In the last 10 years, Western State Colorado University has received $50 million in gifts from donors investing in Western’s people and mission. Each year, the Foundation gives more than $2 million to the University, with the greatest portion directed to scholarships.

In 1997, the Foundation established The Foundation Scholars Program. This program offers the most prestigious, renewable scholarships awarded at Western to date.

In recent years, the Foundation has increased its role in raising private support for Western. The Foundation receives annual fund contributions, one-time gifts, and major gifts made over a period of years. Many different gift options have been utilized: bequests, cash, securities, savings bonds, real estate, trusts, life insurance, and personal property.

Since Western is a state-assisted institution, private gifts to the Foundation are critical to maintaining and enhancing excellence in faculty and student programs. An annual report of the Foundation is available for those wishing further information. Contact the Foundation at (970) 641-2237, tburggraf@western.edu, or mail inquiries to the Western Foundation, Inc., 909 Escalante Drive, P.O. Box 1264, Gunnison, CO 81230.

Leslie J. Savage Library

The staff of the Leslie J. Savage Library provides information, resources, and services designed to advance the intellectual and personal development of members of the University community. When classes are in session, the Library’s services are available seven days a week.

Students find the majority of information they seek for course assignments in the Library collection. In addition to over 250,000 volumes and 3,500 films, the collection includes access to over 70,000 electronic books and over 60 electronic journal databases. Special collections include federal and state government documents, books in the Western Colorado History Collection, and the University archives.

The Library makes extensive use of electronic databases to facilitate identifying and locating desired materials. Using the Library’s catalog, the search for information can be extended to libraries and databases throughout the United States. Through the Library’s resource sharing services, students can borrow materials from other libraries nationwide.

The Library staff gives students the opportunity to become skilled at using the full range of information resources and services. In addition to helping individuals identify and locate desired information, librarians offer group and individual instruction to students as they start to research topics for course assignments. Savage Library provides a welcoming environment for study and research.

The Western State Colorado University Foundation

The Western State Colorado University Foundation, Inc., is a private non-profit corporation founded in 1975 to advance the mission and goals of Western State Colorado University. The Foundation is the primary depository of private gifts from alumni, friends, corporations, and foundations. In the last 10 years, Western State Colorado University has received $50 million in gifts from donors investing in Western’s people and mission. Each year, the Foundation gives more than $2 million to the University, with the greatest portion directed to scholarships.

In 1997, the Foundation established The Foundation Scholars Program. This program offers the most prestigious, renewable scholarships awarded at Western to date.

In recent years, the Foundation has increased its role in raising private support for Western. The Foundation receives annual fund contributions, one-time gifts, and major gifts made over a period of years. Many different gift options have been utilized: bequests, cash, securities, savings bonds, real estate, trusts, life insurance, and personal property.

Since Western is a state-assisted institution, private gifts to the Foundation are critical to maintaining and enhancing excellence in faculty and student programs. An annual report of the Foundation is available for those wishing further information. Contact the Foundation at (970) 641-2237, tburggraf@western.edu, or mail inquiries to the Western Foundation, Inc., 909 Escalante Drive, P.O. Box 1264, Gunnison, CO 81230.
List of Undergraduate Degree Programs

Western State Colorado University offers the Bachelor of Arts (BA) degree in the following programs:

- Accounting
- Anthropology
- Art
- Biology
- Business Administration
- Chemistry
- Communication Arts
- Computer Information Science
- Economics
- English
- Environment and Sustainability
- Exercise and Sport Science
- Geology
- History
- Interdisciplinary Studies / Liberal Arts
- Mathematics
- Music
- Politics and Government
- Psychology
- Recreation and Outdoor Education
- Sociology
- Spanish

The Bachelor of Fine Arts (BFA) degree is offered in:

- Art

Teacher Licensure is available in:

- Elementary Education
- K-12 Education
- Secondary Education
Student Bill of Rights

The Colorado General Assembly enacted the Student Bill of Rights (C.R.S. 23-1-125) to assure that students enrolled in public institutions of higher education have the following rights:

• students should be able to complete their associate of arts and baccalaureate programs in no more than 120 credits unless there are additional degree requirements recognized by the Commission (Colorado Commission on Higher Education);
• a student can sign a four-year graduation agreement that formalizes a plan for that student to obtain a degree in four years, unless there are additional degree requirements recognized by the Commission;
• students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees;
• students have a right to know which courses are transferable among the state public two-year and four-year institutions of higher education;
• students, upon completion of core general education courses, regardless of the delivery method, should have those courses satisfy the core course requirements of all Colorado public institutions of higher education;
• students have a right to know if courses from one or more public higher education institutions satisfy the students’ degree requirements; and
• a student’s credit for the completion of the core requirements and core courses shall not expire for ten years from the date of initial enrollment and shall be transferable.

Assessment of Academic Programs and Services

Assessment is the process of collecting, synthesizing, and interpreting information to aid decision making; it includes information gathered about students, instruction, classroom climate, and/or the institution. The assessment process results in feedback to students and the institution with a goal of improving the instructional process.

At Western, assessment begins as students enter the institution and continues after graduation. Students undergo Math and English placement testing in order to enroll in courses that best suit their academic abilities. As students progress through general education and course work in the major, they are evaluated on skills and disciplinary learning and in turn faculty use these results to improve instruction and the curriculum.

Areas of Assessment: The purpose of student and program assessment is to improve student learning and program delivery. Assessment is an ongoing process; therefore, campus-wide and disciplinary goals and objectives must be determined, assessed, evaluated, and reported. Academic programs are assessed by external reviewers and an internal program review process.
# Academic Calendar for 2013-2014

## Summer Session 2013
- May 13: Classes begin
- May 27: Memorial Day - no classes
- July 4: Independence Day - no classes
- August 9: End of Summer Session

## Fall Semester 2013
- Aug. 26: Classes begin
- Sept. 2: Labor Day - no classes
- Oct. 18: Mid-Fall break
- Nov. 25-29: Thanksgiving break
- Dec. 17-20: Final Exams

## Spring Semester 2014
- Jan. 13: Classes begin
- Jan. 20: Martin Luther King Jr. Day - no classes
- Feb. 17: Presidents' Day - no classes
- March 17-21: Spring break
- May 6-9: Final Exams
- May 10: Spring Commencement (10:00 a.m.)

See the University web page for additional information, updates, and future calendars. All calendars are subject to change.
ADMISSIONS POLICIES AND PROCEDURES

Applicants are evaluated on the basis of their previous academic performance, general background, standardized test scores, and personal attributes. Written personal statements, interviews, and recommendations from teachers, counselors, and others attesting to the applicant’s leadership and academic talents are also considered.

All credentials submitted to the Admissions Office become the property of Western State Colorado University and will not be returned.

Each applicant must submit a non-refundable application fee and complete the appropriate admission application form.

Criteria for Admission of First-Time Freshmen

All freshmen applicants must have their high school submit official transcripts directly to the Admissions Office. Applicants from non-accredited high schools and homeschooled students are considered on a case-by-case basis. Applicants who are not U.S. citizens and have completed their schooling in countries other than the United States (excluding U.S. overseas schools) should see the section on admission of international students.

Freshman applicants should have completed the following secondary school units: (a) four years of English, (b) four years of math, including Algebra I & II and Geometry (c) three years of natural science (two years lab-based), (d) three years of social science, and (e) two years of academic electives, including foreign language.

Applicants with the best chance for admission will have a high school cumulative grade-point average of 2.5 or better (A = 4.0) and rank in the upper two-thirds of their high school graduating classes. Applicants will have scored 19 or higher on the American College Test (ACT) or 900 or higher on the math and critical reading sections of the Scholastic Achievement Test (SAT). Western does not require the writing portion of either the ACT or the SAT.

Freshman applicants are required to submit either the ACT or the SAT scores. Applicants should request that the Student Profile Reports be sent to Western State Colorado University (profile codes: ACT-0536, SAT-4946).

GED Applicants. Applicants who have not graduated from high school are considered for admission if they have successfully completed a GED program with an average score of 500 overall and a minimum score of 410 in each subject area. All GED applicants are required to submit their ACT or SAT scores.

Criteria for Admission of Transfer Students and Students Seeking an Additional Bachelor’s Degree

Transfer applicants must submit official transcripts from all prior colleges and universities. Transfer applicants must have a combined grade-point average of at least 2.5 from all prior colleges or universities to be considered for admission. Transfer applicants must have completed at least the same level of high school course work required of freshmen applicants.

Test scores, recommendations, high school records, interviews, and other relevant information may be used in assessing the application for admission. Transfer applicants who have earned fewer than 30 semester credits are required to submit scores from either the ACT or the SAT, along with final high school transcripts.

Grades earned at other institutions are not included in the calculation of grade-point averages at Western.
Admission of International Students

International students seeking admission must submit an application for admission as well as official high school and/or college transcripts. All official copies of academic transcripts and diplomas of secondary and post-secondary education must be submitted directly to the Western Office of Admissions by the institutions attended.

These documents must be original copies with an official signature and bear the school’s official seal, or a certified copy. All documents in a language other than English must be accompanied by certified English translations of these documents. Students seeking transfer credit for university work completed outside of the United States must submit transcripts to a NACES member credential evaluation service for a course by course evaluation. For a complete list of members, go to: http://www.naces.org/, or http://www.aacrao.org.

Applicants must be graduates of high school or secondary programs equivalent to similar programs in the United States. Applicants from countries where English is not a national language must have a minimum score of 550 on the paper version Test of English as a Foreign Language (TOEFL), a Internet-based Test (BT) or a minimum score of 6.5 on the IELTS test. For international students transferring to Western from another US College or University who have completed 24 semester credit hours or more, and have completed a college level English composition course with a 3.0 GPA or higher, a TOEFL or IELTS score is not required.

Applicants must demonstrate that an adequate sum of money in U.S. currency is available to cover the costs of each year of anticipated study by submitting Western's Affidavit of Support form. Refer to Western's web site for the form and current required amount. An official bank statement will be required from admitted students before Western will generate an F-1 visa. Documents will not be accepted if received via email or fax.

Students Seeking an Additional Undergraduate Degree

Students seeking an additional undergraduate degree must meet all residency and major and/or minor requirements. This includes a minimum of 30 credits in residence at Western. They are considered to have satisfied freshman and sophomore-level General Education requirements by virtue of the work completed for their first undergraduate degree.

Non-Degree Admission

An applicant not wishing to pursue a degree at Western may be admitted as a non-degree student by completing the “Non-Degree Application Form” and submitting a written statement of his/her educational intentions. Western sets policies regarding the non-degree admissions process, criteria for acceptance, limitation of credit, and the courses available to non-degree students.

Should the student wish to pursue a degree in the future, a regular application form must be completed, and the admissions requirements in effect at that time must be met. A maximum of 12 credits taken as a non-degree student will apply toward a degree at Western. Exceptions may be considered on a case-by-case basis. For further information, contact the Admissions Office.

Concurrent High School Student Enrollment

Qualified high school students, 9th-12th grade, may take courses at Western through the Concurrent Enrollment program, earning both high school and university credit. Western sets policies regarding the admissions process and criteria, limitation of credit,
and courses available to Concurrent Enrolled students. Contact Extended Studies for more information.

### Deferral Policy for Offers of Admission

Any new student who is offered admission by the undergraduate Admissions Office is allowed to defer their admission to a future term within the same academic year. Students will be allowed to defer their admission only one time. There will be no application fee for the one allowed deferral. For the purposes of this policy, the academic year is defined to be the fall, spring and summer terms of an academic year, in that order.

April 1 is the earliest date that a student can defer an application for fall semester admission to either the next spring or summer term. October 1 is the earliest date that a student may defer their spring semester admission to the summer term.

No student can change their entry status by deferring to a new term. For example, an admitted freshman who plans to enroll at a different college may not use deferral to enter Western at a later date as a transfer student. That student must submit a new application as a transfer student and pay the application fee. A student originally admitted as a non-degree seeking student may not use deferral to enter Western at a later date as a degree seeking new freshman or new transfer student. That student must submit a new application and pay the application fee.

All deferring students will be required to complete a new admission application in order to confirm information, including the new term to which they are deferring, address, phone numbers, residency information and any other information requested on the application form.

Once the new application has been received, the Admissions Office will correspond with the student if additional information is required, e.g. final high school transcripts. The original admission decision will stand unless other negating circumstances occur, such as the student fails to graduate from high school or has unsatisfactory performance at a transfer institution.

### Readmission of Former Students

Students who leave Western and wish to return are required to apply for readmission, unless they have been granted a formal Academic Leave of Absence. Upon readmission, a student will receive the same academic standing under which she/he left. For example, a student who left the University in good standing will be readmitted in good standing; a student who left while on academic probation will be readmitted on academic probation.

Students who have attended other institutions during their absence from Western must also request that official transcripts be sent to Western State Colorado University by all colleges or universities attended. Courses that have a letter grade of “C-” or better may be considered for transfer credit. Grades earned at other institutions are not included in the calculation of grade-point averages at Western. Contact the Office of the Registrar or navigate to www.western.edu/reg/forms to obtain a readmission application.

### Transfer Credit, AP Credit, CLEP, Other Credit

#### Credit for Advanced Placement

Western awards credit for Advanced Placement in all subject areas. A minimum score of 3 is required for credit to be granted for most AP tests (for some tests, a score of 4 is required). Scores must be submitted by the College Board directly to the Admissions Office.
Credit for International Baccalaureate Program

Western recognizes the International Baccalaureate (IB) Program, and for students who have completed the IB diploma program, grants credit based on performance on individual IB exams. Western will grant a minimum of 24 semester credits of course equivalencies toward the student’s general education or graduation requirements as long as all IB exam scores are 4 or greater. Students who have completed the IB diploma program and have earned a score below a 4 on any of the individual subject exams may earn fewer than 24 semester credits of course equivalencies. Official IB scores must be sent to the Admissions Office from the International Baccalaureate Organization.

Credit for Transfer from Two-Year Colleges

Western will accept courses for which grades of “C-” or better have been earned from accredited two-year colleges. The maximum that Western will accept toward a bachelor's degree is 60 semester credits.

Articulation agreements and transfer guides have been developed with all of the Colorado two-year institutions. Transfer students from Colorado two-year programs who graduate with an associate of arts or associate of science degree will be considered to have satisfied Western's General Education Program.

Credit accepted in transfer from two-year institutions can only be counted as lower-division credit. This applies even if the course equivalency is for an upper-division course at Western.

Transfer credit accepted on a provisional basis from a college that is a candidate for accreditation (as recommended in the American Association of Collegiate Registrars and Admissions Officers Transfer Credit Practices) can only be validated by the student completing 30 credits at Western with a 2.000 cumulative grade-point or better.

Credit for Transfer from Four-Year Institutions

Western will accept courses for which grades of “C-” or better have been earned from accredited four-year colleges or universities. The maximum that Western will accept toward a bachelor's degree is 90 semester credits.

Credits accepted in transfer that are comparable to those offered at Western or are State Guaranteed General Education Transfer Courses may apply toward satisfying requirements of the General Education Program and requirements of the major and minor programs. Courses not equivalent to specific courses at Western or those excluded from acceptance toward any of Western’s program requirements may or may not be accepted as electives. Exceptions to evaluations of transfer credit by the Office of the Registrar may be requested by the appropriate academic department.

Transfer credit accepted on a provisional basis from a college which is a candidate for accreditation (as recommended in the American Association of Collegiate Registrars and Admissions Officers Transfer Credit Practices) can only be validated by the student completing 30 credits at Western with a 2.000 cumulative grade-point or better.

Credit for Transfer from Non-Traditional Programs

Western will accept credits for both military service training and non-traditional training as recommended by the American Council of Education.

The maximum number accepted by Western toward a bachelor’s degree is 30 semester credits. Credits accepted in transfer that are comparable to those offered at Western will apply toward satisfying requirements of the General Education Program and requirements of major and minor programs. Courses not equivalent to specific courses at Western or those excluded from acceptance toward any of Western’s program requirements may or may not be accepted as electives. Exceptions to evalua-
Credit for College Level Examination Program (CLEP)

Western will award credit for both the general and subject CLEP exams. Students may be awarded a maximum of 18 semester credits as a result of completing the general CLEP examinations. This credit may only be used to satisfy General Education requirements at Western.

In awarding credit on the basis of subject examinations, Western follows (approximately) the recommendations of the American Council on Education. This means that credit is awarded on the basis of a scaled score of 50, with the exception of the Level 2 foreign language exams.

For a list of subjects and courses awarded CLEP credit, contact the Office of the Registrar.

Total credit generally permitted under CLEP and other programs leading to credit by examination for any one student is limited to 40 semester credits. Exceptional cases may be appealed.

Students granted CLEP credits from another institution must submit an official CLEP Score Report to Western for credit to be awarded.

Resolution of Transfer Disputes Among Colorado Institutions

Students transferring from Colorado institutions may file an appeal of Western’s evaluation of their transfer credits by adhering to the following procedure. The Office of the Registrar is responsible for the appeals process.

The appeal must be filed in writing to the Office of the Registrar of Western State Colorado University within 15 calendar days of receipt of the evaluation. Failure to file in this timely manner means that the original evaluation will be binding. Western will respond to any timely appeal in writing within 15 calendar days of the receipt of the appeal.

If the initial appeal does not resolve the dispute, the student may appeal in writing to the student’s previous institution(s) within 15 calendar days. The presidents of the two institutions (or their representatives) may then resolve the dispute.

If the issue is still not resolved, the student may file an appeal with the Colorado Commission on Higher Education (CCHE) within 15 calendar days of receipt of written notification by Western of the presidents’ decision.

The CCHE may then resolve the dispute. The decision of CCHE will be final and binding.
Tuition and Fees

Listed below are the estimated basic costs of attending Western State Colorado University during 2013-2014. These costs are subject to change. Costs are presented here for information only.

Tuition (estimated)

Full-time Students

<table>
<thead>
<tr>
<th>Tuition for:</th>
<th>16-Week Semester</th>
<th>Academic Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident Tuition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Tuition</td>
<td>$3,568</td>
<td>$7135</td>
</tr>
<tr>
<td>College Opportunity Fund Stipend</td>
<td>($930)</td>
<td>($1,860)</td>
</tr>
<tr>
<td>Cost to Student</td>
<td>$2,638</td>
<td>$5275</td>
</tr>
<tr>
<td>Non-Resident Tuition</td>
<td>$7,608</td>
<td>$15,216</td>
</tr>
</tbody>
</table>

*Part-Time Students

Tuition for part-time students is based on a per-credit charge. The estimated rates for 2013-2014 are $219.80 per credit for resident students (after application of the College Opportunity Fund Stipend) and $634 per credit for non-residents. For tuition purposes, “part-time” is defined as fewer than 12 credits in a 16-week semester.

Tuition Surcharge

Students enrolled for more than 18 credits in a 16-week semester will pay a tuition surcharge. The tuition surcharge is a per-credit charge at the basic resident or non-resident rate.

Mandatory Fees (estimated)

Mandatory fees have been approved by the Board of Trustees to pay for special services, including the programs operated by the Student Government Association. The estimated cost of all mandatory fees for a full academic year for 2013-2014 is $822. Mandatory fees are prorated for part-time students.

Room and Board Costs (estimated)

Western provides students several housing options in a variety of residence halls. Apartments are available to returning students. Below are examples of estimated living expenses for 2013-2014:

Room Costs for:          | 16-Week Semester | Academic Year |
--------------------------|------------------|---------------|
Double-Mears, Escalante, Ute Complex | $2,350 | $4,700 |
Two bedroom, unfurnished-Chipeta Apartments | $2,850 | $5,700 |
Two bedroom, unfurnished-Pinnacles Apartments | $3,000 | $6,000 |

All students residing in University residence halls (non-apartments) are required to purchase a meal plan. It is suggested that students living in apartments carry a meal plan, but it is not required.

Board Costs for:         | 16-Week Semester | Academic Year |
--------------------------|------------------|---------------|
Blue Mesa Plan            | $2,184           | $4,368        |
Mountaineer Plan          | $1,994           | $3,988        |
Crimson Plan              | $1,761           | $3,522        |
Residence Life Requirement

A housing application, meal application, and a housing contract will be mailed shortly after acceptance to Western. All first and second-year students are required to live in on-campus housing and purchase a meal plan unless excused by the Director of Residence Life for one of the following reasons: (1) the student is married; (2) the student is living with parent(s) or a legal guardian; (3) the student has previously lived on campus for two terms at another institution; (4) the student is at least 21 years of age by the first day of classes.; or (5) the student is an honorably discharged veteran. Housing and roommate assignments will be mailed in late June. This mailing will include room assignment, campus phone number, roommate’s name and address, and information with suggestions on what to bring and how to make the living experience on campus the best it can be.

Deposit

A $100 housing deposit is required with the housing application. This deposit reserves a space on campus for the academic year. Cancellations must be submitted in writing to the Residence Life office before July 1st for the fall semester and November 17th for the spring semester to receive a full refund of the $100 housing deposit. After these dates, housing deposits are non-refundable.

Student Injury and Sickness Insurance

All students enrolled at Western are encouraged to have health insurance. The University offers a supplemental health insurance plan that students should seriously consider.

Total health insurance costs for the 2013-2014 academic year and additional information on the supplemental health insurance plan are available on the Human Resources webpage at http://www.western.edu/hr/.

Payment of Charges

Tuition and fees are due the first day of classes. Students will be mailed a billing statement before the beginning of each semester with an estimate of charges.

Western State Colorado University will not register a student, release a diploma, provide a transcript, or supply placement or other University services to any current student or former student who has an outstanding financial obligation to the University.

Per state statute, failure to pay a financial obligation to the University when it is due may result in an account being placed with a collection agency and such action being reported to a credit bureau. In addition, an account may be charged legally allowable collection charges and attorney fees to help secure payment of the debt owed the University.

Late Charges

In each of the 16-week semesters and in the summer session, a date is established after which payment is considered late. This date is available from the Cashier’s Office.

The late charge begins at $100 for students who do not pay by the due date. Accounts not in good standing by the last day of each semester will be assessed an additional $100 late charge. Failure to pay the bill in time will result in removal from courses and restrict access to school services.
Refund of Charges

The following refund policies are in place at Western State Colorado University:

When a student officially withdraws from Western, tuition and fees are refunded according to the following schedule for a 16-week semester:

- **100% refund** through the end of the official drop period
- **50% refund** for the period between 15% and 25% of the semester
- **25% refund** for the period between 25% and 50% of the semester
- **0% refund** for the period after 50% of the semester

Please refer to the class schedule for specific dates of the official drop period.

If a student officially withdraws from Western, the housing and meal plan charges will be refunded according to the following schedule:

- Prorated by week through the end of the official drop period
- **50%** for the period between 15% and 25% of the semester
- **25%** for the period between 25% and 50% of the semester
- **0%** for the period after 50% of the semester

Please refer to the class schedule for specific dates of the official drop period.

Students who officially withdraw from Western, or who simply stop attending classes, are subject to repaying all or part of any financial aid received, depending on their length of actual attendance.

Changes in Tuition and Fees

Tuition rates are established each year by the Board of Trustees, and student fees are recommended by the Student Government Association and approved by the Trustees. The University reserves the right to change any of these costs at the beginning of any academic semester.

Colorado Residency

New students are classified as in-state or out-of-state students for tuition purposes on the basis of information provided on the application for admission and on other relevant forms. Applicants may be required to submit evidence substantiating their claim of in-state eligibility.

To be eligible for a change to in-state status, students must submit petitions with appropriate documentation. The forms, deadline information, and explanation of the Colorado tuition classification statutes are available online.

Tuition classification is governed by Colorado statutes and by judicial decisions that apply to all state-funded institutions in Colorado and is subject to change without notice.
Financial Aid

Western offers financial aid designed to help bridge the gap between the expected family financial contribution and the cost of attending the university. All students admitted are encouraged to apply for financial aid. Student financial aid is awarded after a student has been accepted for enrollment and the financial aid application is complete. It is strongly recommended that financial aid applications and supporting documents be submitted by April 1.

Applying for Aid

Western State Colorado University utilizes the Free Application for Federal Student Aid (FAFSA) to determine eligibility for all financial aid. This form is available online at: http://www.fafsa.ed.gov/. The FAFSA should be filed as soon as possible after January 1 each year.

Grants

Grants need not be repaid. By completing the FAFSA, a student is automatically applying for consideration of the following grants: Federal need-based and/or Colorado Resident need-based grant.

Scholarships

Scholarships need not be repaid. Western State Colorado University offers numerous scholarship opportunities for both incoming and continuing students.

Employment Programs

Western’s student employment program is funded through federal, state, and institutional sources. Students may work as many as 20 hours per week, and wages vary according to the job. It may be possible to work on campus even if you are not otherwise eligible for financial aid.

Loan Programs

Loans must be repaid. The FAFSA must be completed to receive consideration for any of the following loans: Federal Perkins Loan Program, Federal Direct Stafford Loan Program, and Federal Direct PLUS Program.
STUDENT PROGRAMS AND SERVICES

Programs and services in support of the academic education at Western are offered in the spirit of American educator John Dewey, who believed that the learning experience should not just be a “preparation for future living” but also the guided and intelligent practice of life in the present.

Thus, the goal of those involved in these programs and services at Western is to provide opportunities for students to “apply the curriculum”; to question thoughtfully; to reason clearly; to either compete vigorously or to cooperate sensitively, depending on the challenge; and otherwise to fully embrace the human condition and the responsibilities and opportunities it affords.

The programs offer students the opportunity for direct participation in activities involving their mental, physical, spiritual, or career-related development.

The services assist students both in making their way through Western and in making the transition to their post-graduate lives. These programs and services include cultural, academic, and diversity-related programs and services, educational and career-related programs and services, and recreational and athletic programs.

The programs and services offered in each of these categories are described briefly in the pages that follow. They are described in more detail in the Student Handbook.

Co-Curricular Programs

**Art Exhibitions.** Western’s art faculty, advanced art students, and visiting artists provide a steady rotation of shows and exhibits in the Quigley Hall Gallery and community galleries.

**University Media.** Students manage and operate the University newspaper (*Top o’ the World*), radio station (KWSB-FM), and an annual magazine (*Western Pathfinder Magazine*).

**Enrichment Convocations and Lectures.** Each semester, Western arranges for special on-campus presentations by distinguished professionals, government officials, visiting faculty, and other guests from the world beyond the campus.

**Headwaters Conference.** Each fall, Western invites an interdisciplinary gathering of scholars, writers, poets, storytellers, public officials, and others involved in the cultural development of the Southwest to discuss issues and problems of common concern to Southwesterners.

**Honorary Organizations and Departmental Clubs.** Western has student chapters of several national honorary organizations and departmental clubs which allow students to pursue their disciplinary studies outside the classroom. These groups include: Alpha Kappa Delta (Sociology), Alpha Zeta (Spanish), Gamma Chapter of Tri Beta (Biology), Phi Alpha Theta (History), Psi Chi (Psychology), Sigma Tau Delta (English), Art League, Association for Students of Exercise and Sports Science (ASESS), CCMENC (Music Club), Chemistry Club, English Club (Wordhorde), Politics Club, Psychology Club, Sociology Club and Sustainability Coalition (Environmental Sustainability).

**LEAD Office.** The Leadership, Engagement, and Development (LEAD) Office creates and provides leadership development opportunities and actively engages students into the Western and local community. This office also maintains support for
annual programs such as Orientation, Senior Reception, Family Weekend, and Community Clean-up as well as promoting service opportunities. The LEAD Office is located in the University Center.

**Living/Learning Communities.** Living/Learning Communities are places within the traditional residence halls where students are assigned to live based upon their area of academic interest, where academic engagement is emphasized, and where the students’ social experience is integrated into their academic experience creating a unique residential environment.

**Mountain Rescue Team.** The team is a fully certified university-based search and rescue team. They are a highly trained and dedicated group which has gained national attention a number of times for search and rescue work in the surrounding mountains.

**Multicultural Center.** This Center exists to offer educational, social, psychological, and emotional support for students from culturally or racially diverse backgrounds, however, the office is open to anyone. Activities help students from diverse backgrounds develop their special talents, aid in the retention of these students, and broaden the cross-cultural understanding of all students, staff, faculty, and the administration. The Multicultural Center is located in the University Center. Housed in the Multicultural Center are four clubs: Amigos, the Asian/Pacific Islander Club (APIC), Black Student Alliance (BSA), and the Native American Student Council (NASC).

**Music Programs.** Each semester, programs by the orchestra, chorus, jazz band, and other groups are featured, as well as individual recitals by music faculty members, advanced music students, and guests.

**Peak Productions.** Each year students work in conjunction with communication arts faculty to present five or six full-length theatre productions, including some which are written and directed by students.

**Program Council.** Each year the Program Council, a student-run organization, sponsors bands, speakers, performers, and other entertainers for concerts and presentations.

**Residence Life Focus Programs.** Throughout the year, speakers and other presenters focus on issues of gender, race and ethnicity, health, and other concerns relevant to life in and beyond the residence halls.

**Religious Organizations.** Western has two student religious organizations: Christian Challenge and Ignite. In addition, churches of all denominations in the community welcome participation from students.

**Student Government Association (SGA).** The SGA is Western's student government comprised of representatives from the academic disciplines and from all other student organizations. SGA meets weekly to make decisions on most aspects of student participation in the life and operation of the University, including expenditures of student fees. All students are welcome to attend meetings.
Educational and Career-related Services

**Academic Advising.** Western State Colorado University places great value on the relationship built between a student and his/her academic advisor. Each freshman is assigned an advisor to assist with course selection, registration, and understanding academic policies and procedures. Any student who needs registration information or advising services may contact the Academic Resource Center for assistance or referrals.

**Academic Resource Center.** The Academic Resource Center provides the following services:

- **Disability Services.** As the key office for providing resources and academic accommodations for students with disabilities, the Academic Resource Center offers students a variety of services to assist them as they pursue their academic and career goals. Some of these services may include extended time for tests, an alternative testing site, notetakers, accessible technology including screen readers and voice-to-text software, written material in alternate format, and other academic adjustments as appropriate, depending on students’ needs. In order to receive services, students must submit appropriate documentation of disability to verify eligibility under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act.

- **Exploratory Program.** The Exploratory Program is an advising program for students who have not yet declared a major. All Exploratory students will be advised through the Academic Resource Center and will receive tailored assistance regarding declaring a major.

- **Learning Skills Assistance.** The Academic Resource Center staff provides academic counseling to help students develop effective study habits. This assistance, which is offered both individually and through workshops, provides students with skill-building techniques in areas such as textbook reading, memorization, test taking, note taking, organization, and time management. Students wishing to enhance their motivation, develop an understanding of their own individual learning styles, and improve their overall study skills are encouraged to use the Academic Resource Center’s resources.

- **Turning Point.** Turning Point is a program for students on academic probation. The program is designed to assist students in identifying the cause of their academic difficulty and how to achieve academic success.

- **Career Services.** Career Services provides information to students related to career choices and job-search skills. The Career and Academic Advisor provides support through résumé and cover letter review, workshops, listing of internships and jobs, and the Career, Job, and Internship Fair.

**Computing, Media, and Telecommunications.** Computing, Media and Telecommunication Services provide technological support to all constituents of the campus community. This includes computing resources, Internet access, telephone services, and electronic support of classrooms. Students will find a learning environment at Western that is enhanced by a variety of computer resources designed to improve the quality of education and to promote active learning. Access to local and national resources is accomplished via a local area network in addition to a high-speed Internet connection. All students are given e-mail accounts, allowing them to correspond with professors, friends, and family. Administrative functions such as
university applications, class registration, payment of fees, financial aid inquiries, and online course grades may be accomplished using the University’s online web-based system. Using a variety of computer laboratories, students have easy and convenient access to local and national resources through state-of-the-art computer systems. Students living in the residence halls have full access to these resources from the comfort of their rooms using a direct connection in each room or through wireless access.

**Extended Studies.** The mission of Extended Studies is to extend Western’s educational opportunities for life-long learning. Extended Studies is an integral part of the University. Both credit and non-credit courses are offered, and some classes are offered for graduate credit.

**Student Services.** The Office of Student Affairs and the LEAD Office provide a strong support system designed to help students make the most of their Western experiences. Staff members are readily available to assist students with the wide array of integrated services and programs offered through both offices. The staff also provides helpful connections to other campus resources, such as academic advising and tutoring. Programs connected with the Office of Student Affairs and the LEAD Office include the following:

- **International Student Services.** A variety of services are available to international students, such as visa assistance, orientation, advising on personal and academic matters, employment information, international club membership, and opportunities to participate in numerous cultural and social activities.

- **National Student Exchange.** The National Student Exchange (NSE) program gives eligible students the opportunity to study at one of over 200 colleges and universities across the United States and its territories for up to one academic year.

- **Student Employment.** The LEAD office provides information about jobs available to Western students. The LEAD office receives job listings, including work-study positions, from on-campus departments and off-campus employers.

- **Study Abroad.** Students are encouraged to take advantage of the many opportunities to study abroad, including programs sponsored by Western and programs offered through other colleges, universities, and agencies.

- **Testing Services.** The Office of Student Affairs administers many nationally coordinated exams, including the ACT, GRE Subject and General Tests, LSAT, MPRE, PLACE, PRAX-IS Series, and SAT. The Academic Resource Center administers Accuplacer, CLEP, and correspondence exams by appointment.

- **WRAP.** WRAP (Western’s Responsible Alcohol Partnership) exists to help students have a safe and healthy experience while attending Western. To accomplish this goal, WRAP provides students with alternative activities to prevent the abuse of drugs and alcohol, many of which incorporate a variety of methods of stress reduction. One unique aspect of the approach is that WRAP tries to help and support students who violate campus drug and alcohol policies, rather than simply punish. WRAP wants to ensure that alcohol is used legally, responsibly, and with respect to the health of the drug abusers themselves, fellow students, and the community. WRAP collaborates with campus groups to provide drugs and alcohol education to the entire campus community, partners with GCSAPP and the BACCHUS Network to provide drug prevention and wellness education for Western students.
Recreational and Athletic Programs

**Intracollegiate Athletics.** Western State Colorado University is a member of the Rocky Mountain Athletic Conference, participating under the rules and guidelines of the National Collegiate Athletic Association (NCAA) Division II. The University fields men’s teams in football, basketball, cross-country running, track and field (indoor and outdoor), and wrestling. Western’s women’s teams represent the University in basketball, volleyball, cross-country running, soccer, swimming, and track and field (indoor and outdoor).

**Intramural Program.** Western’s intramural program is organized and run by the Student Government Association with funding from student fees. Organized activities include men’s and women’s leagues in basketball, flag football, and soccer. There are also coeducational competitions in softball, volleyball, dodgeball, floor hockey, disc golf, and ultimate frisbee.

**Club Sports.** Club sports provide the opportunity for student-athletes to participate in sporting competitions against other college, university, or club teams. Club sports teams compete against teams across Colorado, the Rocky Mountains, and the United States. Club sports teams include: skiercross/boardercross, and freeride skiing; baseball; cheerleading; men’s lacrosse; men’s and women’s hockey; men’s and women’s mountain biking, cyclocross, and road cycling; men’s and women’s rugby; and men’s soccer.

**Wilderness Pursuits.** Wilderness Pursuits (WP) is a co-curricular, professionally managed outdoor program that provides rafting, kayaking, mountaineering, hiking, skiing, ice climbing, sea kayaking, and cycling adventures throughout Colorado and the Intermountain West at deep discounts. WP also rents state-of-the-art camping, kayaking, backpacking, skiing, snowshoeing, and mountaineering equipment for nominal fees. WP provides resources and information for planning private expeditions such as maps, books, and videos. WP maintains ski and bike shop repair areas with free access to tools and supplies. Students and staff of all abilities are welcome to participate in WP programs. WP also implements contract programs, such as the Wilderness Based Orientation, the Peter Terbush Memorial Outdoor Leadership Summit, and other programs by special arrangements.

Special Services

**Campus Health Center.** The Health Center is organized and staffed to assist students in various ways, including:

- Counseling Services: Licensed counselors provide individual, group, marital, and family counseling. Full-time students, faculty, and staff are eligible for seven (7) free counseling sessions per year.
- Medical Services: A physician’s assistant provides routine and referral medical care.
- Public Health: A staff of registered nurses provides family planning services, as well as AIDS testing and counseling.

**Ombudsperson.** This service offers assistance or referrals regarding University policies, procedures, and regulations and assists in resolving student-based problems and conflicts. The Ombudsperson is also readily accessible to students as a neutral and informal mediator whose role is to promote fair and equitable treatment at Western.
Westerners In Transition (WIT). This program assists women and men of all ages who do not fit into the usual profile of a single student attending the University directly from high school. WIT guides the incoming student in navigating the processes of admissions, financial aid, registration, and other important steps involved in matriculating at Western. Western’s staff is committed to assisting WIT students through all of the important steps in their university careers. WIT students will network with other individuals who share their experiences as adult learners and who can provide essential mentoring. The program provides personal advising, mentoring, workshops, a newsletter, networking, leadership opportunities, grants, and scholarships.

Student Handbook

Additional student services, policies, and standards of conduct are described in the Student Handbook, available online and published annually by the Office of Student Affairs.

Tenderfoot Child and Family Development Center. A fully licensed day-care center for up to 140 children, six weeks to 12 years old.
ACADEMIC POLICIES

Academic success, a goal that we want all students to achieve, can be measured in many ways. This section identifies and explains the standards that Western has established as measures of academic success and indicates the policies and procedures that apply to the students who fail to meet the standards. The Provost/Vice President for Academic Affairs, in consultation with the Faculty Academic Policies Committee and the Faculty Senate, is responsible for the development and implementation of these academic standards and policies.

Unit of Credit

Western uses the semester hour as the basic unit of credit. The semester credits assigned to a course are based on the specific learning objectives and the expected outcomes. The University’s assigned semester hours are consistent with the Federal definition of a credit hour and the Colorado Commission on Higher Education’s minimum class times for credit courses. The minimum expectation for one semester credit is one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week approximately fifteen weeks of seminars and lecture-based classes. An equivalent amount of work is required in laboratories, internships, practica, online, studio work, and other academic work leading toward the award of credit hours.

Course Numbering System

Following is an explanation of the numbers used in identifying courses offered at Western:

001-099 Preparatory skills courses not counted toward the required 120 credits for a bachelor’s degree. Students enrolled in preparatory skills courses will be assessed tuition separately for those courses.

100-199 Courses primarily for freshmen.

200-299 Courses primarily for sophomores. Freshmen may take them after consultation with an advisor. Many 200-level courses have specific prerequisites which must be completed prior to enrolling.

300-399 Courses primarily for juniors and generally not open to freshmen. Sophomores may enroll after consultation with their academic advisor.

400-499 Courses primarily for seniors and generally not for freshmen and sophomores.

Student Classification by Class Level

Students are classified according to the number of semester credits they have earned.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Semester Credits Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>0-29</td>
</tr>
<tr>
<td>Sophomores</td>
<td>30-59</td>
</tr>
<tr>
<td>Juniors</td>
<td>60-89</td>
</tr>
<tr>
<td>Seniors</td>
<td>90 +</td>
</tr>
</tbody>
</table>
Academic Load

A standard course load over a 16-week semester is 15 credits. This is the most common load leading to graduation in four years.

Students are discouraged from carrying an overload. An overload is defined as more than 18 credits in a 16-week semester. Under no circumstances is a student to enroll for more than 21 credits in a 16-week semester. Students taking 19 to 21 credits in a 16-week semester are assessed a tuition surcharge for each credit over 18 credits.

Students who have a cumulative grade-point average of 3.000 or better may petition to take an overload in a given semester. The petition must be signed by the student’s academic advisor and the chair of the student’s major department. If the student’s cumulative grade-point average is below 3.000, the petition also requires approval of the Vice President for Academic Affairs. The completed petition must be submitted to the Office of the Registrar.

During a 10-week summer session, 6 credits is considered full time. A student may enroll in 12 credits without special approval. No more than 9 credits may be taken in a 5-week part-of-term. Students with a cumulative grade-point average of 3.000 or better may petition to take 13 to 15 credits. The petition must be signed by the student’s academic advisor and the chair of the student’s major department. If the student’s cumulative grade-point average is below 3.000, the petition also requires approval of the Provost/Vice President for Academic Affairs. The completed petition must be submitted to the Office of the Registrar.

No student may take more than 15 credits in the summer session.

Registration

Advising

All Western State Colorado University students are assigned an academic advisor who can assist them in developing their educational plans and accomplishing career and life goals. Academic advisors are important resources as students develop course schedules. Consultation with an academic advisor is required before registration.

Course Descriptions

Course descriptions provide a summary of the course content. If there is a prerequisite that must be met before a student can register for the course, this information is stated in the course description. Prerequisites may include specific courses, class standing, declared major, and other requirements. If there is a corequisite course in which a student must be registered, this information is also stated in the course description. The Class Schedule, available prior to registration, includes information about courses offered in the given semester, such as the names of instructors, class meeting times and locations, and additional requirements.

Registration Procedures

New students are required to participate in new student orientation. Information about registration and orientation is mailed to all new students admitted to the University. Currently enrolled students may register during the present semester for the next semester or summer session. Registration timelines and procedures are detailed in the Class Schedule.
Late Registration

Students should register for classes prior to the beginning of the semester. While they may register during the first week of the semester, students must understand that the limited availability of classes may prevent them from obtaining complete schedules. Late registrants may be assessed additional fees.

Add/Drop

After classes have begun in a 16-week semester, students may add an open class without petition until 5 p.m. on the fourth day of the semester. After the fourth day and until the end of the official drop period, students may add a course only with approval by the instructor. The add deadline for any course that meets for less than 16 weeks is two days. The student is responsible for understanding and communicating with the instructor, understanding course policies, and understanding any consequences of adding a course after the first class meeting.

Students may drop a course during the first 15% of the class meetings. This rule applies for both classes that meet for a full semester and classes that meet in sessions shorter than a full semester. (Note the difference between this rule and “withdrawal” explained on the next page.)

Western State Colorado University faculty reserve the right to drop students from class rolls if they miss the first class meeting. Not all instructors require attendance at the first class meeting, but many do. Students are strongly encouraged to attend all their first class meetings. If circumstances such as weather or flight arrangements prevent students from attending the first class session, it is the student's responsibility to contact the instructor of each course to request that their seat in the class be held.

Class Attendance and Participation

Faculty and students have shared responsibility in the education process. Class attendance and participation is the student's responsibility. The interactions a student has with the instructor and fellow students represent a significant portion of the learning process in coursework. Therefore, class attendance and participation is essential for a successful education. Instructors may set attendance and participation policies for each of their courses, which are specified in the course syllabus. If a student violates an attendance or participation policy, instructors may withdraw a student from class, lower the earned grade, and deploy other actions as specified by the course policy.

An important responsibility for students is to be prepared for class. Such preparation for the average student expecting an average grade (“C”) typically requires 2-3 hours of studying or other types of preparation for every hour of coursework.

Variable Credit Courses

Variable Credit courses are courses which may be offered for a range of credits. The range of credits is set by the discipline, and is published in the catalog and class schedule. The types of courses generally encompassed by the term “variable credit” include Field Experience, Internship (described below), Independent Study, Directed Study, Practicum, Senior Thesis, and Research Problems. The learning objectives and academic requirements for these courses are established between individual faculty and individual students, and have specific academic outcomes defined before the course work begins.

Students must register for variable credit courses prior to beginning the studies associated with the course. Internship hours or study completed before the course
registration is complete will not be counted towards the hours required for the course credit.

The student must be enrolled for the credits during the term in which the studies begin. This coursework is part of a student’s academic load for the semester. A request for changes to variable credit registration after the work begins may be considered through a petition process in extenuating circumstances. The petition must be signed by the instructor for the variable credit course, the department chair, and the Registrar.

To register for a variable credit course, the student must submit a completed and signed Variable Credit Course form to the Office of the Registrar. Some disciplines may have additional requirements for registration in Variable Credit Courses. Substituting variable credit courses for required courses in the major or minor is at the discretion of the discipline; no variable credit course may be used to meet General Education requirements.

Internships

Internships offer students the opportunity to combine academic credit with work in their career field. The learning objectives and academic requirement for these experiences are established in collaboration with the student’s faculty advisor, based on the employer's job description. The faculty advisor, employer, and student sign off on the learning objectives, agreeing in advance what the internship will entail. Students earn credit based on the number of hours to be worked, which is determined in advance. Each academic department establishes a requirement for the number of hours to be worked for each credit earned. Employers complete an evaluation of the intern at the end of the experience which faculty use in assessing the student’s performance and grade.

Minimum eligibility requirements for internships are a 2.000 GPA and completion of at least 12 credits in the academic area of the internship. The internship policy of individual disciplines may be more stringent. Assignment of internship credit toward requirements of a degree program is to be decided by the academic area of the internship, and in no case can it count towards General Education requirements.

In order for internships to maintain academic integrity, Western State Colorado University and a faculty member must be involved from the initial development of the learning objectives through the completion of the internship.

Students must register for internship credit prior to beginning the work associated with the internship. The student must be enrolled for the credits during the term in which the work is initiated. This course work is part of a student’s academic load for the semester.

Taking Courses for No-Credit (NC)

Regularly Enrolled Students. Students may enroll in a course for no-credit (NC), but only at the time of registration. Students may not change from no-credit to credit or from credit to no-credit after the class has begun. Students enrolled for no-credit pay appropriate tuition and fees and are expected to attend classes regularly. No-credit courses are treated as a part of a student's course load for purposes of determining semester course-load limits.

Auditing Courses. Western invites citizens 60 years of age or older to participate in classes at the University on a space-available, no-credit, no-cost basis. (This does not apply to Extended Studies courses.) Students qualified to audit courses in this manner should make arrangements with the Academic Affairs office.
Withdrawal from Individual Courses

After the official add/drop period, a student may only withdraw from a course with approval by the course instructor and the student’s academic advisor. Students who obtain these authorizations will receive a grade of “W” (which has no effect on the student’s grade-point average; refer to sections on Grades and Grade-Point Average that follow). If two-thirds of the scheduled class time in any given course has been completed, the student is not allowed to withdraw, and a grade for the course (which does affect the student’s grade-point average) is recorded. Specific withdrawal deadlines are published in the Course Schedule booklets for each semester.

Course instructors may also withdraw a student from a class for reasons such as inadequate academic progress or attendance, academic dishonesty, or disruptive behavior.

Withdrawal from the University

Students who wish to withdraw from the University may do so any time during the semester. Contact the Vice President for Student Affairs to initiate an official withdrawal from the University. Students should also consult with course instructors and their academic advisor.

After the official Add/Drop period, but before the withdrawal deadline, a student wishing to withdraw entirely from the University will be given a grade of “W” for all courses except variable-credit courses. Once two-thirds of the scheduled class time in any given course has been completed, a student wishing to withdraw from the University will be given a “W” or a “WF” grade for each course.

Withdrawal from Variable Credit Courses. After 15% of the course has been completed, a student wishing to withdraw from the University during a term when he or she is enrolled in a variable credit course (i.e., internships, practicums, field experiences, independent studies, etc.) must receive the approval of the supervising instructor. If a student obtains this authorization, a grade of “W” or a “WF” may be assigned. The coordinator of the specific program can explain the guidelines and consequences resulting from dropping or withdrawing from selected courses.

Withdrawal in Absentia. If illness, injury, or other circumstances prohibit a student from being on campus to request withdrawal from the University in person, the student may notify the Student Affairs office (970) 943-2011 and request that the Vice President for Student Affairs act as the student’s agent in notifying course instructors and the student’s advisor.

Academic Leave of Absence

The Academic Leave of Absence policy is designed to allow students who plan to be absent from Western to continue their studies without completing an application for readmission (see Readmission of Former Students in the Admissions Policies and Procedures section of this Catalog). In addition, students returning from an approved Academic Leave of Absence will be given the same priority at registration as continuing students. Academic Leaves of Absence are granted for one semester or one year to continuing, degree-seeking students in good academic standing. Information regarding Academic Leaves of Absence and application materials are available in the Office of the Registrar.
Grades and Grade-Point Average

For the purpose of calculating a student’s grade-point average (which determines academic standing), numerical values are assigned to letter grades on the following scale:

<table>
<thead>
<tr>
<th>Letter</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.000</td>
</tr>
<tr>
<td>A-</td>
<td>3.670</td>
</tr>
<tr>
<td>B+</td>
<td>3.330</td>
</tr>
<tr>
<td>B</td>
<td>3.000</td>
</tr>
<tr>
<td>B-</td>
<td>2.670</td>
</tr>
<tr>
<td>C+</td>
<td>2.330</td>
</tr>
<tr>
<td>C</td>
<td>2.000</td>
</tr>
<tr>
<td>C-</td>
<td>1.670</td>
</tr>
<tr>
<td>D+</td>
<td>1.330</td>
</tr>
<tr>
<td>D</td>
<td>1.000</td>
</tr>
<tr>
<td>D-</td>
<td>0.670</td>
</tr>
<tr>
<td>F</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Computation of Grade-Point Average (GPA)

To obtain grade points earned in a course, multiply the number of credits per course by the numerical points for the grade earned in the course. Following is an example of a GPA calculation for 12 credits earned by a student taking four courses with each course worth three credits.

| Course #1 - Grade Earned = B | (3 cr) X (3.000 pts) = 9.000 grade points |
| Course #2 - Grade Earned = C+| (3 cr) X (2.330 pts) = 6.990 grade points |
| Course #3 - Grade Earned = C | (3 cr) X (2.000 pts) = 6.000 grade points |
| Course #4 - Grade Earned = B- | (3 cr) X (2.670 pts) = 8.010 grade points |

Total GPA credits=12  Total grade points=30.000

A student’s semester GPA is calculated by dividing total grade points by total GPA credits (30.000/12 = 2.500 GPA). A student’s cumulative GPA is calculated by dividing all grade points earned by all GPA credits.

All grade-point averages at Western are calculated to three decimal places and all requirements specifying grade-point averages (e.g., scholarships) are stated in terms of three decimal places.

Repetition of Courses

A student who has received a low grade in a course can improve his/her cumulative grade-point average by repeating that course and earning a higher grade. If the student repeats a course under the same title and/or number, only the credits and grade points of the most recent enrollment in that course (even if the repeated course grade is lower) are used in determining whether a requirement has been met and in calculating that student’s cumulative GPA. In addition, the following conditions apply to repeating a course:

Variable-credit courses are handled as exceptions to the policy on course repetition. A student who wishes to enroll in a variable-credit course to repeat credit previously taken under that course number, but not for additional available credit under that same course number, must contact the Office of the Registrar.

Students wishing to repeat and replace the grade from a course taken on National Student Exchange or a Study Abroad program must send a letter of petition to the Registrar.

Course work repeated after the undergraduate degree has been recorded on the student academic record will not be included in the undergraduate GPA.

Grades Assigned Other than A, B, C, D, F

At the discretion of the faculty member teaching the course, a student who is unable to complete a course for reasons beyond the student’s control (e.g., illness) may be assigned an “Incomplete” (IN). The student must have completed more than one-half
of the course work at an acceptable level at the time of the request for an “Incomplete.” The student and the faculty member must agree upon a plan for the completion of the work within a time period not to exceed one calendar year. When faculty give an "Incomplete", they must designate the student’s existing grade in the course, the work to be completed for the “Incomplete” to be removed, and also indicate the grade that will be automatically given after one year if the work is not satisfactorily completed.

A grade of “Technical Failure” (TF) indicates that the student discontinued participation in the course without official approval. A “TF” is assigned 0.000 grade points.

Selected courses have been approved to be graded as “Satisfactory/Unsatisfactory” only and are so noted in their course descriptions. Only grades of “S” or “U” may be recorded for courses so designated. The grade of “S” is equivalent to letter grades of C- or above. The grade of “U” is equivalent to the letter grades of D+ or below, and no credits are earned. In no case may the grade of “S” or “U” be converted to a traditional letter grade. The S/U grade cannot be used in classes which allow the letter grades A-F.

Some courses or projects are intended to last longer than one semester. Such courses may be designated by the department or department chair at the time of registration and will be given an “In Progress” designation at the end of the semester. The “In Progress” (IP) designation can be used for a maximum of one year, the end of which a grade must be assigned. Grades of “IN,” “IP,” “NC,” “W,” “S,” and “U” are not counted in the computation of a student’s grade-point average (GPA). Since “S” is not counted in calculation of grade point, it does not assist the student toward inclusion on the Dean’s List or Honors designation at commencement.

“Incomplete” (IN) or “In Progress” (IP) grades completed after the undergraduate degree has been posted will not be included in the undergraduate GPA.

**Attendance-Related Grades**

A course grade of “Technical Failure” (TF) may be assigned by course instructors for students who failed to attend classes but who did not officially withdraw from the course. “TF” is assigned 0.000 grade points for purposes of computing grade-point averages. Whether students have completed enough of the course to be assigned a grade other than “W,” “TF,” or “IN” (see sections explaining letter grades) is determined by the respective course instructors.

**Grade Corrections**

Faculty members must submit requests for grade corrections to the Registrar within one year following the recording of the incorrect grade.

**Academic Standing**

The faculty recognizes that the adjustment to university life may have a negative effect on the early academic performance of some students. To allow for this adjustment period, the 2.000 cumulative grade-point average requirement (ultimately necessary for graduation with a bachelor's degree) is not immediately imposed on beginning students, though all students should strive to achieve at least the minimum level of a 2.000 GPA every semester.

A sliding scale of categories of “academic deficiency” is applied to students who fall below this minimum. Students who are notified that they fall into any of these categories should re-examine their academic goals and their study habits and should avail themselves of the services provided by Western to help them to succeed academically. Students who perform at less than a 2.000 level, even if they are not technically “academically deficient,” should take steps to improve their academic performance.
**Academic Policies**

**Academic Dean’s List**
Students who have attained a grade-point average of 3.70 during a semester, while carrying a full course load, will be placed on the Academic Dean’s List. A full course load is 12 or more credits of letter-graded courses in a 16-week semester or six or more credits of letter-graded courses in a summer session.

**Good Standing**
Students whose cumulative grade-point average exceeds that which would place them on probation are considered to be in good standing. This minimum grade-point average is defined in the section below titled “Academic Probation.”

**Academic Alert**
Students who have cumulative grade-point averages of 2.000 or higher are sent notices at the end of any semester in which they receive a semester grade-point average lower than 1.500, alerting them that corrective action should be taken to improve their performance.

**Academic Probation**
Students are placed on academic probation when their cumulative grade-point average falls below the minimum required (see below). It is an early warning that students should take steps to improve academic performance. Students are placed on academic probation if they:

- are in the first semester of enrollment at Western (regardless of the number of credit for which they are enrolled) and receive a semester GPA below 1.500;
- have attempted fewer than 10 credits and have less than a 1.750 cumulative GPA at the end of a non-probationary semester;
- have attempted between 10 and 44 credits and have less than a 1.880 cumulative GPA at the end of a non-probationary semester; or
- have attempted 45 or more credits and have less than a 2.000 cumulative GPA at the end of a non-probationary semester.

Students are expected to raise their cumulative grade-point average to the required level during the probationary semester. Academic probation ends when the student achieves the required cumulative grade-point average. Students on probation achieving at least a 2.000 semester grade-point average (even though the cumulative grade-point average has not reached the specified level), may be permitted to continue for an additional probationary semester.

**Academic Suspension**
Academic suspension notices are issued at the end of fall, spring, and summer semesters to all students who, during a probationary semester, fail to achieve at least a 2.000 semester grade-point average and do not have the cumulative grade-point average required to be in good standing:

- Students who have attempted fewer than 10 credits and have less than a 1.750 cumulative GPA at the end of a probationary semester are placed on academic suspension.
- Students who have attempted between 10 and 44 credits and have less than a 1.880 cumulative grade-point average at the end of a probationary semester are placed on academic suspension.
- Students who have attempted 45 or more credits and have less than a 2.000
cumulative grade-point average at the end of a probationary semester are placed on academic suspension.

In addition, any student who earns less than a 1.000 GPA in any semester may be placed on academic suspension.

The period of suspension is for one calendar year. A student to whom such a suspension notice is issued at the end of a fall semester is eligible to return a year later, at the beginning of spring semester. A student suspended at the end of the spring semester is eligible to return a year later, at the beginning of the summer session. A student suspended at the end of the summer semester is eligible to return a year later, at the beginning of the fall session. In order to return to Western after serving the specified academic suspension period, the suspended student must apply for readmission through the Registrar.

Credits earned at another institution during a period of academic suspension are evaluated by the criteria explained in the Admissions Policies and Procedures section of this Catalog.

Students who believe that exceptional circumstances contributed to their suspension may submit a written petition, through the Registrar, to the Academic Appeals Committee (a sub-committee of the Faculty Academic Policies Committee). The petition form is available from the Registrar and must be submitted no later than five working days before the start of any semester during which that student wishes to re-enroll at Western. Each petition is reviewed by the Academic Appeals Committee to determine whether the appeal is granted.

The Academic Appeals Committee is authorized to specify conditions, beyond those described in these general policies, which reinstated students must meet in order to continue at Western.

**Academic Dismissal**

If a student returns from a period of academic suspension, the student's academic standing will be “probation after suspension.” If she/he does not earn a 2.000 or higher semester grade-point average during any semester prior to earning or exceeding the cumulative grade-point average required at that point in his/her academic career, no further probationary semester is allowed, and the student is issued an immediate notice of academic dismissal.

Readmission from an academic dismissal is possible only by action of the Academic Appeals Committee, according to the established procedures of that committee. The committee will not accept for review any dismissal appeal petition before two calendar years have transpired since the dismissal. If a student is granted readmission following academic dismissal, credits earned at another institution are evaluated by the criteria explained in the Admissions Policies and Procedures section of this Catalog.

**Errors in Determining Academic Suspension/Dismissal**

Students whose suspension or dismissal resulted from an error in grading or recording will be readmitted (the suspension or dismissal will be removed from their academic records) upon receipt by the Registrar of written notification from the appropriate faculty member. Such errors in grading or recording should be resolved before the Add Deadline of the semester the student is to be readmitted.

**Academic Amnesty**

Students who have not attended Western State Colorado University for six years or more may, upon returning to Western, petition for academic amnesty.
Academic amnesty allows students to count prior credits earned at Western of “C-” and above in meeting total graduation requirements. It also allows students to have a fresh start in their overall grade-point average, as the previous credits attempted at Western will not be used in calculating the overall grade-point average. Petitions by students may be submitted, through the Registrar, to the Faculty Academic Policies Committee. Students must submit petitions for academic amnesty before the end of their first term of re-entry. Academic Amnesty will be granted to a student only once.

**Graduation Requirements**

**Four-year Graduation Plan**

Western State Colorado University has adopted a four-year graduation plan. If a student signs the four-year graduation plan agreement, fulfills all of the conditions, and is still unable to graduate in four years, the University will absorb the cost of the additional course work required for the degree. The four-year graduation plan is available on the Office of the Registrar web page.

**Operative University Catalog**

All first-time entering students are allowed six years from their entering date as degree-seeking students to complete requirements in force at the time of their entrance to Western. During the six-year period, students may elect to satisfy requirements specified in a Catalog more recent than the one under which they entered. Students must, however, indicate to the Registrar which Catalog they want used for the evaluation of their credits when they request a “Graduation Audit.” Students who do not complete requirements within the six-year time limit must meet all the requirements of the Catalog in effect the year in which they apply for graduation. Exceptions to this policy will be considered on a case-by-case basis.

Each operative Catalog year begins at the start of the summer session and ends with the conclusion of the following spring semester.

Readmitted or currently enrolled students who choose, or are required to use, a Catalog more recent than the one in effect when they entered must satisfy all requirements in the new Catalog with the following exception: They are allowed to use courses already posted to the permanent record in satisfying the General Education requirements.

**General University Requirements**

A minimum of 120 semester credits is required for graduation. Of the 120 total credits required, students must earn 40 credits in upper-division courses (those courses numbered 300 and above). Fifteen of these 40 upper-division credits must be earned in courses that are part of the standard or comprehensive major programs.

At the time of graduation, students are required to have a minimum overall cumulative grade-point average of 2.000 or better, as well as a 2.000 or better grade-point average in their major.

All requirements specified in this section are minimums; some programs require levels beyond these minimums.

**Resident Credit Requirements**

Every candidate for a degree must earn a minimum of 30 credits from Western State Colorado University. This 30-credit minimum must include: a) at least 15 credits in the major, b) at least eight credits in the minor, and c) the final credit earned.

Credit earned for student teaching, independent study, internships, and other courses
that may require off-campus experiences are treated as “resident” credit if the student has registered for that credit through Western directly.

If a student registers for courses at another institution, regardless of the auspices under which such registration occurs, then such courses cannot be counted as “resident” credit at this University.

**Major and Minor Requirements**

Each student is obligated to meet either: (a) the requirements of a standard major program and a minor in another discipline, requiring a minimum of 30 credits earned in the major and a minimum of 18 credits earned in the minor; or (b) the requirements of a comprehensive major program, requiring a minimum of 48 credits with no minor required. The requirements of some majors and minors exceed these minimums. Students must complete a capstone requirement (minimum of 2 credits) as part of the standard or comprehensive major. Capstone courses are incorporated in the degree requirements listed in the Academic Programs section of this Catalog.

A student may earn a second or additional major by completing the requirements of each major.

A student may earn a second or additional emphasis within a major by completing the requirements of each emphasis, which must include a minimum of 18 unduplicated credits. To graduate with both a B.A. and a B.F.A., a student must complete the requirements of both degrees and complete a minimum of 150 credits. All degrees, majors, emphases, and minors desired must be declared on the “Application for the Bachelor Degree” card.

**General Education Requirements**

All students must complete the Western State Colorado University General Education Program including the Essential Skills and the Liberal Arts requirements. Specific requirements are described in the General Education section of this Catalog.

**Graduation With Honors**

In order to graduate with honors, a student must have an overall cumulative grade-point average at Western State Colorado University as follows:

- **Cum Laude**: 3.500 - 3.749
- **Magna Cum Laude**: 3.750 - 3.899
- **Summa Cum Laude**: 3.900 - 4.000

In order to be recognized for honors at a commencement ceremony, a student must have achieved the required grade-point average in all work completed at Western, with a minimum of 40 GPA credits in residence at Western. Up to eighteen of these credits may be in progress during the final semester. Any honors status which is posted to a student’s permanent record upon graduation will reflect the grade-point average that student earned on all work completed at Western.

**Graduation Requirement Audit**

Students are responsible for meeting all academic requirements. The University assists students in monitoring their academic progress by providing an academic advisor, copies of the student’s permanent records, and DegreeWorks, an online advising and graduation audit tool. Students must submit the Intent to Graduate form during the semester in which they expect to earn their 89th credit hour. The Registrar reviews the audit and communicates with the student and the student’s academic
advisor on requirements not yet completed.

Application for and Awarding of the Degree

Students are required to file an “Application for the Bachelor Degree” card with the Office of the Registrar during the first two weeks of the semester in which they expect to complete all degree requirements. Degrees are awarded at the end of the semester in which all degree requirements are completed provided all requirements are completed and grades recorded within 25 working days after the last day of that semester. If requirements are not completed and recorded within that period, the graduation date for the diploma and transcript is the semester during which the work is completed and grades recorded. In this case, students must notify the Office of the Registrar when all requirements are completed and file a new “Application for the Bachelor Degree” card.

Commencement

All students who complete requirements for graduation and are entitled to receive degrees are encouraged to participate in commencement exercises. In order to participate in commencement a student must have nine or fewer credits left to complete graduation requirements and be registered for those credits the following term; or have only a capstone, or internship to complete and be registered for it the next term it is offered. Students must be in good standing and must submit a request to be included in the commencement ceremony to the Registrar during the first two weeks of the semester in which the commencement is held.

Academic Integrity

As members of the academic community, students are expected to recognize and uphold standards of intellectual and academic integrity. The University assumes, as a basic and minimum standard of conduct in academic matters, that students will be honest and that they will submit for credit only the products of their own efforts. Both the ideals of scholarship and the need for practices that are fair require that all dishonest work be rejected as a basis for academic credit. They also require that students refrain from any and all forms of dishonorable conduct in the course of their academic work. Dishonest work may include, but is not limited to, the following infractions:

Plagiarism. Presenting another person’s work as one’s own, including paraphrasing or summarizing of the works of another person without acknowledgment and the submitting of another student’s work as one’s own is considered plagiarism. Plagiarism frequently involves a failure to acknowledge in the text, notes, or foot-notes the quotation of paragraphs, sentences, or even a few phrases written or spoken by someone else.

Cheating on Examinations. Giving or receiving unauthorized help before, during, or after an examination is considered cheating. Examples of unauthorized help include the use of notes, texts, or “crib sheets” during an examination (unless specifically approved by the instructor).

Unauthorized Collaboration. Submission for academic credit of a work product, or a part thereof, represented as being one’s own, which has been developed in substantial collaboration with assistance from another person or source, is a violation of academic honesty. It is also a violation of academic honesty to knowingly provide such assistance. Collaborative work specifically authorized by an instructor is allowed.
**Falsification.** It is a violation of academic honesty to misrepresent material or fabricate information in an academic exercise or assignment (e.g., false or misleading citation of sources or the falsification of the results of experiments or of computer data).

**Multiple Submissions.** It is a violation of academic honesty to submit substantial portions of the same work for credit more than once without the explicit consent of the instructor(s) to whom the material is submitted for additional credit.

**Consequences of Violations**

Violations of academic integrity may result in the following: a grade of “F” or a “zero” for the assignment, an “F” for the course, withdrawal from the course, or suspension or expulsion from the University. Serious violations of academic integrity are reported to the Office of Academic Affairs.

**Academic Due Process for Students**

It is the objective of these procedures to provide for the prompt and fair resolution of the types of problems described herein which students may experience at Western:

**Definitions**

**Complaint.** An informal claim by an affected student that a faculty member or an academic administrator has violated, misinterpreted, or improperly exercised his/her professional duties.

**Complainant.** An affected student who makes a complaint.

**Grievance.** A written allegation by an affected student that a faculty member or an academic administrator has violated, misinterpreted, or improperly exercised his/her professional duties. The grievance should include the possibility of a remedy.

**Grievant.** An affected student who files a grievance.

**Respondent(s).** The faculty member(s) and/or academic administrator(s) identified by the affected student as causing or contributing to the complaint or grievance.

**Grievance Committee.** A committee composed of one faculty member selected by the grievant, one faculty member selected by the respondent, and three faculty members selected by the Vice President for Academic Affairs (or assignees).

**Time Limits.** When a number of days are specified herein, they shall be understood to exclude Saturdays, Sundays, holidays, University vacation days, and other days when the University is not in session and holding classes.

**Academic Administrator.** Professional personnel of the University, other than teaching faculty, who are in positions to make academic decisions affecting students, including but not limited to, department chairs, Associate Vice President for Academic Affairs, Vice President for Academic Affairs, and the President.

**Informal Complaint Procedure**

The complainant shall discuss the problem with the respondent(s). If the problem is not mutually resolved at this time, the complainant shall confer with the immediate supervisor(s) of the respondent(s). (This usually will be the Chair(s) of the Department(s) to which the respondent(s) is assigned.)

If satisfactory resolution is still not achieved, the complainant must confer with the Vice President for Academic Affairs.
**Formal Grievance Procedure**

If the complaint is not suitably resolved, the student has the right to file a grievance with the Vice President for Academic Affairs within six months of the time that the grievant could or should have known of the action which is the basis of the problem. This written allegation shall indicate what has already been done to resolve the complaint. Preservation of relevant documents and of precise records of actions taken is advantageous.

The grievance committee shall be formed under the supervision of the Vice President for Academic Affairs, and a hearing shall be scheduled within 15 days after that officer receives the written grievance from the grievant.

The grievance committee shall hear testimony from the grievant, the respondent, and whomever else it deems appropriate.

Within 15 days after completion of the hearing(s), the grievance committee shall submit its findings to the Vice President for Academic Affairs for implementation as deemed appropriate by that officer. A copy of the finding of the committee and of the implementing decision of the Vice President for Academic Affairs shall be given to the grievant and the respondent.

The grievant may withdraw the grievance at any point in the proceedings by doing so in writing to the Vice President for Academic Affairs.

The Vice President for Academic Affairs may grant an extension of the time limit for good cause.

If the grievance has not been resolved satisfactorily after the above procedures have been completed, the grievant is advised that he/she may appeal to the President of Western State Colorado University, and ultimately, to the Board of Trustees.
The General Education Program provides a foundation for analytical discovery, independent thinking, and informed and engaged citizenship. General Education courses require students to engage the knowledge, perspectives, and methods of specific disciplines while developing essential skills. In so doing, students increase their understanding of themselves, the natural world, the bases of our society and institutions, the larger world, and their relationships. These courses offer a foundation for further studies and continued intellectual growth.

The thirty-five credit General Education Program contains two components: Essential Skills (9 credits) and the Liberal Arts (26 credits).

I. Essential Skills (9 Credits)

The purpose of the Essential Skills requirements is to provide students with the tools needed to reason, write, speak, read, quantify, and use information and technology in new ways of thinking and doing. The acquisition, application, and integration of the Essential Skills are practiced through the General Education curriculum and within courses in the disciplines during the students’ university careers.

Students must earn a minimum grade of “C-” in the following courses to fulfill the Essential Skills requirement:

**First Writing Course (3 credits)**

ENG 102 Academic Writing (GT-CO1)* ................................................................. 3 cr

Enrollment in English 102 Academic Writing and English 102 Honors Academic Writing requires reading and writing abilities consistent with the university entry-level expectations defined by the Colorado Commission on Higher Education. Consult with an advisor for English course prerequisites.

**Second Writing Course (3 credits).**

COM 202 Academic Writing and Inquiry ............................................................ 3 cr

**Mathematics Course (3 credits).** The mathematics requirement varies by program of study (major, emphasis, minor). Many programs have specific requirements beyond the University minimum. In all cases, these specific requirements satisfy the University Mathematics Course requirement. To select the appropriate courses, see the Academic Programs section of this Catalog.

If there is no specific mathematics requirement within a program of study, the minimum Mathematics Course requirement of the University may be satisfied by passing, with a minimum grade of “C-,” any university-level mathematics course numbered 100 or above. Mathematics essential skills courses include the following:

- MATH 105 Mathematics for the Liberal Arts (GT-MA1)* ................................. 3 cr
- MATH 131 Mathematics for the Social Sciences (GT-MA1)* .......................... 3 cr
- MATH 140 College Algebra (GT-MA1)* ......................................................... 3 cr
- MATH 141 Precalculus ................................................................................... 4 cr
- MATH 151 Calculus I (GT-MA1)* ................................................................. 4 cr
- MATH 209 Mathematics for Elementary School Teachers I .......................... 4 cr
- MATH 213 Probability and Statistics (GT-MA1)* .......................................... 3 cr

*Colorado State Guaranteed General Education Transfer Course
Enrollment in university-level mathematics courses (numbered 100 or above) requires mathematics abilities consistent with the university entry-level expectations defined by the Colorado Commission on Higher Education. Students should consult with their advisors about which mathematics course is appropriate.

II. Liberal Arts (26 Credits)

Each of the courses included in the Liberal Arts program extends the development of Essential Skills while examining the social sciences, natural sciences, and the arts and humanities. Courses in the Liberal Arts program may also satisfy major and/or minor requirements.

AREA I: Social Sciences (9 credits) Courses in Area I focus on the following goals:
- Students use social science methods and reasoning.
- Students demonstrate knowledge of how historical, political, economic, cultural, or social contexts shape the human environment.
- Students demonstrate knowledge of how individuals relate to the social world, past and present.

Nine credits are required from the courses listed below. Students must choose from three disciplines.

ANTH 107 Introduction to General Anthropology (GT-SS3)* ........................................ 3 cr
ECON 201 Macroeconomics (GT-SS1)* ............................................................................. 3 cr
ENVS 100 Introduction to Environment and Sustainability ................................................. 3 cr
GEOG 110 World Regional Geography (GT-SS2)* ......................................................... 3 cr
GEOG 120 Introduction to Human Geography (GT-SS2)* .............................................. 3 cr
GEOG 250 Geography of North America (GT-SS2)* ...................................................... 3 cr
HIST 101 World History to 1500 (GT-HI1)* ................................................................. 3 cr
HIST 102 World History Since 1500 (GT-HI1)* ............................................................... 3 cr
HIST 126 U.S. History to 1865 (GT-HI1)* ................................................................. 3 cr
HIST 127 U.S. History Since 1865 (GT-HI1)* ............................................................... 3 cr
HIST 250 History of the Middle East (GT-HI1)* ............................................................ 3 cr
HIST 254 A History of Africa ......................................................................................... 3 cr
HIST 260 Introduction to Latin American History .......................................................... 3 cr
POLS 117 Introduction to Political Ideas (GT-SS1)* ......................................................... 3 cr
POLS 180 Introduction to American Politics (GT-SS1)* .................................................. 3 cr
POLS 255 Introduction to Comparative Politics ............................................................. 3 cr
POLS 260 Introduction to World Politics ......................................................................... 3 cr
PSY 100 General Psychology (GT-SS3)* ......................................................................... 3 cr
SOC 101 Introduction to Sociology .................................................................................. 3 cr
SOC 168 Social Problems ............................................................................................... 3 cr

AREA II: Natural Sciences: (8 credits) Courses in Area II focus on the following goals:
- Students demonstrate knowledge of scientific viewpoints.
- Students use the scientific method.
- Students evaluate the impacts of science and technology on society.
- Students demonstrate scientific literacy.

*Colorado State Guaranteed General Education Transfer Course
Eight credits are required from the courses listed below:

**BIOL 120** Studies in Biology (GT-SC2)* ................................................................. 3 cr
**BIOL 130** Environmental Biology (GT-SC2)* .......................................................... 3 cr
**BIOL 135** Environmental Biology Laboratory (GT-SC1)* ....................................... 1 cr
**BIOL 150** Biological Principles (with laboratory) (GT-SC1)* ............................... 4 cr
**BIOL 151** Diversity and Patterns of Life (with laboratory) .................................. 4 cr
**BIOL 200** Environmental and Public Health (GT-SC2)* .......................................... 3 cr
**CHEM 100** Contemporary Chemistry (GT-SC2)* .................................................... 3 cr
**CHEM 101** Introduction to Inorganic Chemistry (GT-SC2)* ..................................... 3 cr
**CHEM 111** General Chemistry I (GT-SC2)* ............................................................. 3 cr
**CHEM 112** General Chemistry Laboratory I (GT-SC1)* ......................................... 1 cr
**CHEM 113** General Chemistry II ............................................................................... 3 cr
**CHEM 114** General Chemistry Laboratory II ............................................................. 1 cr
**GEOL 101** Physical Geology (GT-SC2)* ................................................................. 3 cr
**GEOL 105** Physical Geology Laboratory (GT-SC1)* ................................................ 3 cr
**PHYS 110** Solar System Astronomy (GT-SC2)* ......................................................... 3 cr
**PHYS 120** Meteorology (GT-SC2)* ........................................................................... 3 cr
**PHYS 125** Energy and the Environment (GT-SC2)* ................................................. 3 cr
**PHYS 140** Introductory Physics (with laboratory) (GT-SC1)* ............................... 4 cr
**PHYS 170** Principles of Physics I (with laboratory) (GT-SC1)* ............................... 4 cr
**PHYS 171** Principles of Physics II (with laboratory) (GT-SC1)* ............................. 4 cr
**PHYS 200** General Physics I (with laboratory) (GT-SC1)* ....................................... 4 cr
**PHYS 201** General Physics II (with laboratory) ........................................................ 4 cr
**SCI 110** Habitable Planet (with laboratory) ............................................................... 4 cr
**SCI 120** Living Planet (with laboratory) ................................................................. 4 cr
**SCI 210** Dynamic Planet (with laboratory) ............................................................... 4 cr

**AREA III: Arts and Humanities** (9 credits). Courses in Area III focus on the following goals:

- Students enhance their appreciation of the modes of creative expression.
- Students ask fundamental questions of value and meaning.
- Students survey a variety of ways humans have perceived their world.
- Students explore the ways in which the human environment is shaped by social, cultural, linguistic, religious, philosophical, and historical circumstances.
- Students gain increased awareness of the moral and ethical dimensions of the human condition.

Nine credits are required from the courses listed below. Students must choose from three disciplines. English, French, and Spanish are counted as one discipline for General Education purposes.

**ART 105** Introduction to Art (GT-AH1)* ................................................................. 3 cr
**ART 106** Studio Art for the Non-Artist ................................................................. 3 cr
**COM 119** Introduction to Film ................................................................................ 3 cr
**COM 121** Introduction to Theatre ............................................................................ 3 cr
**COM 151** Introduction to Mass Media ................................................................. 3 cr
**COM 216** Dramatic Literature and Script Analysis ................................................. 3 cr
**ENG 150** Introduction to Literature ........................................................................ 3 cr

*Colorado State Guaranteed General Education Transfer Course
General Education

ENG 205  Introduction to Creative Writing ................................................................. 3 cr
ENG 230  Environmental Literature (GT-AH2)* ......................................................... 3 cr
ENG 237  Women and Literature ................................................................................ 3 cr
ENG 238  Literary Culture of the American West ......................................................... 3 cr
ENG 248  Film Arts: Film as Literature/Literature as Film ........................................... 3 cr
ENG 250  Critical Approaches to Literature ................................................................. 3 cr
ENG 254  Formula Fiction ......................................................................................... 3 cr
ENG 255  Ancient World Literature (GT-AH2)* .......................................................... 3 cr
ENG 270  Folklore ...................................................................................................... 3 cr
FREN 256  French Literature in Translation .................................................................. 3 cr
MUS 100  Fundamentals of Music (GT-AH1)* ............................................................. 3 cr
MUS 140  Introduction to Music (GT-AH1)* ............................................................... 3 cr
MUS 240  Perspectives in Music ................................................................................ 3 cr
MUS 245  History of Rock and Roll ............................................................................ 3 cr
PHIL 101  Introduction to Philosophy (GT-AH3)* ....................................................... 3 cr

Colorado State Guaranteed General Education Transfer Courses

Western State Colorado University students who transfer to another Colorado public college or university may facilitate the transferring of general education credits by completing courses designated as State Guaranteed General Education Transfer Courses. Upon acceptance to another Colorado public college or university, students may have up to 31 credits of successfully completed (C- or better) State Guaranteed General Education Transfer Courses meet specific general education requirements of the receiving institution. Courses must incorporate specific content and competency areas as defined by the State Guaranteed General Education Transfer Curriculum. For more information regarding State Guaranteed General Education Transfer Courses and the 31-credit State Guaranteed General Education Transfer Curriculum, please consult the Colorado Department of Higher Education website: http://highered.colorado.gov.

Credits earned in general education courses not designated as State Guaranteed General Education Transfer Courses routinely transfer to other colleges and universities as determined by the receiving institution. A student transferring credits to another college or university should consult with the receiving institution to determine how transferred credits may meet particular general education requirements.

*Colorado State Guaranteed General Education Transfer Course.

GT-CO1: Colorado Guaranteed General Education Transfer Course, Introduction to Writing
GT-MA1: Colorado Guaranteed General Education Transfer Course, Mathematics
GT-SS1: Colorado Guaranteed General Education Transfer Course, Economics of Political Systems
GT-SS2: Colorado Guaranteed General Education Transfer Course, Geography
GT-SS3: Colorado Guaranteed General Education Transfer Course, Human Behavior, Culture, or Social Frameworks
GT-HI1: Colorado Guaranteed General Education Transfer Course, History
GT-SC1: Colorado Guaranteed General Education Transfer Course, Natural Sciences with Laboratory
GT-SC2: Colorado Guaranteed General Education Transfer Course, Natural Sciences without Laboratory
GT-AH1: Colorado Guaranteed General Education Transfer Course, Arts and Expression
GT-AH2: Colorado Guaranteed General Education Transfer Course, Literature and Humanities
GT-AH3: Colorado Guaranteed General Education Transfer Course, Ways of Thinking
ACADEMIC PROGRAMS

Accounting (ACC)

At Western, we believe that the best accountants are those with the greatest breadth in their undergraduate education. Thus, Accounting majors at Western are required to take a full range of General Education courses while still completing all necessary accounting and related business courses. This approach results in graduates who have over half of their course work in liberal arts disciplines, but who still meet all educational requirements to become certified public accountants. This method of accounting education, together with the rigors inherent in the study of accounting, combine to create an outstanding program with outstanding students. In addition, as with other disciplines at Western, students can count on small classes with caring and dedicated faculty.


The Professional Emphasis is intended to provide the appropriate educational background for students interested in professional accountancy (CPA) as a career, or the pursuit of a graduate degree in accounting, business, or law. The course work leading to graduation with a Comprehensive Accounting Major is composed of five areas: 1) general education and elective courses; 2) supporting tool courses; 3) Accounting Nucleus courses; 4) supporting courses in Accounting, Business Administration and Economics; and 5) a Capstone Course. Students completing one of the Comprehensive Majors do not need a minor area of study.

Students interested in becoming a Certified Public Accountant (CPA) should be aware that all states now require or will soon require 150 credits to be licensed as a CPA. In Colorado, this requirement will be effective as of July 1, 2015; Colorado CPA candidates will be allowed to sit for the CPA examination after they have completed 120 credits but will need to complete 150 credits before being licensed. Students should consult with an Accounting faculty advisor to develop an appropriate academic program if they plan on seeking licensure.

The Financial Analysis Emphasis in Accounting is designed for students who are interested in careers in accounting or finance but who do not intend to seek CPA certification. This emphasis includes courses in the traditional areas of managerial finance, financial institutions, investments, and economics, and also requires a substantial core of accounting courses. This approach maximizes the post-graduate opportunities available to students. Students completing the Financial Analysis Emphasis do not need a minor area of study.

The Standard Accounting Major is appropriate for students who have a strong interest in both accounting and another discipline. It does not offer the integrated breadth provided in the comprehensive majors. Students pursuing a Standard Major must also complete a minor area of study or have a second major in another discipline. The Standard Major does not provide sufficient preparation for someone interested in professional accountancy, but provides an excellent preparation for graduate study or for careers that make use of accounting information. The selection of a minor area of study (or a second major) that complements a Standard Accounting Major should be made with the aid of an advisor. Students may not pair a Standard Accounting Major with a Business Minor.
Many majors are student members of the Colorado Society of Certified Public Accountants and the American Institute of Certified Public Accountants.

To graduate, all majors must have a grade-point average of 2.500 or better in all courses required in the major and complete each of the following courses with a minimum grade of “C”: ACC 201 Introduction to Financial Accounting, ACC 202 Introduction to Managerial Accounting, ACC 301 Intermediate Financial Accounting I, ACC 302 Intermediate Financial Accounting II, ACC 320 Advanced Management Accounting, and ACC 350 Income Tax.

**FACULTY**

Professors Monica D. Newman and Scott G. Newman

**DESCRIPTION OF THE PROGRAMS**

All Accounting Majors require a minimum of 18 credits of Tool Courses and the 12-credit Accounting Nucleus.

**Tool Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201 Introduction to Financial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACC 202 Introduction to Managerial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 202 Microeconomics</td>
<td>3 cr</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>MATH 140 College Algebra</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 141 Precalculus</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 151 Calculus I</td>
<td>4 cr</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>ECON 216 Statistics for Business and Economics</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 213 Probability and Statistics</td>
<td>3 cr</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>BUAD 220 Computer Applications in Business</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 120 Information Management and Analysis</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Students are strongly encouraged to complete all Tool Courses before enrolling in Accounting Nucleus courses.

**Accounting Nucleus**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 301 Intermediate Financial Accounting I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACC 302 Intermediate Financial Accounting II</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACC 320 Advanced Management Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACC 350 Income Tax</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Accounting Major: Standard Program**

A minimum of 42 credits is required including 18 credits of Tool Courses, the 12-credit Accounting Nucleus, and the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 498 Accounting Ethics</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUAD 210 Legal Environment of Business</td>
<td>3 cr</td>
</tr>
<tr>
<td>Two of the following:</td>
<td></td>
</tr>
<tr>
<td>ACC 340 Accounting Information Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACC 410 Auditing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACC 450 Advanced Financial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACC 460 Advanced Income Tax</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
Accounting Major: Comprehensive Programs

PROFESSIONAL EMPHASIS
A minimum of 57 credits is required including 18 credits of Tool Courses, the 12-credit Accounting Nucleus, and the following:

- ACC 340 Accounting Information Systems .................................................. 3 cr
- ACC 410 Auditing .......................................................................................... 3 cr
- ACC 450 Advanced Financial Accounting .................................................. 3 cr
- ACC 498 Accounting Ethics .......................................................................... 3 cr
- BUAD 210 Legal Environment of Business ................................................. 3 cr
- BUAD 270 Principles of Marketing ................................................................. 3 cr
- BUAD 315 Business Law ................................................................................ 3 cr
- BUAD 360 Managerial Finance ..................................................................... 3 cr

One of the following:
- BUAD 333 Organizational Behavior ............................................................. 3 cr
- BUAD 350 Human Resource Management ................................................ 3 cr

FINANCIAL ANALYSIS EMPHASIS
A minimum of 57 credits is required including 18 credits of Tool Courses, the 12-credit Accounting Nucleus and the following:

- ACC 460 Advanced Income Tax .................................................................... 3 cr
- BUAD 210 Legal Environment of Business ................................................. 3 cr
- BUAD 311 Essential Excel Skills for the Workplace ...................................... 1 cr
- BUAD 312 Advanced Excel Applications .................................................... 2 cr
- BUAD 360 Managerial Finance ..................................................................... 3 cr
- BUAD 461 Investments .................................................................................. 3 cr
- BUAD 491 Strategic Management ................................................................. 3 cr
- ECON 201 Macroeconomics ........................................................................ 3 cr

Two of the following:
- ECON 301 Intermediate Macroeconomics .................................................. 3 cr
- ECON 316 Econometrics .............................................................................. 3 cr
- ECON 361 Money, Banking, and Financial Markets .................................... 3 cr

Accounting Minor
A minimum of 18 credits is required:

- ACC 201 Introduction to Financial Accounting ............................................ 3 cr
- ACC 202 Introduction to Managerial Accounting ......................................... 3 cr
- ACC 301 Intermediate Financial Accounting I ............................................. 3 cr
- Accounting electives ..................................................................................... 9 cr

Capstone Course Requirement. The following courses in the Accounting Major fulfill the capstone course requirement: ACC 498 Accounting Ethics (Standard Accounting Major or Professional Emphasis); or BUAD 491 Strategic Management (Financial Analysis Emphasis).
ACCOUNTING COURSES

ACC 197  Special Topics                  1-6 credits

ACC 201  Introduction to Financial Accounting       3 credits
An introduction to the field of accounting with emphasis on corporate financial statements. Financial statements are viewed as a communication device conveying the financial health of a business to interested parties. The objective of this first course is to teach students to read, analyze, and interpret these financial statements. The emphasis is on developing critical thinking and problem-solving skills using accounting concepts. Students are exposed to the steps used by accountants to record, measure, and process financial information. Cash flow analysis is contrasted with the accrual basis of accounting; the concepts of asset valuation and income measurement are discussed. Accounting majors must pass this class with a minimum grade of “C”. Prerequisites: university-level mathematics requirement with a minimum grade of “C-”, or instructor permission.

ACC 202  Introduction to Managerial Accounting       3 credits
An introduction to the preparation, uses, and analysis of common management accounting information. Topics include cost-volume-profit analysis, capital budgeting and present value applications, cash budgets, financial statement analysis, taxes, and management decisions, plus a brief introduction to modern cost accounting, with emphasis on activity-based costing systems. The development of problem-solving and analytical abilities is given primary importance throughout the course. Accounting majors must pass this class with a minimum grade of “C”. Prerequisites: MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-”; and ACC 201 with a minimum grade of “C”.

ACC 297  Special Topics                  1-6 credits

ACC 301  Intermediate Financial Accounting I       3 credits
Rigorous and comprehensive study of the means by which generally accepted accounting principles are used to generate the publicly-available information disseminated by modern U.S. corporations. Theoretical and practical criticisms and alternatives to current accounting practice are also considered, as is the idea of accounting as an information feedback system that allows individuals and organizations to reshape their environment. In addition, students are exposed to the realities of the economic and political climate surrounding the accounting standard-setting process. Accounting majors must pass this class with a minimum grade of “C”. Prerequisites: MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-”; and ACC 201 with a minimum grade of “C”.

ACC 302  Intermediate Financial Accounting II       3 credits
Continuation of ACC 301. As the ACC 301-02 sequence progresses, increased emphasis is placed on the relationship of modern accounting and information theory to current accounting practice. In addition, students are expected to develop an insight into the behavioral and economic consequences of the financial reporting process. Accounting majors must pass this class with a minimum grade of “C.” Prerequisite: ACC 301.

ACC 320  Advanced Management Accounting       3 credits
A study of the information needed by managers for planning, control and decision-mak-
ing. Both the tools needed to generate this information and the principles involved in evaluating the information are covered. Topics include: breakeven analysis; product and process costing, including activity-based costing, standard costing and joint costs; cash budgets and forecasting; relevant costs and non-routine decisions; the direct vs. absorption costing tradeoff; and capital budgeting. The overall level of difficulty in this course is generally consistent with the level of difficulty encountered on typical management accounting problems found on the Uniform CPA Examination. Accounting majors must pass this class with a minimum grade of “C”. Prerequisites: ACC 202 and ACC 301.

ACC 340  Accounting Information Systems  3 credits
A dual-purpose course which explores the theoretical view of information systems, while at the same time exposing the student to actual off-the-shelf accounting software. The course alternates between textbook readings and discussions and several case studies which require the student to create a computerized accounting system for a fictional client. After completing the course, the student is expected to possess the ability to computerize a manual accounting system, to understand system theory underpinnings of accounting information systems, and to have developed a view of the implications of expected technological advances on management information systems in general and accounting systems in particular. Prerequisite: BUAD 220 or CIS 120. Prerequisite or corequisite: ACC 301.

ACC 350  Income Tax  3 credits
An introduction to the federal income tax system. Emphasis is on the ways in which the U.S. income tax laws influence personal and business behavior and decision making, and how the tax laws can be used to accomplish various economic and social objectives. Topics covered include an introduction to tax research, principles of income and deduction, tax liability, and tax credits. Individual taxation is the primary focus, but the basic principles apply to most forms of business organization as well. Accounting majors must pass this class with a minimum grade of “C”. Prerequisite: minimum sophomore standing.

ACC 397  Special Topics  1-6 credits
ACC 410  Auditing  3 credits
An introduction to the field of auditing including an examination of the standards and methods used by certified professional accountants when attesting to the fairness of corporate financial statements. Specifics topics include the accounting professional code of ethics, generally accepted auditing standards (GAAS), internal controls, sampling techniques, audit planning, and specific audit procedures. Government policies concerning auditors’ responsibilities for fraud detection are also discussed. Prerequisite: ACC 302.

ACC 450  Advanced Financial Accounting  3 credits
An overview of the financial accounting theory, practice, problems, and reporting requirements for various economic entities. These include partnerships, foreign branches and subsidiaries, state and local governments, colleges and universities, hospitals, voluntary organizations, and the modern parent/subsidiary corporate structure. The approach taken in this course is that there are common information nee-
Accounting ds which each of these entities must satisfy. While the specific approach used to satisfy this need is dependent on a variety of factors, the common thread is that useful information is being generated for the consumers of that information. Prerequisite: ACC 302.

**ACC 460  Advanced Income Tax**  
3 credits  
A continuation of federal income taxation, with emphasis on property transactions, corporations, partnerships, and fiduciaries. A primary objective is decision-making from an after-tax point of view, that is, how taxes affect behavior. Topics include the tax effects of organizing, operating, and liquidating partnerships and corporations. Tax research methodology and the federal estate and gift tax are also covered. Prerequisite: ACC 350.

**ACC 491  Seminar in Accounting**  
3 credits  
A boardroom approach to problem solving through research, discussion, and analysis.

**ACC 492  Independent Study**  
1-6 credits  
A singular investigation into a unique problem arrived at between the researcher and the advisor.

**ACC 497  Special Topics**  
1-6 credits  
**ACC 498  Accounting Ethics**  
3 credits  
Investigates and explores the ethical responsibilities faced by professional accountants in all fields. Students will read, discuss, and analyze case studies regarding ethical situations and issues confronted by the accounting profession. The AICPA Code of Professional Conduct will be studied, as well as foundational ethical theory and an approach for identifying and analyzing ethical issues, with a focus on current events. Students are expected to make significant written and oral contributions to the class. This is the capstone course for the Standard Accounting Major and the Professional Emphasis. Prerequisite: senior status.

**ACC 499  Internship in Accounting**  
1-6 credits  
Experiences designed especially for the uninitiated student. Internships provide guided, counseled, and progressive experience under a dual tutelage program of a businessperson and an academician. Graded Satisfactory/Unsatisfactory only.
**ANTHROPOLOGY (ANTH)**

Anthropology is the scientific study of humans that is holistic and cross-cultural. Through anthropology a student achieves a broad geographical and temporal perspective of human biological and cultural adaptations. This perspective includes an understanding of cultural diversity in our own society, in our world at large, and in the past.

The Anthropology Standard Major provides students with a challenging, scholarly educational experience. Training in archaeology, physical anthropology, and cultural anthropology involves classroom, laboratory, and field work. Students majoring in Anthropology at Western apply information from the classroom as they participate in field studies. Majors are required to attend an Anthropology field school. The field school gives students hands-on field experience in anthropology. Laboratory skills are an important feature of the Anthropology curriculum, and students have the opportunity to participate in research with faculty.

Students majoring in Anthropology have used this experience to further careers in archaeology, cultural anthropology, forensics, and law enforcement, teaching, community planning, international business, and governmental research. With additional graduate work, careers in archaeology, cultural anthropology, and physical anthropology are possible.

**Faculty**

Professor Mark Stiger and Lynn L. Sikkink.
Lecturer David Hyde.

**Description of the Program**

**Anthropology Major: Standard Program**

A minimum of 38 credits is required:

- ANTH 107 Introduction to General Anthropology ............................................. 3 cr
- ANTH 218 Physical Anthropology (with laboratory) ............................................. 4 cr
- ANTH 219 Archaeology (with laboratory) ....................................................... 4 cr
- ANTH 230 Cultural Anthropology (with laboratory) .......................................... 4 cr
- ANTH 265 Anthropological Writing and Statistics ........................................... 3 cr
- ANTH 465 Senior Research Seminar ................................................................ 3 cr
- Anthropology electives .................................................................................... 9 cr

*Two of the following field and laboratory courses*

- ANTH 322 Analysis of Material Culture (with laboratory) ............................... 4 cr
- ANTH 467 Ethnography Field School ............................................................... 4 cr
- ANTH 469 Archaeology Field School ............................................................... 4 cr

*(ANTH 467 and 469 may be repeated for eight credits)*

**Anthropology Minor**

A minimum of 18 credits, including:

- ANTH 107 Introduction to General Anthropology ............................................. 3 cr
- Anthropology Electives .................................................................................... 7 cr

*(ANTH 467 and ANTH 469 may be repeated for eight credits).*
Two of the following:

ANTH 218 Physical Anthropology (with laboratory) ............................................ 4 cr
ANTH 219 Archaeology (with laboratory) ............................................................. 4 cr
ANTH 230 Cultural Anthropology (with laboratory) ............................................. 4 cr

**Capstone Course Requirement.** The following course in the Anthropology Major fulfills the capstone course requirement: ANTH 465 Senior Research Seminar.

### Anthropology Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 107</td>
<td>Introduction to General Anthropology</td>
<td>3 credits</td>
</tr>
<tr>
<td>ANTH 197</td>
<td>Special Topics</td>
<td>1-6 credits</td>
</tr>
<tr>
<td>ANTH 218</td>
<td>Physical Anthropology (with laboratory)</td>
<td>4 credits</td>
</tr>
<tr>
<td>ANTH 219</td>
<td>Archaeology (with laboratory)</td>
<td>4 credits</td>
</tr>
<tr>
<td>ANTH 230</td>
<td>Cultural Anthropology (with laboratory)</td>
<td>4 credits</td>
</tr>
<tr>
<td>ANTH 265</td>
<td>Anthropological Writing and Statistics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ANTH 297</td>
<td>Special Topics</td>
<td>1-6 credits</td>
</tr>
<tr>
<td>ANTH 320</td>
<td>Cultural Ecology</td>
<td>3 credits</td>
</tr>
<tr>
<td>ANTH 322</td>
<td>Analysis of Material Culture (with laboratory)</td>
<td>4 credits</td>
</tr>
<tr>
<td>ANTH 333</td>
<td>Archaeology of Colorado</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

A general introduction to anthropology. All three sub-fields of modern anthropology: cultural anthropology (archaeology and ethnography), physical anthropology, and linguistics are covered. GT-SS3

**ANTH 197 Special Topics**

An examination of biological variation in modern human populations and biological evolution of humans as shown by the fossil record. Prerequisite: ANTH 107.

**ANTH 218 Physical Anthropology (with laboratory)**

A study of the methods and theory of modern archaeology. The emphasis is on how archaeologists understand the past. A general chronology of world prehistory is presented. Prerequisite: ANTH 107.

**ANTH 219 Archaeology (with laboratory)**

An exploration of ethnographic theory and methods, and a cross-cultural and comparative examination of societies studied by ethnographers. Prerequisite: ANTH 107.

**ANTH 230 Cultural Anthropology (with laboratory)**

An introduction to the skills employed in the field of anthropology, using data sets and techniques from anthropological research. Prerequisites: ANTH 107, ENG 102, and MATH 140.

**ANTH 265 Anthropological Writing and Statistics**

An examination of key perspectives, theories, and methods in the study of ecological anthropology. Students learn about the use and definition of the environment by groups from different cultural backgrounds, and build a comparative perspective in so doing. The focus is on contemporary groups, but archaeological examples are used as comparison and to build time-depth in our understanding of cultural ecology. Prerequisite: ANTH 107 or instructor permission.

**ANTH 297 Special Topics**

A lab course training students in analytical methods in anthropology. Students are responsible for a major project in which they carry out all phases of anthropological research, including research design, background research, hypothesis, analysis, and presentation of results. Materials studied include lithics, fauna, ceramics, and botanical remains. An excellent preparation for (or follow-up to) the Archaeological Field School. Prerequisite: ANTH 219.

**ANTH 333 Archaeology of Colorado**

A detailed look at the archaeological sequences of Colorado with an emphasis on western Colorado. Time periods from Paleo-Indian to Historic are described. This
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 344</td>
<td>Indians of North America</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A detailed look at the native people found in North America and their relationships to each other and the non-native settlers of North America. Several case studies are examined in depth. Prerequisite: ANTH 107 or instructor permission.</td>
<td></td>
</tr>
<tr>
<td>ANTH 355</td>
<td>Medical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An examination of medical systems from various cultural groups, focusing on beliefs, methods of healing, health practitioners, and medical pluralism. Prerequisite: ANTH 107.</td>
<td></td>
</tr>
<tr>
<td>ANTH 369</td>
<td>Anthropology Field Trip</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>A field study of archaeological and ethnographic cultures in the western United States. Students camp and tour ancient sites, modern Native American towns, and anthropological museums. This course may be taken for a maximum of six credits.</td>
<td></td>
</tr>
<tr>
<td>ANTH 392</td>
<td>Independent Study in Anthropology</td>
<td>1-4</td>
</tr>
<tr>
<td>ANTH 397</td>
<td>Special Topics</td>
<td>1-6</td>
</tr>
<tr>
<td>ANTH 465</td>
<td>Senior Research Seminar</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A study of the history and intellectual growth of anthropology is paired with individual work on student projects, which employ theory and methods discussed in class. Students present their work to the university community. Prerequisite: ANTH 265 and senior standing; or instructor permission.</td>
<td></td>
</tr>
<tr>
<td>ANTH 467</td>
<td>Ethnography Field School</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>A field experience in cultural anthropology in which students are immersed in the culture, traditions, and lifeways of a group of people, learning methods of inquiry and anthropological perspectives through hands-on experiences. This course may be taken for a maximum of eight credits. Prerequisite: ANTH 230 or instructor permission.</td>
<td></td>
</tr>
<tr>
<td>ANTH 469</td>
<td>Archaeology Field School</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>A field-experience course in which students learn and perform proper field techniques. Some laboratory work may be involved. This course is offered during the summer session and may be taken for a maximum of eight credits. Prerequisites: ANTH 219 or instructor permission.</td>
<td></td>
</tr>
<tr>
<td>ANTH 497</td>
<td>Special Topics</td>
<td>1-6</td>
</tr>
</tbody>
</table>
**ART (ART)**

The Art faculty emphasizes that the program and courses are important, but equally important is the atmosphere in which the student works—an atmosphere in which the professors are sincerely dedicated to assisting the student, above and beyond the normal classroom expectations. It is this atmosphere that promotes the student’s one-on-one involvement with faculty members in the classroom, and more often than not, on a personal basis as well. The student, in working this closely with a faculty member who is professionally active in the art world, feels, sees, and understands what is expected of an artist.

Students majoring in Art may select the Bachelor of Arts degree or the Bachelor of Fine Arts degree.

The Bachelor of Arts degree is designed for the qualified student intending to graduate with a liberal arts background with an in-depth emphasis in Art. The Bachelor of Arts degree in Art consists of a Standard Major and a Comprehensive Major which allows students to specialize in studio art, graphic design, K-12 art education licensure, and art history and theory.

The Bachelor of Fine Arts degree is designed for the qualified student intending to become a professional artist or to pursue graduate study in Art. The Bachelor of Fine Arts degree in Art consists of a Comprehensive Major which allows students to specialize in painting, photography, printmaking, ceramics, jewelry, sculpture, or graphic design.

**Admission to the Program.** All degree-seeking students who wish to major or minor in Art must be admitted to the Art Program.

To be formally admitted to the Art Program, a student must:

1. submit an application for admission;

2. have demonstrated a minimum competency by completing the following courses with a minimum grade of “C”:
   - ART 119 Foundation Drawing I ........................................................................ 3 cr
   - ART 120 Foundation Drawing II ....................................................................... 3 cr
   - ART 171 Foundation Design: Two-Dimensional ................................................. 3 cr
   - ART 172 Foundation Design: Three-Dimensional .............................................. 3 cr
   - and completed two semesters of:
   - ART 000 Exhibition and Convocation Attendance ........................................... 0 cr

3. submit a portfolio of recent art work;

4. submit a current transcript which shows an overall grade-point average of 2.000.

All majors must have an overall grade-point average of 2.500 or above in order to graduate.

**FACULTY**

Professors Albert R. Caniff, Jr., Terri J. Murphy, Heather S. Orr, and Don E. Seastrum

Assistant Professors Tina Butterfield and S. Chase Hutchison;

Lecturer Thaddeus K. Smith.
DESCRIPTION OF THE PROGRAMS

Bachelor of Arts Degree in Art
All majors require a total of 24 credits of Art Foundation Courses in addition to specific Art emphasis course requirements. A senior exhibition or an art history senior thesis is required of all majors. A quality representation of the student’s artwork from the junior and senior years is used for the senior exhibition.

Art Foundation Courses
Fall offerings
ART 119  Foundation Drawing I .............................................................................. 3 cr
ART 171  Foundation Design: Two-Dimensional.................................................. 3 cr
ART 222  Art History I ............................................................................................. 3 cr
ART 319  Intermediate Drawing.............................................................................. 3 cr

Spring offerings
ART 120  Foundation Drawing II ........................................................................... 3 cr
ART 172  Foundation Design: Three-Dimensional ............................................... 3 cr
ART 223  Art History II ............................................................................................ 3 cr

Offered both Fall and Spring
ART 000  Exhibition and Convocation Attendance (six semesters required)... 0 cr
ART 400  Artist’s Portfolio / Senior Exhibition (one semester required) ....... 3 cr

Art Major: Standard Program
A minimum of 36 credits is required, including the 24-credit Art Foundation Courses and 12 credits of Art electives (nine credits must be at the 300- or 400-level).

Art Major: Comprehensive Programs

STUDIO ART EMPHASIS
Painting, Photography, Printmaking, Ceramics, Jewelry, and/or Sculpture
A minimum of 54 credits is required, including the 24-credit Art Foundation Courses, 24 credits of Art electives (nine credits must be at the 300- or 400-level), and six credits of non-art supporting courses selected in consultation with an Art advisor.

GRAPHIC DESIGN EMPHASIS
A minimum of 54 credits is required, including the 24-credit Art Foundation Courses, three credits of Art electives, three credits of non-art supporting courses selected in consultation with an Art advisor, and the following 24 credits:

Fall Offerings
ART 246  Introduction to Photography ................................................................. 3 cr
ART 257  Introduction to Printmaking................................................................. 3 cr
ART 270  Introduction to Graphic Design and Illustration................................ 3 cr
ART 271  Calligraphy / Typography...................................................................... 3 cr
ART 283  Introduction to Airbrush...................................................................... 3 cr

Spring Offerings
ART 370  Intermediate Graphic Design............................................................... 3 cr

Offered both Fall and Spring
ART 470  Advanced Design and Illustration I...................................................... 3 cr
ART 471  Advanced Design and Illustration II ...................................................... 3 cr

K-12 ART EDUCATION LICENSURE EMPHASIS
This program qualifies students for the State of Colorado License in Art Education for K-12 teaching. Specific Education courses required for Art Education Licensure are arr-
anged through the Teacher Education Program (see description under Education).

A minimum of 48 credits is required, including the 24-credit Art Foundation Courses and the following 24 credits:

**Six of the following (18 credits total):**

**Fall offerings**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 203</td>
<td>Introduction to Ceramics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 230</td>
<td>Introduction to Sculpture</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 235</td>
<td>Introduction to Jewelry</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 257</td>
<td>Introduction to Printmaking</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 271</td>
<td>Calligraphy/Typography</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 280</td>
<td>Introduction to Painting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 283</td>
<td>Introduction to Airbrush</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Two of the following (six credits total):**

**Spring offerings**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 303</td>
<td>Intermediate Ceramics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 330</td>
<td>Intermediate Sculpture</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 357</td>
<td>Intermediate Printmaking</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 380</td>
<td>Intermediate Painting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 383</td>
<td>Intermediate Airbrush</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

It is recommended that students majoring in the Art Education Licensure Emphasis include COM 119 Theatre and Media Aesthetics, and MUS 140 Introduction to Music, in their General Education Liberal Arts Area III electives.

**ART History and Theory Emphasis**

A minimum of 54 credits is required, including the 24 credits of Art Foundation Courses, six credits of Art electives, six credits of non-art supporting courses selected in consultation with an Art advisor, and the following 18 credits:

**Fall offerings**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 324</td>
<td>Art Criticism and Critical Theory in Contemporary Art</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 325</td>
<td>Women Artists</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 422</td>
<td>Native American Art of North America</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Spring offerings**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 321</td>
<td>American Art: Colonial to Modern</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 421</td>
<td>Art of Mesoamerica and the Andean Region of South America</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 424</td>
<td>Modern Art History, Aesthetics, Theory, and Criticism</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Bachelor of Fine Arts Degree in Art**

To receive and maintain Bachelor of Fine Arts (B.F.A.) in Art candidate status each semester, students must continuously create artwork outside of course assignments that exhibits the highest quality and creativity. When students receive B.F.A. in Art candidate status, they must report to their advisor for continuance in the program. The advisor is responsible for critiques, guidance, and assistance in the completion of the senior exhibition.

At the completion of the B.F.A. Foundation Program, students’ portfolios should demonstrate the criteria identified by the Art faculty and B.F.A. acceptance form. The review committee will identify students’ portfolios that reflect Bachelor of Fine Arts in Art degree potential.
Students wishing to apply for candidacy to the Bachelor of Fine Arts in Art Program must apply no earlier than the spring of their sophomore year and no later than the fall of their junior year, present a portfolio of recent art works, specify an emphasis of study, be in good academic standing, and have completed the following courses with a minimum grade of “C”:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 119 Foundation Drawing I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 120 Foundation Drawing II</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 171 Foundation Design: Two-Dimensional</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 172 Foundation Design: Three-Dimensional</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

All Bachelor of Fine Arts in Art Majors require the 36-credit BFA Foundation Courses. All Art courses must be selected in consultation with an Art advisor.

A senior exhibition is required of all majors. A quality representation of students’ artwork from the junior and senior years is used for the senior exhibition.

**BFA Foundation Courses**

**Fall offerings**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 119 Foundation Drawing I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 171 Foundation Design: Two-Dimensional</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 222 Art History I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 319 Intermediate Drawing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 491 Seminar in Art</td>
<td>3 cr</td>
</tr>
<tr>
<td>Art History (300 level)</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Spring offerings**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 120 Foundation Drawing II</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 172 Foundation Design: Three-Dimensional</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 223 Art History II</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 419 Advanced Drawing</td>
<td>3 cr</td>
</tr>
<tr>
<td>Art History (400 level)</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Offered both Fall and Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 000 Exhibition and Convocation Attendance (six semesters required)</td>
<td>0 cr</td>
</tr>
<tr>
<td>ART 400 Artist’s Portfolio / Senior Exhibition</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Two-Dimensional Art: Painting Emphasis**

A minimum of 63 credits is required including the 36-credit BFA Foundation Courses, six credits of Art electives, and 21 credits from the following, which must include 15 credits from one painting medium (painting, airbrush, or watercolor):

**Fall offerings**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 280 Introduction to Painting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 283 Introduction to Airbrush</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 286 Introduction to Watercolor</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Spring offerings**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 380 Intermediate Painting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 383 Intermediate Airbrush</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 386 Intermediate Watercolor</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Offered both Fall and Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 480 Advanced Painting I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 481 Advanced Painting II</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 482 Advanced Painting III</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
ART 483  Advanced Airbrush I.................................................................................... 3 cr
ART 484  Advanced Airbrush II................................................................................ 3 cr
ART 485  Advanced Airbrush III............................................................................. 3 cr
ART 486  Advanced Watercolor I............................................................................. 3 cr
ART 487  Advanced Watercolor II........................................................................... 3 cr
ART 488  Advanced Watercolor III......................................................................... 3 cr

**TWO-DIMENSIONAL ART: PHOTOGRAPHY EMPHASIS**
A minimum of 63 credits is required including the 36-credit BFA Foundation Courses, six credits of Art electives, and the following 21 credits:

**Fall offerings**
- ART 246  Introduction to Photography ............................................................... 3 cr
- ART 270  Introduction to Graphic Design and Illustration.................................. 3 cr

**Spring offerings**
- ART 346  Intermediate Photography.................................................................... 3 cr
- ART 370  Intermediate Graphic Design ................................................................ 3 cr

**Offered both Fall and Spring**
- ART 446  Advanced Photography I...................................................................... 3 cr
- ART 447  Advanced Photography II...................................................................... 3 cr
- ART 448  Advanced Photography III.................................................................... 3 cr

**TWO-DIMENSIONAL ART: PRINTMAKING EMPHASIS**
A minimum of 63 credits is required including the 36-credit BFA Foundation Courses, six credits of Art electives, and the following 21 credits:

**Fall offerings**
- ART 246  Introduction to Photography ............................................................... 3 cr
- ART 257  Introduction to Printmaking................................................................. 3 cr

**Spring offerings**
- ART 357  Intermediate Printmaking .................................................................... 3 cr

**Offered both Fall and Spring**
- ART 457  Advanced Printmaking I ..................................................................... 3 cr
- ART 458  Advanced Printmaking II .................................................................... 3 cr
- ART 459  Advanced Printmaking III .................................................................... 3 cr

*One of the following:*
- ART 280  Introduction to Painting ....................................................................... 3 cr
- ART 286  Introduction to Watercolor ................................................................. 3 cr

**THREE-DIMENSIONAL ART: CERAMICS EMPHASIS**
A minimum of 63 credits is required, including the 36-credit BFA Foundation Courses, six credits of Art electives, and the following 21 credits:

**Fall offerings**
- ART 203  Introduction to Ceramics...................................................................... 3 cr
- ART 230  Introduction to Sculpture .................................................................... 3 cr
- ART 235  Introduction to Jewelry ........................................................................ 3 cr

**Spring offerings**
- ART 303  Intermediate Ceramics ....................................................................... 3 cr

**Offered both Fall and Spring**
- ART 403  Advanced Ceramics I ......................................................................... 3 cr
- ART 404  Advanced Ceramics II ......................................................................... 3 cr
- ART 405  Advanced Ceramics III ......................................................................... 3 cr
THREE-DIMENSIONAL ART: JEWELRY EMPHASIS
A minimum of 63 credits is required, including the 36-credit BFA Foundation Courses, six credits of Art electives, and the following 21 credits:
Fall offerings
   ART 203  Introduction to Ceramics................................................................. 3 cr
   ART 230  Introduction to Sculpture ................................................................. 3 cr
   ART 235  Introduction to Jewelry ................................................................. 3 cr
Spring offerings
   ART 335  Intermediate Jewelry .................................................................... 3 cr
Offered both Fall and Spring
   ART 435  Advanced Jewelry I ...................................................................... 3 cr
   ART 436  Advanced Jewelry II ...................................................................... 3 cr
   ART 437  Advanced Jewelry III .................................................................... 3 cr

THREE-DIMENSIONAL ART: SCULPTURE EMPHASIS
A minimum of 63 credits is required, including the 36-credit BFA Foundation Courses, six credits of Art electives, and the following 21 credits:
Fall offerings
   ART 203  Introduction to Ceramics................................................................. 3 cr
   ART 230  Introduction to Sculpture ................................................................. 3 cr
   ART 235  Introduction to Jewelry ................................................................. 3 cr
Spring offerings
   ART 330  Intermediate Sculpture.................................................................. 3 cr
Offered both Fall and Spring
   ART 430  Advanced Sculpture I .................................................................... 3 cr
   ART 431  Advanced Sculpture II .................................................................... 3 cr
   ART 432  Advanced Sculpture III .................................................................. 3 cr

DESIGN ART: GRAPHIC DESIGN EMPHASIS
A minimum of 63 credits is required, including the 36-credit BFA Foundation Courses, and the following 27 credits:
Fall offerings
   ART 246  Introduction to Photography ............................................................ 3 cr
   ART 257  Introduction to Printmaking............................................................. 3 cr
   ART 270  Introduction to Graphic Design and Illustration............................ 3 cr
   ART 271  Calligraphy / Typography............................................................... 3 cr
Spring offerings
   ART 370  Intermediate Graphic Design......................................................... 3 cr
Offered both Fall and Spring
   ART 375  Magazine Production (one semester required).............................. 3 cr
   ART 470  Advanced Design and Illustration I ................................................. 3 cr
   ART 471  Advanced Design and Illustration II ............................................... 3 cr
   ART 472  Advanced Design and Illustration III ............................................. 3 cr

Art Minor
A minimum of 18 credits is required:
   ART 119  Foundation Drawing I .................................................................... 3 cr
   ART 120  Foundation Drawing II ................................................................... 3 cr
   ART 171  Foundation Design: Two-Dimensional......................................... 3 cr
ART 172  Foundation Design: Three-Dimensional 3 cr
Art electives 3 cr

One of the following:
ART 222  Art History I 3 cr
ART 223  Art History II 3 cr

Capstone Course Requirement. The following course in the Art Major fulfills the capstone course requirement: ART 400 Artist’s Portfolio/Senior Exhibition.

ART COURSES

ART 000  Exhibition and Convocation Attendance 0 credits
Designed to encourage exhibition and convocation attendance as a means of learning about art history, professional artists, artistic practice, portfolio review, and topics of interest to artists. Students qualify for a “satisfactory” grade by attending all of the posted events in each semester. Graded Satisfactory/Unsatisfactory only.

ART 105  Introduction to Art 3 credits
An introduction to the visual arts with an emphasis on the influence of art works on present-day living and thinking. A specific focus is announced each time the course is offered. Some examples include architecture, Native American art, non-western art, women in art, crafts, and European art. (Course may be taken only once for credit and does not count toward the Art major or minor.) GT-AH1

ART 106  Studio Art for the Non-Artist 3 credits
Provides the student a “hands-on” experience in various studio activities: drawing, design, and painting. The theories and processes of art are discussed on a nonprofessional level. (Does not count toward the Art major or minor.)

ART 119  Foundation Drawing I 3 credits
A foundation course in drawing with special attention to line, value, perspective, texture, and shape. Landscape, still life, and other forms are used as subject matter. The visual elements and principles of organization in relationship to perceiving both flat and illusionary space are explored. Black and white media are exclusively practiced. Prerequisite: Art major or minor status.

ART 120  Foundation Drawing II 3 credits
A foundation course in drawing, placing emphasis on composition. The study of the essential aspects of drawing (such as gesture, contour, proportions, anatomy, structure, textural surface, and articulation) and their synthesis into a coherent drawing attitude. Included in this course is the introduction of drawing the life form and color. Prerequisite: ART 119.

ART 171  Foundation Design: Two-Dimensional 3 credits
An introduction to design organization with an emphasis on the exploration of line, value, texture, shape, and color. Prerequisite: Art major or minor status.

ART 172  Foundation Design: Three-Dimensional 3 credits
A foundation course in design organization with emphasis on the exploration of mass, texture, process, and techniques in the three-dimensional area. Tools and materials are explored. Prerequisite: Art major or minor status.

ART 197  Special Topics 1-6 credits
ART 203  Introduction to Ceramics  3 credits
An introduction to the basic techniques and processes of ceramics: pinch, coil, slab, and some wheelwork. Prerequisites: ART 120, ART 171, and ART 172.

ART 222  Art History I  3 credits
A survey of western and non-western art from approximately 30,000 years ago to the 14th century. Works of art and architecture are examined within the cultural and historic context for art-making through world human history. Prerequisite: ENG 102 with a minimum grade of “C” and Art major or minor status.

ART 223  Art History II  3 credits
A survey of western and non-western art from approximately the 14th century to the present. Works of art and architecture are examined within the cultural and historic context for art-making through world human history. Prerequisite: ENG 102 with a minimum grade of “C” and Art major or minor status.

ART 230  Introduction to Sculpture  3 credits
An introduction to the various processes of sculpture: carving, modeling, and casting. Aesthetic qualities and craftsmanship of the sculptural forms are emphasized. Prerequisites: ART 120, ART 171, and ART 172.

ART 235  Introduction to Jewelry  3 credits
An introduction to the creative use of silver and precious gemstones in the making of jewelry. Design and craftsmanship are emphasized. Prerequisites: ART 120, ART 171, and ART 172.

ART 246  Introduction to Photography  3 credits
An introduction to contemporary photographic techniques incorporating traditional black-and-white analogue photography alongside digital photographic practice and procedure. Lectures introduce topic areas that the student must exercise in lab sessions. Students must supply their own “quality” 35mm or 120mm camera. Prerequisites: ART 120, ART 171, and ART 172.

ART 257  Introduction to Printmaking  3 credits
An introduction to the basic techniques of printmaking including lithography, wood-cut, etching, and the collagraph. Emphasis is on the traditional approaches in print-making. Prerequisites: ART 120, ART 171, and ART 172.

ART 270  Introduction to Graphic Design and Illustration  3 credits
An introductory course utilizing the basic fundamentals of art in a broad base of commercial applications. Design in the areas of corporate identity, packaging, illustration, and typography are explored. Illustration, new techniques, materials, and tools used by the designer are emphasized. Prerequisites: ART 120, ART 171, and ART 172.

ART 271  Calligraphy/Typography  3 credits
A study of individual letter forms as design elements that relate to visual communication. Prerequisites: ART 120, ART 171, and ART 172.

ART 280  Introduction to Painting  3 credits
An introduction to oil painting, using basic tools, materials, techniques, and the development of compositional methods. Prerequisites: ART 120, ART 171, and ART 172.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 283</td>
<td>Introduction to Airbrush</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An introduction to the use of the airbrush as a tool for painting, drawing, and design. Multiple use of the tool within traditional and non-traditional directions, as well as tool maintenance, are stressed. Prerequisites: ART 120, ART 171, and ART 172.</td>
<td></td>
</tr>
<tr>
<td>ART 286</td>
<td>Introduction to Watercolor</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An introduction to both the traditional and contemporary methods of watercolor. The various watercolor media are explored. Prerequisites: ART 120, ART 171, and ART 172.</td>
<td></td>
</tr>
<tr>
<td>ART 297</td>
<td>Special Topics</td>
<td>1-6</td>
</tr>
<tr>
<td>ART 303</td>
<td>Intermediate Ceramics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An exploration of the expressive possibilities of individual ceramic direction. Students collaborate with the instructor to plan a suitable and particular direction for study. Prerequisite: ART 203.</td>
<td></td>
</tr>
<tr>
<td>ART 319</td>
<td>Intermediate Drawing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A study of figure drawing with an emphasis on structure, figure compositions, and portrait studies from the model using various drawing media and techniques. Prerequisite: ART 120.</td>
<td></td>
</tr>
<tr>
<td>ART 321</td>
<td>American Art: Colonial to Modern</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A survey of the arts of America from the 17th century to the present. Emphasis is placed on uniquely American innovations and expressions, regional distinctions in American art, with a strong component in art of the American West; significant individual artists and trends; and the arts of the many diverse peoples that comprise America. Prerequisite: junior standing or instructor permission.</td>
<td></td>
</tr>
<tr>
<td>ART 324</td>
<td>Art Criticism and Critical Theory in Contemporary Art</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A survey of contemporary art and art practices through the discipline of art criticism. This seminar course prepares students for senior-level courses and advanced studies in art and art history at the graduate level. A survey of modern and contemporary art since the mid-twentieth century is followed by seminar presentations on selected readings. Prerequisites: ART 222 and ART 223.</td>
<td></td>
</tr>
<tr>
<td>ART 325</td>
<td>Women Artists</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A survey of women artists and their work from the 16th century (Renaissance) to contemporary times. The contribution of women artists and the changing roles of women in the western tradition of the visual arts are examined within relevant historical, political, social, theoretical, and gender contexts. Prerequisite: junior standing or instructor permission.</td>
<td></td>
</tr>
<tr>
<td>ART 330</td>
<td>Intermediate Sculpture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An exploration of the expressive possibilities of individual sculpture direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 230.</td>
<td></td>
</tr>
<tr>
<td>ART 335</td>
<td>Intermediate Jewelry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An exploration of the expressive possibilities of individual jewelry direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 235.</td>
<td></td>
</tr>
<tr>
<td>ART 346</td>
<td>Intermediate Photography</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An intermediate course that explores the expressive possibilities of individual photogra-</td>
<td></td>
</tr>
</tbody>
</table>
phy direction with an emphasis placed on digital photographic practices and principles. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 246

**ART 357 Intermediate Printmaking**  
3 credits  
An exploration of the expressive possibilities of individual printmaking direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 257.

**ART 370 Intermediate Graphic Design**  
3 credits  
A study of graphic design processes and applications. Emphasis is on the exploration of creative solutions to design problems. Topics include past and current design trends, tools, and computer related graphics. Prerequisite: ART 270.

**ART 375 Intermediate Magazine Production**  
3 credits  
An integration of journalism and art course work into a study of magazine production. Faculty supervise students in design and production work leading to the publication of the *Western Pathfinder Magazine*, in both print and online versions. Prerequisite: ART 370 and instructor permission.

**ART 380 Intermediate Painting**  
3 credits  
An exploration of the expressive possibilities of individual painting direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 280.

**ART 383 Intermediate Airbrush**  
3 credits  
An exploration of the expressive possibilities of individual airbrush direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 283.

**ART 386 Intermediate Watercolor**  
3 credits  
Designed for exploration of the expressive possibilities of individual watercolor direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 286.

**ART 390 Workshop in Art**  
3 credits  
A review and critique of advanced problems in art: two-dimensional, three-dimensional, or design. May be repeated for a maximum of nine credits (three per semester). Prerequisites: minimum junior standing and instructor permission. Students must have completed 300-level course in their chosen emphasis.

**ART 397 Special Topics**  
1-6 credits

**ART 400 Artist’s Portfolio/Senior Exhibition**  
3 credits  
A capstone course in which students develop a portfolio of recent work which enhances preparation for the Senior Exhibition, a career in art, gallery representation, or application to graduate school. Prerequisite: senior standing.

**ART 403 Advanced Ceramics I**  
3 credits  
An advanced exploration of the expressive possibilities of individual ceramic direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 303.

**ART 404 Advanced Ceramics II**  
3 credits  
An advanced exploration of the expressive possibilities of individual ceramic direction. Students collaborate with the instructor to plan a suitable and particular direction
of study. Prerequisite: ART 403.

**ART 405 Advanced Ceramics III** 3 credits
An advanced exploration of the expressive possibilities of individual ceramic direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 404.

**ART 419 Advanced Drawing** 3 credits
An advanced study in figure drawing with emphasis on the figure, expanding visual awareness by developing control of drawing as a tool for research and invention. Problems progress from simple structural analysis to more sophisticated exploration of subject matter, and finally to individual interpretation. Prerequisite: ART 319 and B.F.A. candidate.

**ART 421 Art of Mesoamerica and the Andean Region of South America** 3 credits
A survey of the arts of the pre-contact civilizations in Middle America and the Andes. The art and architecture of these ancestral peoples are examined within their cultural contexts. Prerequisite: minimum junior standing or instructor permission.

**ART 422 Native American Art of North America** 3 credits
A survey of the arts of the indigenous (First Nations) civilizations in North America, from antiquity to the present era. The art and architecture of these peoples are examined contextually. Prerequisite: minimum junior standing or instructor permission.

**ART 424 Modern Art History, Aesthetics, Theory, and Criticism** 3 credits
An exploration of trends and developments in the Western tradition of the visual arts from the mid-nineteenth century to the present, considering Modernism, Post-Modernism, and recent tendencies. The visual arts of these periods are viewed through the lens of theories and ideas that have powered change in Western art, including current revisionist and theoretical considerations in Art and Art History. Prerequisite: minimum junior standing or instructor permission.

**ART 430 Advanced Sculpture I** 3 credits
An advanced exploration of the expressive possibilities of individual sculptural direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 330.

**ART 431 Advanced Sculpture II** 3 credits
An advanced exploration of the expressive possibilities of individual sculptural direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 430.

**ART 432 Advanced Sculpture III** 3 credits
An advanced exploration of the expressive possibilities of individual sculptural direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 431.

**ART 435 Advanced Jewelry I** 3 credits
An advanced exploration of the expressive possibilities of individual jewelry direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 335.

**ART 436 Advanced Jewelry II** 3 credits
An advanced exploration of the expressive possibilities of individual jewelry direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 435.
ART 437 Advanced Jewelry III 3 credits
An advanced exploration of the expressive possibilities of individual jewelry direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 436.

ART 446 Advanced Photography I 3 credits
An advanced exploration of the expressive possibilities of individual photography direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 346.

ART 447 Advanced Photography II 3 credits
An advanced exploration of the expressive possibilities of individual photography direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 446.

ART 448 Advanced Photography III 3 credits
An advanced exploration of the expressive possibilities of individual photography direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 447.

ART 457 Advanced Printmaking I 3 credits
An advanced exploration of the expressive possibilities of individual printmaking direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 357.

ART 458 Advanced Printmaking II 3 credits
An advanced exploration of the expressive possibilities of individual printmaking direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 457.

ART 459 Advanced Printmaking III 3 credits
An advanced exploration of the expressive possibilities of individual printmaking direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 458.

ART 470 Advanced Design and Illustration I 3 credits
An advanced exploration of the expressive possibilities of individual graphic design direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 370.

ART 471 Advanced Design and Illustration II 3 credits
An advanced exploration of the expressive possibilities of individual graphic design direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 470.

ART 472 Advanced Design and Illustration III 3 credits
An advanced exploration of the expressive possibilities of individual graphic design direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 471.

ART 475 Advanced Magazine Production I 3 credits
An advanced integration of journalism and art course work into a study of magazine production. Faculty supervise students in design and production work leading to the publication of the Western Pathfinder Magazine, in both print and online versions. Prerequisite: ART 375 and instructor permission.
ART 476  Advanced Magazine Production II  3 credits
An advanced integration of journalism and art course work into a study of magazine production. Faculty supervise students in design and production work leading to the publication of the *Western Pathfinder Magazine*, in both print and online versions. Prerequisite: ART 475 and instructor permission.

ART 477  Advanced Magazine Production III  3 credits
An advanced integration of journalism and art course work into a study of magazine production. Faculty supervise students in design and production work leading to the publication of the *Western Pathfinder Magazine*, in both print and online versions. Prerequisite: ART 476 and instructor permission.

ART 480  Advanced Painting I  3 credits
An advanced exploration of the expressive possibilities of individual painting direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisites: ART 380.

ART 481  Advanced Painting II  3 credits
An advanced exploration of the expressive possibilities of individual painting direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 480.

ART 482  Advanced Painting III  3 credits
An advanced exploration of the expressive possibilities of individual painting direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 481.

ART 483  Advanced Airbrush I  3 credits
An advanced exploration of the expressive possibilities of individual airbrush direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 383.

ART 484  Advanced Airbrush II  3 credits
An advanced exploration of the expressive possibilities of individual airbrush direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 483.

ART 485  Advanced Airbrush III  3 credits
An advanced exploration of the expressive possibilities of individual airbrush direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 484.

ART 486  Advanced Watercolor I  3 credits
An advanced exploration of the expressive possibilities of individual watercolor direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisites: ART 386.

ART 487  Advanced Watercolor II  3 credits
An advanced exploration of the expressive possibilities of individual watercolor direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 486.

ART 488  Advanced Watercolor III  3 credits
An advanced exploration of the expressive possibilities of individual watercolor direction. Students collaborate with the instructor to plan a suitable and particular direction of study. Prerequisite: ART 487.
ART 490  Workshop in Art  3 credits
A review and critique of advanced problems in art: two-dimensional, three-dimensional, or design. May be repeated for a maximum of nine credits (three credits per semester). Prerequisites: senior standing and instructor permission. Students must have completed a 400-level course in chosen emphasis.

ART 491  Seminar in Art  3 credits
An investigation and evaluation of contemporary topics in art. Students are exposed to artistic expression through visiting artist programs, exhibitions, and workshops. Students develop individual research topics. Prerequisites: B.F.A. candidate and senior standing.

ART 492  Directed Study  1-6 credits
Individualized instruction for advanced students who have taken all the courses in a particular art area and wish to pursue the area further. Prerequisite: junior or senior status with at least 15 credits in Art.

ART 497  Special Topics  1-6 credits
ART 499  Internship in Art  1-12 credits
Supervised practical experiences in art for advanced students. With faculty approval, credit earned in this course may be applied to the Major or Minor in Art. Prerequisite: instructor permission.
The Biology Program provides a comprehensive educational experience consistent with the liberal arts philosophy of the University. The contemporary curriculum includes hands-on learning through laboratory and field experience. Small classes and low student-to-faculty ratios allow meaningful interaction between biology students and faculty, both in and out of the classroom. Professors advise students’ academic scheduling and career options. Students are encouraged to conduct research projects with faculty and to participate in internships with private entities and local agencies.

Biology majors receive broad training in the life sciences leading to a variety of careers. Our graduates pursue entry-level careers in biological research, education, and applied sciences such as wildlife biology, fisheries, and forestry. The Biology Major prepares graduates to succeed in graduate school and professional schools in disciplines such as medicine, dentistry, veterinary medicine, physical therapy, ecology, and wildlife biology.

Five different emphases are offered: Cell and Molecular Biology, Environmental Biology and Ecology, General Biology, Pre-Allied Health, and Secondary Education Licensure. All majors receive training in fundamental biological principles and in supporting sciences appropriate for each emphasis. The Program’s flexibility allows students to specialize in areas of their interest.

The Cell Biology/Pre-Medicine Emphasis is recommended for students pursuing careers in biotechnology, graduate programs in laboratory biology, and professional programs in medicine, veterinary medicine, dentistry, and pharmacy.

The Environmental Biology and Ecology Emphasis is recommended for students with career interests in environmental biology including ecology, conservation biology, environmental science, and natural resource management. Students may concentrate in wildlife biology within the Environmental Biology and Ecology Emphasis.

The General Biology Emphasis is our most flexible major. Students pursuing this emphasis work closely with their academic advisor to select from a variety of upper division elective courses and supporting science courses to create a self-designed major in areas such as botany, zoology, molecular ecology, and integrative biology. This emphasis allows students to integrate the study of structure and function at all levels of biological organization from molecules to ecosystems and across all branches of the tree of life. The Allied Health Emphasis is designed for students planning to enter professional programs in nursing, medical technology, chiropractic, optometry, physical therapy, public health, and physician’s assistant programs. Because the admission requirements of these schools varies greatly, students must consult with their advisors to design a curriculum that meets their professional interests.

The Secondary Licensure Emphasis qualifies students for the State of Colorado License in Secondary Science Education.

**Faculty**

Professors Kevin D. Alexander, Robin A. Bingham, and Peter H. Gauss;
Associate Professor Cassandra L. Osborne;
Assistant Professors Shan M. Hays;
Thornton Chair in Biology Patrick A. Magee;
Lecturers Amy Honan and Megan Sherbenou.
DESCRIPTION OF THE PROGRAMS

The courses listed for each of the following emphases are the minimum requirements. Higher-level supporting courses may be appropriate for students pursuing certain careers. Students should consult with their advisors for proper course selections. All majors require a Capstone Course.

**Biology Major: Comprehensive Programs** All Biology majors require the 18-credit Biology Nucleus.

**Biology Nucleus**

- BIOL 150 Biological Principles (with laboratory) .................................................. 4 cr
- BIOL 151 Diversity and Patterns of Life (with laboratory) ........................................ 4 cr
- BIOL 301 General Ecology ....................................................................................... 3 cr
- BIOL 310 Cell Biology ............................................................................................. 3 cr
- BIOL 312 Genetics (with recitation) .......................................................................... 4 cr

**CELL BIOLOGY/PRE-MEDICINE EMPHASIS**

The Cell Biology/Pre-Medicine Emphasis requires a minimum of 64 credits, including the 18-credit Biology Nucleus, 15 additional credits in Biology, and 31 credits of supporting courses.

Required Biology courses:

- BIOL 313 Cell and Genetics Laboratory .................................................................. 2 cr

*Three of the following:*

- BIOL 342 Microbiology (with laboratory) .............................................................. 4 cr
- BIOL 362 Evolutionary Biology: Theory and Application ...................................... 3 cr
- BIOL 373 Human Anatomy and Physiology II (with laboratory) ...................... 4 cr
- BIOL 420 Molecular Biology (with laboratory) ....................................................... 4 cr
- BIOL 454 Developmental Biology (with laboratory) .............................................. 4 cr
- BIOL 474 Comparative Animal Physiology (with laboratory) ............................. 4 cr

*At least two credits of Capstone Experience courses:*

- BIOL 495 Senior Seminar (may be repeated) ......................................................... 1 cr
- BIOL 496 Senior Thesis ......................................................................................... 2-4 cr

Minimum supporting courses:

- CHEM 111 General Chemistry I ............................................................................ 3 cr
- CHEM 112 General Chemistry Laboratory I ............................................................ 1 cr
- CHEM 113 General Chemistry II ............................................................................ 3 cr
- CHEM 114 General Chemistry Laboratory II ....................................................... 1 cr
- CHEM 331 Organic Chemistry I ............................................................................ 3 cr
- CHEM 332 Organic Chemistry II ........................................................................... 3 cr
- CHEM 334 Organic Chemistry Laboratory I ......................................................... 1 cr
- CHEM 335 Organic Chemistry Laboratory II ........................................................ 1 cr
- CHEM 471 Biochemistry I ...................................................................................... 4 cr

*One of the following:*

- MATH 151 Calculus I ............................................................................................... 4 cr
- MATH 213 Probability and Statistics ...................................................................... 3 cr

*Either both:*

- PHYS 170 Principles of Physics I ............................................................................ 4 cr
- PHYS 171 Principles of Physics II ............................................................................ 4 cr

*or both:*
Phys 200 General Physics I (with laboratory) ....................................................... 4 cr
Phys 201 General Physics II (with laboratory) ....................................................... 4 cr

Environmental Biology and Ecology Emphasis
The Environmental Biology and Ecology Emphasis requires a minimum of 58 credits, including the 18-credit Biology Nucleus, 17 additional credits in Biology and 23 credits of supporting courses.

Required Biology Courses:
- BIOL 302 Ecology Laboratory and Recitation ...................................................... 2 cr
- Two of the following systems and applications courses:
  - BIOL 362 Evolutionary Biology: Theory and Application ............................... 3 cr
  - BIOL 430 Wildlife Ecology and Management (with laboratory) ...................... 4 cr
  - BIOL 431 Wildlife Techniques Workshop ....................................................... 1 cr
  - BIOL 440 Conservation Biology ..................................................................... 3 cr
  - BIOL 444 Colorado Ecoregions ...................................................................... 3 cr
  - BIOL 476 Aquatic Ecology (with laboratory) ................................................. 4 cr
  - BIOL 477 Plant Ecology (with laboratory) ....................................................... 4 cr
  - BIOL 481 Forest Ecology (with laboratory) ..................................................... 4 cr
- Two of the following organismal courses:
  - BIOL 320 Ornithology (with laboratory) ....................................................... 4 cr
  - BIOL 322 Mammalogy (with laboratory) ....................................................... 4 cr
  - BIOL 327 Field Entomology (with laboratory) .............................................. 4 cr
  - BIOL 352 Botany (with laboratory) ............................................................... 4 cr
  - BIOL 353 Rocky Mountain Flora .................................................................. 3 cr
- At least two credits of Capstone Experience courses:
  - BIOL 495 Senior Seminar (may be repeated) ................................................ 1 cr
  - BIOL 496 Senior Thesis ............................................................................... 2-4 cr

Minimum supporting courses:
- CHEM 111 General Chemistry I ........................................................................ 3 cr
- CHEM 112 General Chemistry Laboratory I .................................................... 1 cr
- CHEM 113 General Chemistry II ..................................................................... 3 cr
- CHEM 114 General Chemistry Laboratory II ................................................. 1 cr
- CHEM 231 Introduction to Organic Chemistry and Biochemistry .................. 3 cr
- CHEM 234 Introductory Organic and Biochemistry Laboratory ..................... 1 cr
- GEOL 101 Physical Geology ........................................................................... 3 cr
- GEOL 105 Physical Geology Laboratory ......................................................... 1 cr
- MATH 213 Probability and Statistics ............................................................... 3 cr
- PHYS 140 Introductory Physics (with laboratory) ........................................... 4 cr

Wildlife Biology Concentration: Environmental Biology and Ecology students may concentrate in wildlife biology. This concentration is intended for students seeking certification as a professional wildlife biologist from the Wildlife Society. Additional courses in humanities, social sciences, communications, and public policy and administration are also required. Appropriate courses should be selected in consultation with an advisor.

General Biology Emphasis
The General Biology Emphasis requires a minimum of 51 credits including the 18-credit Biology Nucleus, 14 credits of 300- and 400-level Biology electives, and 19 credits of supporting courses:
CHEM 111 General Chemistry I ................................................................. 3 cr
CHEM 112 General Chemistry Laboratory I .............................................. 1 cr
CHEM 113 General Chemistry II ............................................................... 3 cr
CHEM 114 General Chemistry Laboratory II ............................................. 1 cr
CHEM 231 Intro to Organic Chemistry and Biochemistry ..................... 3 cr
CHEM 234 Intro to Organic Chemistry and Biochemistry Laboratory ...... 1 cr
PHYS 140 Introductory Physics (with laboratory) .................................... 4 cr

One of the following:
MATH 151 Calculus I ................................................................................... 3 cr
MATH 213 Probability and Statistics .......................................................... 3 cr

The following restrictions apply: Biology electives must include at least two credits of either BIOL 302 Ecology Laboratory and Recitation or BIOL 313 Cell and Genetics Laboratory; at least two credits of Capstone courses (BIOL 495 Senior Seminar, or BIOL 496 Senior Thesis); 300 and 400-level Biology electives must be selected in consultation with an advisor; CHEM 471 Biochemistry I, may be used to satisfy up to four credits; Biology faculty approval is required to apply more than three credits of BIOL 392 Independent Study or SCI 499 Internship in Science.

PRE-ALLIED HEALTH EMPHASIS
The Pre-Allied Health Emphasis requires a minimum of 54 credits including the 18-credit Biology Nucleus, 17 additional biology credits, and 19 credits of supporting courses. Appropriate microbiology, chemistry and physics courses should be selected in consultation with an advisor.

Required Biology courses:
BIOL 300 Basic Nutrition .......................................................................... 3 cr
BIOL 372 Human Anatomy & Physiology I (with laboratory) .................. 4 cr
BIOL 373 Human Anatomy & Physiology II (with laboratory) ................ 4 cr

One of the following:
BIOL 201 Introduction to Microbiology (with laboratory) ...................... 4 cr
BIOL 342 Microbiology (with laboratory) .................................................. 4 cr

At least two credits of Capstone Experience Courses:
BIOL 495 Senior Seminar (may be repeated) ........................................... 1 cr
BIOL 496 Senior Thesis ............................................................................. 2-4 cr

Minimum supporting courses:
CHEM 111 General Chemistry I ................................................................. 3 cr
CHEM 112 General Chemistry Laboratory I .............................................. 1 cr
CHEM 113 General Chemistry II ............................................................... 3 cr
CHEM 114 General Chemistry Laboratory II ............................................. 1 cr
CHEM 231 Introduction to Organic Chemistry and Biochemistry .......... 3 cr
CHEM 234 Introductory Organic and Biochemistry Laboratory ............. 1 cr
MATH 213 Probability and Statistics ......................................................... 3 cr
PHYS 140 Introductory Physics (with laboratory) ..................................... 4 cr

SECONDARY LICENSURE EMPHASIS
The Secondary Licensure Emphasis requires a minimum of 59 credits including the 18-credit Biology Nucleus, eight additional credits in Biology, and 33 credits in supporting courses. Students must fulfill the requirements for the Secondary Licensure Option (described under Education). Students interested in pursuing this comprehensive program should consult with the Teacher Education Program advisor in addition to the advisor in their major as soon as possible. EDUC 409 Secondary Student Teaching
fulfills the Capstone Requirement for students completing this emphasis.

Required Biology courses:

- **BIOL 342** Microbiology (with laboratory) ............................................................... 4 cr

*Either:*

- **ESS 201** Essentials of Human Anatomy and Physiology (with laboratory) ............ 4 cr

*or both of the following:*

- **BIOL 372** Human Anatomy and Physiology I (with laboratory) ....................... 4 cr
- **BIOL 373** Human Anatomy and Physiology II (with laboratory) ....................... 4 cr

Minimum supporting courses:

- **CHEM 111** General Chemistry I ................................................................. 3 cr
- **CHEM 112** General Chemistry Laboratory I ..................................................... 1 cr
- **CHEM 113** General Chemistry II ................................................................. 3 cr
- **CHEM 114** General Chemistry Laboratory II ..................................................... 1 cr
- **CHEM 231** Introduction to Organic Chemistry and Biochemistry .................. 3 cr
- **CHEM 234** Introductory Organic Chemistry and Biochemistry Laboratory ....... 3 cr
- **GEOL 101** Physical Geology ........................................................................... 3 cr
- **GEOL 105** Physical Geology Laboratory ......................................................... 1 cr
- **GEOL 201** Historical Geology (with laboratory) ................................................ 4 cr
- **MATH 213** Probability and Statistics.................................................................... 3 cr
- **PHYS 110** Solar System Astronomy ................................................................... 3 cr
- **PHYS 120** Meteorology .................................................................................... 3 cr
- **PHYS 140** Introductory Physics (with laboratory) ............................................. 4 cr

**Biology Minor**

A minimum of 18 credits is required, including:

- **BIOL 150** Biological Principles (with laboratory) ............................................ 4 cr
- **BIOL 151** Diversity and Patterns of Life (with laboratory) ................................ 4 cr
- Biology electives ...................................................................................................... 10 cr

**Substitutions.** The following substitutions may be used to satisfy biology degree requirements: CHEM 331 Organic Chemistry I (3 credits), CHEM 332 Organic Chemistry II (3 credits), CHEM 334 Organic Chemistry Lab I (1 credit), CHEM 335 Organic Chemistry Lab II (1 credit), may be substituted for CHEM 231 Introduction to Organic Chemistry and Biochemistry (3 credits), and CHEM 234 Introductory Organic and Biochemistry Lab (1 credit); PHYS 170 Principles of Physics I (4 credits), may be substituted for PHYS 140 Introductory Physics with lab (4 credits); PHYS 200 General Physics II (4 credits), may be substituted for PHYS 170 Principles of Physics I (4 credits), PHYS 171 Principles of Physics II (4 credits).

**Capstone Course Requirement.** The following courses in the Biology Major fulfill the capstone course requirement: BIOL 495 Senior Seminar, BIOL 496 Senior Thesis, or EDUC 409 Secondary Student Teaching (Secondary Licensure Emphasis).

**BIOLOGY COURSES**

**BIOL 120** Studies in Biology ................................................................. 3 cr

An introduction to selected biological topics and the methods of science through an exploration of current topics such as evolution, bioethics and conservation biology. Students may only take this course once for credit. GT-SC2
BIOL 130  Environmental Biology  
An introduction to basic biological principles as they apply to interactions between organisms and their environment. Consideration is given to biotic and abiotic interactions, energy flow, biogeochemical cycling, population growth, biodiversity, basic cell biology, genetics, and evolution with a special emphasis on human impacts on these biological systems. This course establishes a strong foundation in applied biology from a scientific perspective. GT-SC2

BIOL 135  Environmental Biology Laboratory  
An experimental approach in both the field and laboratory to explore fundamental biological principles including biotic and abiotic interactions, energy flow, biogeochemical cycling, population growth, biodiversity, basic cell biology, genetics and evolution. Prerequisite or corequisite: BIOL 130. GT-SC1

BIOL 150  Biological Principles (with laboratory)  
An introduction to the central unifying concepts of biology including the biochemical foundations of life, cell structure and function, cell metabolism, genetics, and evolution. Laboratories introduce students to the process and methods of science through investigative experiences. This course is designed for the science major. Prerequisites: A year of high school biology; and a year of high school chemistry or CHEM 101 or CHEM 111. GT-SC1

BIOL 151  Diversity and Patterns of Life (with laboratory)  
An overview of organismal diversity and ecology. Through a taxonomic survey, students are introduced to prokaryotic and eukaryotic diversity including microorganisms, plants, and animals. Organismic anatomy and physiology, as well as fundamentals of ecology, are also considered. Laboratories introduce students to the process and methods of science through investigative experiences. This course is designed for the science major. Prerequisites: A year of high school biology and a year of high school chemistry or CHEM 101 or CHEM 111.

BIOL 197  Special Topics  

BIOL 200  Environmental and Public Health  
An appraisal of man's surroundings which influence his health, including an introduction to the societal structure designed to cope with health problems. Of particular benefit to those who plan to major in the social sciences or enter the field of public health. GT-SC2

BIOL 201  Introduction to Microbiology (with laboratory)  
A study of the basic aspects of microbiology for allied health students that includes an introduction to the identification, physiology, growth and control of microbes. Laboratory exercises will emphasize aseptic, pure culture, and identification techniques. This course can only be used to fulfill graduation requirement for students in the allied health biology emphasis.

BIOL 297  Special Topics  

BIOL 300  Basic Nutrition  
An introduction to the science of human nutrition. Consideration is given to the chemical nature and functions of the major groups of nutrients, the function of the digestive system, energy, metabolism and balance, weight control, and nutrition for fitness. Human nutrition during the life span is also addressed. Prerequisites: BIOL 130 or BIOL 150; and CHEM 101 or CHEM 111.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 301</td>
<td>General Ecology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An introduction to basic ecological principles and their relationships to natural systems. Human impact on the natural systems is assessed. Prerequisite: BIOL 150 and BIOL 151. Prerequisite or corequisite: COM 202.</td>
<td></td>
</tr>
<tr>
<td>BIOL 302</td>
<td>Ecology Laboratory and Recitation</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>An experimental approach in both field and laboratory to explore fundamental ecological principles. Students gather and analyze data to address ecological hypotheses, learn practical ecological skills (performing field techniques, using statistical and graphical tools, and interpreting ecological software), and develop oral and written communication skills. Prerequisites: BIOL 150, BIOL 151, and CHEM 113. Prerequisite or corequisite: BIOL 301.</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An introduction to cellular function and structure. Prerequisites: BIOL 150 and BIOL 151. Prerequisite or corequisite: CHEM 231 or CHEM 331; and COM 202.</td>
<td></td>
</tr>
<tr>
<td>BIOL 312</td>
<td>Genetics (with recitation)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>A course in Mendelian inheritance, linkage, chromosomal aberrations, molecular genetics, gene regulation, genetic engineering, and population genetics. Prerequisites: BIOL 301, BIOL 310, CHEM 231, and CHEM 234; or CHEM 331.</td>
<td></td>
</tr>
<tr>
<td>BIOL 313</td>
<td>Cell and Genetics Laboratory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>An introduction to experimentation and laboratory techniques used in cell biology, physiology, and genetics, including experimental design, data analysis, and presentation of research results. Prerequisite or corequisite: BIOL 312.</td>
<td></td>
</tr>
<tr>
<td>BIOL 320</td>
<td>Ornithology (with laboratory and recitation)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>An introduction to the study of bird evolution, ecology, and conservation. This course has a strong field component providing frequent opportunities to observe birds in their native environments. Prerequisite: BIOL 301 or instructor permission.</td>
<td></td>
</tr>
<tr>
<td>BIOL 322</td>
<td>Mammalogy (with laboratory and recitation)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>An introduction to the study of mammal taxonomy, evolution, ecology and conservation. Prerequisite: BIOL 301 or instructor permission.</td>
<td></td>
</tr>
<tr>
<td>BIOL 327</td>
<td>Field Entomology (with laboratory)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>An introduction to the world of the most diverse and abundant form of animal life on Earth through an experiential, field, and laboratory class. The course emphasizes field study, collection and preservation, identification, ecology, and natural history. Prerequisite: BIOL 301 or instructor permission.</td>
<td></td>
</tr>
<tr>
<td>BIOL 342</td>
<td>Microbiology (with laboratory)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>An introduction to microbial morphology, identification, physiology, genetics, and microbiology laboratory techniques. A brief consideration is given to fungi. Prerequisites: Biology Nucleus.</td>
<td></td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Botany (with laboratory)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Using field and laboratory experiences this course explores the diversity within the plant kingdom using a comparative approach to examine evolutionary trends and relationships. Students are introduced to the structure and function of plants through an investigation of plant cells, tissues, organs, and basic physiological processes. Economic importance, human uses, and significance of plants to society are emphasized. Prerequisites: BIOL 150, BIOL 151, and ENG 102; or instructor permission.</td>
<td></td>
</tr>
</tbody>
</table>
BIOL 353 Rocky Mountain Flora 3 credits
A field and laboratory course focusing on identification of flowering plants common to the Western Slope of the Colorado Rocky Mountains. This course covers methods of plant collection and preservation, field identification, natural history, and ecology as well as local plants of particular human interest, including those that are medically important, edible, and are poisonous. Prerequisites: BIOL 150 and BIOL 151; or instructor permission.

BIOL 362 Evolutionary Biology – Theory and Application 3 credits
This course provides a comprehensive overview of evolutionary processes and mechanisms within an applied framework. Evolutionary perspectives in human health and medicine, environmental and conservation biology, agriculture and natural resource management, and biotechnology are covered. Topics include organismic adaptations to changing environments and long-term responses to environmental perturbation, and insights into many issues of growing social importance such as climate change, land use change, and emerging diseases. Prerequisites: BIOL 312; or ENVS 350, ENVS 370, ENVS 390, and either BIOL 151 or both BIOL 130 and BIOL 135; or instructor permission.

BIOL 372 Human Anatomy and Physiology I (with laboratory) 4 credits
An introduction to regulatory mechanisms which maintain normal body function. Specific topics include cytology, histology, integumentary system, skeletal system, muscle system, and nervous system. The course is designed for allied health and exercise and sport science students. Prerequisites: BIOL 150; CHEM 231 or CHEM 111.

BIOL 373 Human Anatomy and Physiology II (with laboratory) 4 credits
A continuation of BIOL 372 Human Anatomy and Physiology I. Specific topics include immunology, cardiovascular system, respiratory system, digestive system, excretory system, reproductive system, and endocrine system. Prerequisite: BIOL 372.

BIOL 392 Independent Study in Biology 1-4 credits
A study in a specific area of biology under the direction of a faculty member. May be taken for a maximum of four credits. Graded Satisfactory/Unsatisfactory only.

BIOL 397 Special Topics 1-6 credits
Under faculty supervision, students participate in the development of laboratory and field experience exercises, as well as in their instruction and execution. Specifically designed for students serving as teaching assistants in Biology. May be taken for a maximum of 3 credits. Graded Satisfactory/Unsatisfactory only. Prerequisite: BIOL 150, BIOL 151, and instructor permission.

BIOL 420 Molecular Biology (with laboratory) 4 credits
A study of the molecular mechanisms by which cellular processes are controlled in prokaryotic and eukaryotic cells. Topics include the biochemistry of macromolecular processes, the structure of genes and chromosomes, the genetic and molecular techniques used to study gene expression, and the transcriptional and translational control of gene expression. The laboratory includes recombinant DNA techniques to manipulate the genome of a model organism. Prerequisites: BIOL 312 and CHEM 471.
BIOL 430  Wildlife Ecology and Management (with laboratory)  4 credits
Principles of ecology are applied to population and habitat management towards wildlife conservation. Tools used by wildlife biologists to restore endangered species, harvest sustainable populations, reduce overpopulated species, and to monitor and study populations are emphasized. Habitat management approaches are discussed, along with human dimensions in wildlife conservation. A field component allows students to investigate wildlife populations and habitat issues in the Gunnison Basin. Prerequisite: BIOL 301 or instructor permission. Co-requisite: BIOL 431.

BIOL 431  Wildlife Techniques Workshop  1 credit
A one week intensive field course focuses on wildlife conservation issues and wildlife management techniques such as trapping and marking wildlife, radio telemetry, population monitoring, GPS and GIS, and wildlife conflict resolution. The course includes a trip outside the basin; a field trip course fee is required. Prerequisite: BIOL 301 or instructor permission. Co-requisite: BIOL 430.

BIOL 435  Animal Behavior  3 credits
An introduction to the study of animal behavior. This course emphasizes the importance of ecology and evolution in understanding animal behavior. Prerequisites: Biology Nucleus; or instructor permission.

BIOL 440  Conservation Biology  3 credits
This course addresses the reduction in biological diversity of the planet and suggested solutions to prevent further reduction. Integrating themes are drawn from scientific disciplines such as population genetics, ecology, evolutionary biology, botany, zoology, molecular biology, biochemistry, and wildlife management. Prerequisites: BIOL 312; or ENVS 350, ENVS 370, ENVS 390, and either BIOL 151 or both BIOL 130 and BIOL 135; or instructor permission.

BIOL 444  Colorado Ecoregions  3 credits
A survey of the three main ecoregions of Colorado including the Great Plains, the Southern Rocky Mountains, and the Colorado Plateau. Students travel throughout Colorado and explore the ecology and natural history of the ecosystems by hiking, backpacking, and river rafting. Content includes an evolutionary perspective on ecosystem features and the adaptations of species characterizing each system, as well as applied issues in natural resources management. Prerequisite: BIOL 301 or instructor permission.

BIOL 454  Developmental Biology (with laboratory)  4 credits
An examination of the embryology of vertebrates, stressing mammalian embryonic development and comparisons with amphibians, reptiles, and birds. Prerequisite: BIOL 312.

BIOL 474  Comparative Animal Physiology (with laboratory)  4 credits
An analysis of function in invertebrates and vertebrates, utilizing an environmental approach and emphasizing evolutionary trends in physiological systems. Prerequisites: Biology Nucleus, SCI 202, and PHYS 140.

BIOL 476  Aquatic Ecology (with laboratory)  4 credits
A study of physical, chemical, and biological parameters of lakes and streams in the functioning of freshwater eco-systems. Prerequisite: BIOL 301 or GEOL 320; or instructor permission.
BIOL 477  Plant Ecology (with laboratory)  4 credits
An introduction to plant populations and communities, including their role within terrestrial ecosystems. Prerequisite: BIOL 301 or instructor permission.

BIOL 481  Forest Ecology (with laboratory)  4 credits
Ecology of forest species, communities, landscapes, and ecosystems, with a focus on the Gunnison Basin. Topics include tree physiology, species interactions, fire and disturbance, succession, forest types, climate, forest management and restoration. Labs and field trips will provide hands-on experience and practical skills in tree identification, forest mensuration, vegetation sampling, statistics and GIS. Students will develop and conduct independent/group research projects. Prerequisites: BIOL 301, MATH 213.

BIOL 495  Senior Seminar  1 credit
An examination of biological subdisciplines through an investigation of the primary literature. The professional practices, procedures, and standards of the subdiscipline are discussed. This course may be repeated for credit and must be taken twice to fulfill the capstone course requirement. Graded Satisfactory/Unsatisfactory only. Prerequisites: Biology Nucleus and MATH 213.

BIOL 496  Senior Thesis  2-4 credits
An advanced research experience resulting in a Senior Thesis, supervised by a thesis committee of three faculty members including at least one biologist. A proposal of the project must be approved by the thesis committee prior to project initiation. In addition to completing the written thesis, students must present the results of their work in a departmental seminar. This course satisfies the capstone course requirement. Graded Satisfactory/Unsatisfactory only. Prerequisites: Biology Nucleus, and MATH 213.

BIOL 497  Special Topics  1-6 credits
BUSINESS ADMINISTRATION (BUAD)

The Business Administration Program is designed to produce graduates who possess skills and abilities needed to succeed in the business world of the 21st century. An emphasis is placed on critical thinking skills, communication skills, liberal arts breadth, and the fundamental business concepts essential for successful careers in business.

Each of the degree options is organized to develop a thorough understanding of the fundamental concepts of business. In addition to conceptual knowledge, each student develops the ability to apply specific principles in a specialty of the student’s choosing. These principles are taught through a program that has three essential elements.

The Base Curriculum consists of a group of courses mainly outside of the Business area that covers the basic competencies needed to succeed in the upper-division Business requirements. These courses have been selected to ensure basic knowledge in the areas of communication, reasoning, and critical thinking required for upper-division study.

The second element is the Business Administration Nucleus, comprised of a core of Business courses focusing on principles in the areas of communication, marketing, management, and law. These courses form the fundamental business concepts required in all emphasis areas and represent the bulk of the requirements for the Standard Program in Business Administration.

The third element consists of a group of courses in the area in which the student wishes to acquire additional technical skills. In the Standard Program, the courses are in an area outside of Business Administration where the student is required to attain at least a minor. In the other emphasis areas offered by the department (management, marketing, entrepreneurship, Latin American business, professional land and resource management, and resort management), the student has additional requirements that develop skills necessary to succeed in the chosen area.

The Management Emphasis provides opportunities to develop the necessary expertise to enter a training program for managerial-level employees in any size business. These courses place emphasis on learning both essential management principles and their application in the highly competitive world of business.

The Marketing Emphasis is designed to prepare students for entry-level positions in strategic marketing, sales, marketing research, and promotion. Students are encouraged to relate their studies in related disciplines, such as Communications and Economics, to the study of marketing.

The Entrepreneurship Emphasis is structured to develop graduates with the skills and competencies to create and successfully manage a small-business enterprise. The program of study is intentionally broad-based to minimize the threats and problems commonly associated with start-up businesses. These courses address both theoretical underpinnings and practical applications of those areas of business of significant importance to entrepreneurs.

The Latin American Business Emphasis prepares students for entry-level positions in international organizations that specialize in Latin America. The program is highly interdisciplinary with a solid business core. In addition to business fundamentals, the student will develop an understanding of the predominant language and culture of Latin America and its history, together with the broad concepts of international economics.
The Professional Land and Resource Management Emphasis is designed to prepare students for entry-level positions as land negotiators. Students learn land and resource management principles through knowledge and perspectives of business administration, economics, geology, and environmental studies. The program is designed to prepare students to work in the business side of energy and mineral exploration.

The Resort Management Emphasis prepares students for entry-level management positions in the hospitality industry. With a solid foundation in business, a student is well prepared to succeed in specific courses in resort management and equipped with employment-ready skills upon graduation. Students are required to complete 400 hours of work experience in the industry prior to graduation to provide practical experience in the field.

Graduate study in business (MS or MBA) is possible regardless of undergraduate major. However, students lacking sufficient quantitative and analytical skills may find it difficult at best. These skills can be acquired by completing the Base Curriculum previously described and a Mathematics course equivalent to MATH 232 Applied Calculus for the Managerial and Social Sciences.

To graduate all business administration majors must have a grade-point average of 2.500 or above in all courses required in the major.

**FACULTY**

Professors Cynthia L. Drexel, Michaela C. Driver, Roger L. Hudson, Kevin A. Nelson, and Michael Vieregge;

Assistant Professors Jeffrey Dykes, Christopher W. Greene and Scott Sells;

Lecturers Menon Billingsley.

**DESCRIPTION OF THE PROGRAMS**

All Business Administration majors must complete the Base Curriculum, which requires a minimum of 18 credits. Each course in the Base Curriculum must be completed with a minimum grade of "C," except the mathematics course requirement which must be completed with a minimum grade of "C-." Students majoring in Business Administration should complete this base curriculum before enrolling in 300- or 400-level BUAD courses. Discuss specific exceptions with your advisor before enrolling in 300- or 400-level BUAD courses.

**Base Curriculum**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Introduction to Financial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACC 202</td>
<td>Introduction to Managerial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Microeconomics</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

One of the following mathematics courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 140</td>
<td>College Algebra</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 141</td>
<td>Precalculus</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 151</td>
<td>Calculus I</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 220</td>
<td>Computer Applications in Business</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 120</td>
<td>Information Management and Analysis</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 213</td>
<td>Probability and Statistics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 216</td>
<td>Statistics for Business and Economics</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
The 15-credit Business Administration Nucleus forms the core for each of the emphasis areas and also comprises the bulk of the Standard Program. It is important that the student achieve a high level of understanding of the basic fundamental concepts represented by these courses to be successful in the completion of the required upper-level course work and in their business career. If BUAD 350 Human Resource Management is used to satisfy the requirements of the Business Administration Nucleus, then it cannot be used to satisfy the elective requirement within the major.

**Business Administration Nucleus**

- BUAD 210 Legal Environment of Business .................................................. 3 cr
- BUAD 270 Principles of Marketing ........................................................................ 3 cr
- BUAD 309 Business Communication ...................................................................... 3 cr
- BUAD 360 Managerial Finance .................................................................................. 3 cr
- One of the following:
  - BUAD 333 Organizational Behavior ........................................................................ 3 cr
  - BUAD 350 Human Resource Management ............................................................ 3 cr

**Business Administration Major: Standard Program**

The Standard Program requires a minimum of 45 credits including the 18-credit Base Curriculum, the 15-credit Business Administration Nucleus, BUAD 491 Strategic Management, and nine credits of Business Administration electives. At least six credits of the nine credits must be upper-division Business Administration electives, and no more than three credits may be from: BUAD 100 Business in Society, BUAD 150 Introduction to Hospitality, or BUAD 499 Internship in Business Administration. Electives should be chosen in consultation with an advisor. BUAD 397 or BUAD 497 special topics courses are allowed to count toward the nine-credit requirement only with departmental approval.

**Business Administration and Environmental Studies Coordinated Double Major:**
If a student elects to complete a Business Administration Major: Standard Program and the coordinated Environmental Studies Major: Standard Program, the student must complete the nine credits of upper-division Business Administration electives by taking ECON 370 Natural Resource Economics, BUAD 363 Business and the Environment, and BUAD 410 Water and Environmental Law.

**Business Administration Major: Comprehensive Programs**

**MANAGEMENT EMPHASIS**

A minimum of 57 credits is required, including the 18-credit Base Curriculum, the 15-credit Business Administration Nucleus (students must take BUAD 333 in the Nucleus), and the following courses:

- BUAD 311 Essential Excel Skills for the Workplace ................................................. 1 cr
- BUAD 312 Advanced Excel Applications ...................................................................... 2 cr
- BUAD 350 Human Resource Management ................................................................... 3 cr
- BUAD 375 Entrepreneurship and Business Planning ................................................. 3 cr
- BUAD 491 Strategic Management ................................................................................. 3 cr
- ECON 201 Macroeconomics ....................................................................................... 3 cr
- Three of the following electives:
  - BUAD 100 Business in Society .............................................................................. 3 cr
  - BUAD 150 Introduction to Hospitality ...................................................................... 3 cr
BUAD 300  Business Ethics ................................................................. 3 cr
BUAD 315  Business Law ................................................................. 3 cr
BUAD 325  Management Information Systems ................................ 3 cr
BUAD 335  Marketing Communications ........................................... 3 cr
BUAD 337  Hospitality Law and Risk Management ........................... 3 cr
BUAD 340  Global Business ............................................................. 3 cr
BUAD 345  Consumer Behavior ....................................................... 3 cr
BUAD 499  Internship in Business Administration .............................. 3 cr
ECON 303  International Economics and Globalization ..................... 3 cr

No more than three credits from BUAD 100 Business in Society, BUAD 150 Introduction to Hospitality, or BUAD 499 Internship in Business Administration may be used to satisfy the elective requirement.

**MARKETING EMPHASIS**

A minimum of 57 credits is required, including the 18-credit Base Curriculum, the 15-credit Business Administration Nucleus, and the following courses:

BUAD 335  Marketing Communications........................................... 3 cr
BUAD 340  Global Business ............................................................. 3 cr
BUAD 345  Consumer Behavior ....................................................... 3 cr
BUAD 425  Marketing Research ....................................................... 3 cr
BUAD 491  Strategic Management ................................................... 3 cr

*Three of the following electives:*

BUAD 100  Business in Society........................................................ 3 cr
BUAD 150  Introduction to Hospitality .............................................. 3 cr
BUAD 300  Business Ethics ............................................................ 3 cr
BUAD 311  Essential Excel Skills for the Workplace ............................. 1 cr
BUAD 312  Advanced Excel Applications ........................................... 2 cr
BUAD 315  Business Law ................................................................. 3 cr
BUAD 325  Management Information Systems ................................... 3 cr
BUAD 350  Human Resource Management........................................ 3 cr
BUAD 499  Internship in Business Administration .............................. 3 cr
CIS  160  Introduction to Web Design .............................................. 3 cr
COM 372 Issues Management ......................................................... 3 cr
ECON 201  Macroeconomics ........................................................... 3 cr

No more than three credits from BUAD 100 Business in Society, BUAD 150 Introduction to Hospitality, or BUAD 499 Internship in Business Administration may be used to satisfy the elective requirement.

**ENTREPRENEURSHIP EMPHASIS**

A minimum of 57 credits is required, including the 18-credit Base Curriculum, the 15-credit Business Administration Nucleus, and the following:

ACC 350  Income Tax........................................................................... 3 cr
BUAD 315  Business Law ................................................................. 3 cr
BUAD 375  Entrepreneurship and Business Planning ............................ 3 cr
BUAD 494  Entrepreneurial Analysis and Consulting ............................ 3 cr

*One of the following:*

BUAD 335  Marketing Communications........................................... 3 cr
BUAD 345  Consumer Behavior ....................................................... 3 cr
Three of the following electives:

- BUAD 100 Business in Society ................................................................. 3 cr
- BUAD 150 Introduction to Hospitality ......................................................... 3 cr
- BUAD 300 Business Ethics ........................................................................... 3 cr
- BUAD 311 Essential Excel Skills for the Workplace ...................................... 1 cr
- BUAD 312 Advanced Excel Applications................................................... 2 cr
- BUAD 340 Global Business .......................................................................... 3 cr
- BUAD 350 Human Resource Management .................................................. 3 cr
- BUAD 345 Marketing Research .................................................................... 3 cr
- BUAD 491 Strategic Management ............................................................... 3 cr
- BUAD 499 Internship in Business Administration ........................................ 3 cr
- ECON 201 Macroeconomics ....................................................................... 3 cr
- ECON 302 Intermediate Microeconomics ................................................... 3 cr

No more than three credits from BUAD 100 Business in Society, BUAD 150 Introduction to Hospitality, or BUAD 499 Internship in Business Administration and no more than one economics course, ECON 201 Macroeconomics or ECON 302 Intermediate Microeconomics, may be used to satisfy the elective requirement.

**Latin American Business Emphasis**

A minimum of 60 credits is required including the 18-credit Base Curriculum, the 15-credit Business Administration Nucleus, and the following courses:

- BUAD 340 Global Business ......................................................................... 3 cr
- BUAD 491 Strategic Management ............................................................... 3 cr
- ECON 201 Macroeconomics ....................................................................... 3 cr
- ECON 303 International Economics and Globalization ................................ 3 cr
- HIST 260 Latin American History (or another appropriate History course).... 3 cr

Three credits of the following:

- BUAD 311 Essential Excel Skills for the Workplace .................................... 1 cr
- BUAD 312 Advanced Excel Applications................................................... 2 cr
- BUAD 335 Marketing Communications....................................................... 3 cr
- BUAD 345 Consumer Behavior ................................................................... 3 cr
- BUAD 350 Human Resource Management ................................................ 3 cr

Three of the following, based on proficiency:

- SPAN 101 Elementary Spanish I ................................................................. 3 cr
- SPAN 102 Elementary Spanish II................................................................. 3 cr
- SPAN 254 Intermediate Spanish I ............................................................... 3 cr
- SPAN 255 Intermediate Spanish II............................................................... 3 cr
- SPAN 341 Latin American Civilization and Culture ..................................... 3 cr
- SPAN 342 Mexican Civilization and Culture ................................................ 3 cr

**Professional Land and Resource Management Emphasis**

**Admission to the program:** All students who wish to major in the Professional Land and Resource Management (PLRM) emphasis in Business Administration must be formally admitted to the program. For admission, a student must complete and submit an application for admission and meet the following requirements:
1. completion of the 18-credit Base Curriculum and BUAD 210, BUAD 270, and BUAD 309; and

2. possess a GPA of 3.0 or higher. Students who started their academic studies at Western must have an overall GPA of 3.0 or higher. Students who are transfer students must have an overall GPA of 3.0 or higher for all credits taken at Western (12 credits minimum).

A minimum of 70 credits is required, including the 18-credit Base Curriculum, the 15-credit Business Administration Nucleus, and the following courses:

**BUAD 305 Fundamentals of Professional Land and Resource Management** ........................................ 3 cr
**BUAD 320 Petroleum Land Management** ............................................................................. 3 cr
**BUAD 330 Mining Land Management** ............................................................................... 3 cr
**BUAD 410 Water and Environmental Law** ........................................................................ 3 cr
**BUAD 420 Oil and Gas Law and Contracts** ....................................................................... 3 cr
**BUAD 491 Strategic Management** ................................................................................ 3 cr
**BUAD 499 Internship** .......................................................................................................... 3 cr
**ECON 370 Natural Resource Economics** ......................................................................... 3 cr
**ENVS 350 U.S. and Western Environmental Politics** ..................................................... 3 cr
**GEOG 340 Introduction to Geographic Information Systems** ....................................... 3 cr
**GEOL 101 Physical Geology** ............................................................................................ 3 cr
**GEOL 105 Physical Geology Laboratory** ......................................................................... 1 cr
**GEOL 240 Introduction to Petroleum and Mining Geology** ............................................. 3 cr

A grade of “C” or above must be attained in all PLRM emphasis area courses.

**RESORT MANAGEMENT EMPHASIS**

A minimum of 60 credits is required, including the 18-credit Base Curriculum, the 15-credit Business Administration Nucleus, and the following 27 credits:

**BUAD 150 Introduction to Hospitality** .............................................................................. 3 cr
**BUAD 331 Food & Beverage Management** ...................................................................... 3 cr
**BUAD 332 Rental & Retail Management** .......................................................................... 3 cr
**BUAD 334 Lodging Operations** ....................................................................................... 3 cr
**BUAD 337 Hospitality Law and Risk Management** ........................................................ 3 cr
**BUAD 363 Business and the Environment** ....................................................................... 3 cr
**BUAD 482 Hospitality Operations Management** ............................................................ 3 cr
**BUAD 491 Strategic Management** ................................................................................ 3 cr

One of the following:

**BUAD 345 Consumer Behavior** .................................................................................... 3 cr
**BUAD 350 Human Resource Management** .................................................................. 3 cr
**BUAD 499 Internship in Business Administration** ....................................................... 3 cr
**ROE 398 Program Planning** .......................................................................................... 3 cr

**Business Administration Minor**

A minimum of 18 credits is required, including one upper-division Business Administration elective and the following:

**ACC 201 Introduction to Financial Accounting** .............................................................. 3 cr
**BUAD 210 Legal Environment of Business** ................................................................. 3 cr
BUAD 270 Principles of Marketing ................................................................. 3 cr
BUAD 309 Business Communication .......................................................... 3 cr

One of the following:
BUAD 100 Business in Society ................................................................. 3 cr
BUAD 150 Introduction to Hospitality .......................................................... 3 cr

Capstone Course Requirement. The following courses in the Business Administration Major fulfill the capstone course requirement: BUAD 491 Strategic Management (Standard Major or Management, Marketing, Latin American Emphases) or BUAD 494 (Entrepreneurial Analysis and Consulting (Entrepreneurship Emphasis).

BUSINESS ADMINISTRATION COURSES

BUAD 100 Business in Society 3 credits
A study of the role of business in modern society. Topics include the private enterprise system, consumerism, management functions, major functional areas of large business, vital areas of small-business operation, and the environment of business.

BUAD 150 Introduction to Hospitality 3 credits
An introduction to hospitality management, including historical developmental patterns, current business trends, and future international expectations. Current job market, working environments, personal risks, and rewards are explored.

BUAD 197 Special Topics 1-6 credits

BUAD 206 Personal Finance 3 credits
Designed to help students plan the handling of their finances in everyday business transactions. Topics include budgeting, credit, savings, insurance, income tax, investments, and estate planning.

BUAD 210 Legal Environment of Business 3 credits
Provides students an ability to sense the occasions when a lawyer should be consulted for guidance in avoiding legal mistakes. A study is made of the ordinary legal aspects of common business transactions, including the topics of social forces, contracts, personal property, and agency.

BUAD 220 Computer Applications in Business 3 credits
Designed to teach students to apply a variety of interdisciplinary computer applications in their business professions. Topics include integrating word processing, spreadsheets, databases, communications, and graphics on personal computers. A minimal skill in keyboarding is required.

BUAD 270 Principles of Marketing 3 credits
An introduction to the fundamental concepts of marketing, including consumer demand and behavior, segmentation, advertising, marketing research, product development, distribution, pricing, the internet as a marketing agent, and global marketing issues. The student is exposed to the most basic tools, factors, and marketing principles administered by management in establishing policy, planning, and complex problem solving. Prerequisites: ENG 102 with a minimum grade of “C-” and completion of at least 24 credits; or instructor permission.

BUAD 297 Special Topics 1-6 credits
BUAD 300  Business Ethics  3 credits
A study of how ethics apply to business organizations today. Special emphasis is placed on developing moral reasoning. The course provides multiple perspectives on actual cases and ethical dilemmas faced by organizations with an emphasis on allowing students to think through ethical problems. Topics studied include moral philosophies, moral agency and development, ethical underpinnings of free markets and economic systems, and ethical concerns with the environment, future generations, and other stakeholders such as employees and consumers. Prerequisites: completion of Base Curriculum; BUAD 309 or COM 202; or instructor permission.

BUAD 301  Topics in Business Administration  1-6 credits
Provides an opportunity for students to examine current issues, topics, problems, and trends within the field.

BUAD 305  Fundamentals of Professional Land and Resource Management  3 credits
Introduction to the energy industry, including petroleum, minerals, wind, solar, and alternative fuels. Includes the history of the energy industry and provides basics in exploration, production, transportation and refining. Electricity generation and transmission is explored and global energy concepts are discussed. Prerequisite: admission into the PLRM program or instructor permission.

BUAD 309  Business Communication  3 credits
A study of the fundamentals, principles, and practices of effective written communication, including concepts of appearance, language, and psychology of tone and persuasiveness as applied to the business letter, memorandum, and report. Presentation skills are also discussed. Prerequisites: ENG 102 with a minimum grade of “C-”; sophomore standing.

BUAD 311  Essential Excel Skills for the Workplace  1 credit
This course prepares the student for Microsoft Excel Office Specialist certification. This covers all of the topics tested by the certifying examination including managing worksheets and workbooks, applying formulas and functions, analyzing and organizing data, visual presentation of data, and sharing worksheet data with others. Prerequisites: university-level mathematics requirement with a minimum grade of “C-” or instructor permission.

BUAD 312  Advanced Excel Applications  1 credit
This course emphasizes the use of computer spreadsheets to organize, analyze and present quantitative information to aid managerial decision-making. The course exercises include examples from several disciplines including business, energy and environmental impact analysis, natural sciences, and social sciences. Specific topics include business planning and budgeting, capital budgeting and net present value analysis, time value of money, cost/benefit analysis, goal seeking, scenario planning, and pivot tables. Prerequisites: BUAD 311, Excel Office Specialist certification, or instructor permission.

BUAD 315  Business Law  3 credits
Study includes: sales, commercial paper, secured transactions, corporations, partnerships, estates, trusts, and agency. Prerequisite: BUAD 210.

BUAD 320  Petroleum Land Management  3 credits
Introduction to the field of land management in the petroleum industry. Covers the necessary knowledge and skills of the petroleum land professional, both in the U.S. and
internationally. Topics include land survey systems, mineral ownership and severance, as well as oil and gas leases. Examines other oil and gas exploration and development phases. State and federal leasing is covered. Prerequisites admission into the PLRM program, or instructor permission.

**BUAD 325 Management Information Systems**  
3 credits
A study of how managers can and should be involved with systems planning, development, and implementation; what information systems resources are available to managers for decision support; and how information and technology can be used to support business strategy. Also, this course takes a managerial approach to information systems concepts and applications in business, while exposing the student to various types of software in the business sector. Prerequisite: BUAD 220 or CIS 120.

**BUAD 330 Mining Land Management**  
3 credits
An introduction to the field of land management in the mining industry both in the U.S. and internationally. Includes fundamentals of mining geology and technical operations as well as fundamentals of the Mining Act of 1872 and its amendments and interpretation. Emphasis is on the role of the mining land negotiator including lands available for mining, surface inspections, private leasing or purchasing, public lands leasing, negotiation and land maintenance. The concept of permitting is also introduced. Prerequisites: admission into the PLRM program; BUAD 305; BUAD 320; or instructor permission.

**BUAD 331 Food and Beverage Management**  
3 credits
Prepares students for management of sales, food cost controls, beverage cost controls, labor, personnel, sanitation, and market analysis as they relate to the resort industry. Prerequisites: completion of Base Curriculum; BUAD 150; or instructor permission.

**BUAD 332 Rental and Retail Management**  
3 credits
An introduction to operating rental and retail-profit centers as part of a corporation involved in the resort industry. Topics covered include managing personnel, equipment, training, traffic flow, buying, forecasting, and accounting. Prerequisites: completion of Base Curriculum; BUAD 150; or instructor permission.

**BUAD 333 Organizational Behavior**  
3 credits
Provides students an understanding of human behavior in organizations today. Students will become familiar with the basic dimensions of organizational behavior covering topics such as leadership, motivation, management of people, and group dynamics. The course stresses an experimental approach as well as the personal nature of the material and how this relates to the complexities of behavior in and of organizations. Prerequisite: BUAD 309 or COM 202; or instructor permission.

**BUAD 334 Lodging Operations**  
3 credits
A focus on organizational structure and front office positions. Topics covered include reservation, registration and rooming process; management, financial, and policy control procedures; and organization, staffing, and functions of housekeeping departments. Prerequisite: completion of Base Curriculum; BUAD 150; or instructor permission.
BUAD 335  Marketing Communications  3 credits
Advertising, sales promotions, media utilization, public relations, and personal selling are highlighted in this course. Legal regulations and ethical considerations in mass media advertising and promotions are also covered. Finally, the student is exposed to the principles of planning and budgeting for such media events. Prerequisites: MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-”; ACC 201 with a minimum grade of “C”; BUAD 270; or instructor permission.

BUAD 337  Hospitality Law and Risk Management  3 credits
Provides an awareness of the rights and responsibilities that the law grants to or imposes upon a hotelkeeper and illustrates the possible consequences of failure to satisfy legal obligations. Also included is risk management as a means of mitigating exposure to lawsuits and fines. Prerequisites: BUAD 150; BUAD 210; or instructor permission.

BUAD 340  Global Business  3 credits
An advanced course with application of management and marketing principles to the international marketplace. Cultural, political, and geographic differences are analyzed in order to develop market strategies for global markets. Prerequisite: BUAD 309 or COM 202; or instructor permission.

BUAD 345  Consumer Behavior  3 credits
Utilizing theories from the behavioral sciences, this course provides an in-depth examination of the individual customer learning and decision-making processes, segmentation, as well as culture, subculture, and social class relationships with marketing. Students develop an understanding of consumers’ shopping behavior, utilization of different marketing channels, perception of products, and reactions to advertising and other selling methods. Prerequisites: completion of Base Curriculum; BUAD 270; or instructor permission.

BUAD 350  Human Resource Management  3 credits
Provides students with an understanding of the functions, content and challenges of Human Resource Management (HRM) in organizations today. Insights will be developed on basic dimensions of HRM such as recruitment, selection, performance management, rewards and retention, as well as particular challenges concerning strategic HRM and global environments. Emphasis is placed on how the complexities of HRM relate to students’ past and future experiences as members of organizations. Prerequisite: BUAD 309 or COM 202; or instructor permission.

BUAD 360  Managerial Finance  3 credits
An introductory course to the field of managerial finance, covering such topics as financial analysis, time value of money, risk/return analysis, capital budgeting, working capital management, cost of capital, and optimal capital structure. Prerequisite: completion of Base Curriculum; or instructor permission.

BUAD 363  Business and the Environment  3 credits
A focus on the impact on the environment of human presence and absence. There is a consideration of various ‘green practices’ that result in both positive environmental impacts and cost savings to industry, and examination of governmental initiatives regarding various business practices and their expected impacts on the environment, on
businesses’ bottom lines, and on consumers. Course material emphasizes videos, readings, and guest lectures. Prerequisite: completion of Base Curriculum; or instructor permission.

**BUAD 375 Entrepreneurship and Business Planning**  
3 credits  
Provides the future entrepreneur with the skills and insights necessary to minimize risks associated with the undertaking of a new business venture. The primary focus is for each student to prepare a complete business plan for a proposed business enterprise. Prerequisites: completion of Base Curriculum; BUAD 270; BUAD 333 or BUAD 350; BUAD 360; or instructor permission.

**BUAD 397 Special Topics**  
1-6 credits  
Prerequisite: completion of Base Curriculum; or instructor permission.

**BUAD 410 Water and Environmental Law**  
3 credits  
A comprehensive case law study of water and environmental law, addressing the historical development of the riparian, prior appropriation, Federal and Indian water rights doctrines, and the emergence of Federal and State environmental law and policy, specifically addressing how water law and environmental law interface with and impact each other. This course will develop a knowledge base fundamental to the preparation of a student in the PLRM emphasis. Prerequisite: completion of Base Curriculum; or instructor permission. BUAD 210 recommended.

**BUAD 420 Oil and Gas Law and Contracts**  
3 credits  
Includes the nature and protection of oil and gas rights, conveying oil and gas rights, oil and gas leasing, as well as tax and other business matters. Case law based study of jurisprudence affecting the oil and gas industry. Emphasis is on oil and gas titles, leases, contracts, and mineral ownership. State regulation is also emphasized and international case studies are discussed. Prerequisites: admission into the PLRM program; BUAD 305; BUAD 320; or instructor permission. BUAD 330 recommended as a corequisite.

**BUAD 425 Marketing Research**  
3 credits  
The focus of this course is the collection, analysis, and interpretation of marketing data for reporting research information necessary to make informed marketing decisions. Students develop skills in defining research problems, designing surveys, experiments, and observational studies, managing data collection, performing data analysis, and communicating results. Prerequisites: completion of Base Curriculum; BUAD 270; or instructor permission. BUAD 335 and BUAD 345 recommended.

**BUAD 461 Investments**  
3 credits  
A study of the many investments available for individual portfolios. Emphasis is placed on the risks inherent in investments and the methods and techniques of analysis used in selecting securities for investments. Prerequisite: completion of Base Curriculum; BUAD 360; or instructor permission.

**BUAD 482 Hospitality Operations Management**  
3 credits  
An integration of management functions learned in previous classes into a workable approach to profitable resort operations. Students are encouraged to take this course during their last semester; graduating seniors are given priority in enrollment. Prerequisite: completion of Base Curriculum; BUAD 331; BUAD 332; BUAD 334; BUAD 337; BUAD 360; or instructor permission.
BUAD 485 Quantitative Decision Making  3 credits
A course in managerial decision making that emphasizes the use of computer spreadsheets to organize, analyze, and present quantitative information to aid managerial decision-making. The course includes quantitative topics from a wide variety of business functions, including production, human resources, accounting, finance, marketing, and information systems. Prerequisites: completion of Base Curriculum; BUAD 360; or instructor permission.

BUAD 491 Strategic Management  3 credits
The formal analysis of an organization’s macro and industry environment; its mission and goals; and strategy formulation, implementation, and control. This is a capstone course which integrates the student’s knowledge from the areas of accounting, finance, marketing, and management. Students are encouraged to take this course during their last semester; graduating seniors are given priority in enrollment. Prerequisites: completion of Base Curriculum; BUAD 309; BUAD 333 or 350; BUAD 360; and senior standing.

BUAD 492 Independent Study  1-6 credits
A singular investigation into a unique problem to be determined jointly by the researcher and the advisor. Prerequisite: completion of Base Curriculum; or instructor permission.

BUAD 494 Entrepreneurial Analysis and Consulting  3 credits
An investigation of emerging problems and issues relevant to small businesses. This is accomplished through two techniques: 1) studying current business journal articles, and 2) working with a local small-business owner to solve a specific problem facing his or her business. Prerequisite: completion of Base Curriculum; BUAD 375; or instructor permission.

BUAD 497 Special Topics  1-6 credits
Prerequisite: completion of Base Curriculum; or instructor permission.

BUAD 499 Internship in Business Administration  1-6 credits
A course designed specifically for junior- and senior-level students. Internships provide guided, counseled, and progressive experience under a dual-tutelage program of a businessperson and an academician. An academically monitored activity to assure quality experience. Graded Satisfactory/Unsatisfactory only. Prerequisite: completion of Base Curriculum; or instructor permission.
CHEMISTRY (CHEM)

Chemistry is the study of the principles that govern matter and the chemical transformations of matter. This fundamental discipline plays a pivotal role in all of the sciences. In fact, life itself is essentially a complicated system of interrelated chemical processes. In the study of Chemistry, the student is exposed to atomic and molecular structure, properties of matter, chemical reactions, and spectroscopy.

A student who successfully completes the Chemistry Major gains basic theoretical knowledge and practical experimental skills in areas of inorganic, organic, analytical, physical, and biochemistry. Courses in the supporting areas provide a basic foundation in calculus, physics, and subjects necessary to understanding modern chemical concepts. Coordinated laboratory experiences reinforce concepts presented in lecture classes. Students also benefit from “hands-on” use of modern chemical instrumentation and from student research, a requirement of every student majoring in Chemistry.

Knowledge of chemistry is necessary for all health and allied health professional programs, geochemistry, environmental science, and molecular biology. Students seeking entrance into professional and graduate programs in these areas are well-prepared as Chemistry majors. Employment opportunities (academic and research laboratories, governmental agencies, hazardous materials management, sales, environmental testing, and remediation) remain good for students possessing undergraduate degrees in Chemistry. Opportunities expand exponentially for those students who continue their training for a masters or doctoral degree. Chemistry graduates from Western have been successful in their careers because of the theoretical and practical training received in their areas of emphasis.

The Chemistry Major at Western consists of a comprehensive program offering three areas of emphasis selected according to the interests and career goals of the student. These emphases are: general chemistry, biochemistry, and secondary licensure.

The Secondary Licensure Emphasis in Chemistry qualifies students for the State of Colorado License in Science Education. Other Chemistry emphases may also be used for licensure but may require additional classes. In addition, the student must fulfill the requirements of the Secondary Licensure Program (see description under Education).

FACULTY

Professors Dale L. Orth and Anne W. Ryter; Associate Professor Jason E. Mullins; Lecturers Jarral W. Ryter and Zachary Via.

DESCRIPTION OF THE PROGRAMS

All Chemistry Majors require the 23-credit Chemistry Nucleus.

Chemistry Nucleus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry Laboratory I</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEM 113</td>
<td>General Chemistry II</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEM 114</td>
<td>General Chemistry Laboratory II</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Analytical Chemistry (with laboratory)</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEM 332</td>
<td>Organic Chemistry II</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
CHEM 334  Organic Chemistry Laboratory I ........................................................... 1 cr
CHEM 335  Organic Chemistry Laboratory II ......................................................... 1 cr
CHEM 451  Physical Chemistry I ................................................................. 3 cr

**Chemistry Major: Comprehensive Programs**

**GENERAL CHEMISTRY EMPHASIS**
A minimum of 60 credits is required including the 23-credit Chemistry Nucleus and the following:

- CHEM 401  Instrumental Analysis ................................................................. 2 cr
- CHEM 402  Instrumental Laboratory .............................................................. 2 cr
- CHEM 452  Physical Chemistry II ................................................................. 3 cr
- CHEM 454  Physical Chemistry Laboratory .................................................. 2 cr
- CHEM 461  Advanced Inorganic Chemistry ................................................ 3 cr
- CHEM 494  Research Problems in Chemistry ................................................ 2-4 cr

**Required supporting courses:**
- MATH 151  Calculus I ................................................................................... 4 cr
- MATH 251  Calculus II .................................................................................. 4 cr
- MATH 252  Calculus III ................................................................................ 4 cr
- PHYS 200  General Physics I (with laboratory) .............................................. 4 cr
- PHYS 201  General Physics II (with laboratory) ............................................. 4 cr
- SCI 202  Scientific Writing ........................................................................... 3 cr

**BIOCHEMISTRY EMPHASIS**
A minimum of 67 credits is required including the 23-credit Chemistry Nucleus and the following supporting courses:

- BIOL 150  Biological Principles (with laboratory) ......................................... 4 cr
- BIOL 151  Diversity and Patterns of Life (with laboratory) .......................... 4 cr
- BIOL 310  Cell Biology ................................................................................ 3 cr
- BIOL 312  Genetics (with recitation) .............................................................. 4 cr
- CHEM 471  Biochemistry I .......................................................................... 4 cr
- CHEM 472  Biochemistry II ....................................................................... 4 cr
- CHEM 494  Research Problems in Chemistry .............................................. 2-4 cr
- MATH 151  Calculus I ................................................................................... 4 cr
- MATH 251  Calculus II .................................................................................. 4 cr
- PHYS 200  General Physics I (with laboratory) .............................................. 4 cr
- PHYS 201  General Physics II (with laboratory) ............................................. 4 cr
- SCI 202  Scientific Writing ........................................................................... 3 cr

Note: BIOL 420 Molecular Biology I, may substitute for CHEM 472 Biochemistry II, with permission of your advisor.

**SECONDARY LICENSURE EMPHASIS**
Students interested in pursuing this comprehensive program should consult with the Teacher Education Program advisor in addition to the advisor in their major as soon as possible. A minimum of 67 credits is required including the 23-credit Chemistry Nucleus, the requirements for the Secondary Licensure Program (described under Education) and the following:

- BIOL 150  Biological Principles (with laboratory) ......................................... 4 cr
Chemistry

BIOL 151 Patterns and Diversity of Life (with laboratory) ........................................... 4 cr
BIOL 301 General Ecology ............................................................................................ 3 cr
GEOL 101 Physical Geology ........................................................................................ 3 cr
GEOL 105 Physical Geology Laboratory ..................................................................... 1 cr
GEOL 201 Historical Geology (with laboratory) ......................................................... 4 cr
MATH 151 Calculus I ..................................................................................................... 4 cr
MATH 251 Calculus II ................................................................................................... 4 cr
PHYS 110 Solar System Astronomy ............................................................................. 3 cr
PHYS 120 Meteorology ................................................................................................. 3 cr
PHYS 200 General Physics I (with laboratory) ............................................................ 4 cr
PHYS 201 General Physics II (with laboratory) ......................................................... 4 cr
SCI 202 Scientific Writing ......................................................................................... 3 cr

Chemistry Minor

The Chemistry Minor requires a minimum of 19 credits including the following:

CHEM 111 General Chemistry I ................................................................................. 3 cr
CHEM 112 General Chemistry Laboratory I ............................................................... 1 cr
CHEM 113 General Chemistry II .............................................................................. 3 cr
CHEM 114 General Chemistry Laboratory II ............................................................. 1 cr

And either Plan A, B, or C (below)

Plan A:

CHEM 331 Organic Chemistry I ................................................................................. 3 cr
CHEM 332 Organic Chemistry II ............................................................................... 3 cr
CHEM 334 Organic Chemistry Laboratory I ............................................................... 1 cr
CHEM 335 Organic Chemistry Laboratory II ............................................................ 1 cr
Chemistry elective (300-level or above) .................................................................. 3 cr

Plan B:

CHEM 451 Physical Chemistry I ................................................................................. 3 cr
CHEM 452 Physical Chemistry II ............................................................................. 3 cr
CHEM 454 Physical Chemistry Laboratory ............................................................... 2 cr
Chemistry elective (300-level or above) .................................................................. 3 cr

Plan C:

CHEM 306 Analytical Chemistry (with laboratory) .................................................... 4 cr
CHEM 401 Instrumental Analysis ................................................................................ 2 cr
CHEM 402 Instrumental Laboratory .......................................................................... 2 cr
Chemistry elective (300-level or above) .................................................................. 3 cr

Capstone Course Requirement. The following courses fulfill the capstone course requirement for the Chemistry Major: CHEM 494 Research Problems in Chemistry, or EDUC 409 Secondary Student Teaching (Secondary Licensure Emphasis).

Chemistry Courses

CHEM 100 Contemporary Chemistry .......................................................................... 3 credits

An introductory course which addresses the basic facts and principles of chemistry, as well as the history of chemistry, practical aspects of chemistry, and relevance of chemistry. Topics covered in the course are dependent on the instructor and contemp-
oratory events. This course is designed for non-science majors without a background in chemistry or mathematics and may not be counted toward the Chemistry Major or Minor. GT-SC2

**CHEM 101 Introduction to Inorganic Chemistry**  
3 credits  
A survey of inorganic chemistry, with an emphasis on chemical principles, atomic theory, periodic law, chemical equilibrium, equations, solutions, and descriptive chemistry of the elements. This course is designed for non-majors without a background in chemistry or mathematics and may not be counted toward the Chemistry Major or Minor. GT-SC2

**CHEM 111 General Chemistry I**  
3 credits  
An introductory course designed for science majors focusing on principles and applications of chemistry. Topics covered are stoichiometry, bonding models, intermolecular forces, and periodic trends. Prerequisite or corequisite: MATH 140 or Accuplacer university-level mathematics test score of 85 or above, ACT math score of 24 or above, or instructor permission. GT-SC2

**CHEM 112 General Chemistry Laboratory I**  
1 credit  
An introduction to basic laboratory techniques of inorganic chemistry correlating with CHEM 111. Experiments emphasize techniques, instrumentation, and solution chemistry. Laboratory notebook keeping and the safe handling and disposal of laboratory chemicals is also stressed. Corequisite: CHEM 111. GT-SC1

**CHEM 113 General Chemistry II**  
3 credits  
A continuation of CHEM 111. Topics covered are thermodynamics, kinetics, equilibrium, electrochemistry, and nuclear chemistry. Prerequisite: CHEM 111.

**CHEM 114 General Chemistry Laboratory II**  
1 credit  
A continuation of CHEM 112. An introduction to basic laboratory techniques of inorganic chemistry correlating with CHEM 113. Experiments emphasize techniques, instrumentation, and solution chemistry. Laboratory notebook keeping and the safe handling and disposal of laboratory chemicals are also stressed. Prerequisite: CHEM 112. Corequisite: CHEM 113.

**CHEM 197 Special Topics**  
1-6 credits

**CHEM 231 Introduction to Organic Chemistry and Biochemistry**  
3 credits  
A descriptive survey course which introduces the essential topics and applications of organic chemistry and biochemistry. The course is designed for non-majors who need the second semester of a one-year chemistry core that includes general, organic, and biochemistry. This course may not be counted for credit toward the Chemistry Major or Minor. Prerequisite: CHEM 101 or CHEM 113.

**CHEM 234 Introductory Organic and Biochemistry Laboratory**  
1 credit  
An introductory laboratory to accompany CHEM 231. Experiments focus on reactions of organic functional groups, organic synthesis, and the chemistry of biological molecules. This course may not be counted for credit toward the Chemistry Major or Minor. Prerequisite or corequisite: CHEM 231.

**CHEM 297 Special Topics**  
1-6 credits

**CHEM 306 Analytical Chemistry (with laboratory)**  
4 credits  
A lecture/laboratory course involving principles, techniques and calculations involved with quantitative analysis of substances. Includes solution chemistry, gravimetric, volumetric, redox, and pH determinations. Prerequisites: CHEM 113 and CHEM 114.
### CHEM 331 Organic Chemistry I 3 credits
A study of saturated and unsaturated hydrocarbons. Topics include their naming, electronic structure, bonding, radioactivity, stereochemistry, and reaction mechanisms. Prerequisite: CHEM 113.

### CHEM 332 Organic Chemistry II 3 credits
A continuation of CHEM 331. This course discusses spectroscopic analysis, physical and chemical properties of organic functional groups. Emphasis includes synthesis, mechanisms, and reactions of aromatic compounds, carbonyl containing compounds, and amines. Prerequisite: CHEM 331.

### CHEM 334 Organic Chemistry Laboratory I 1 credit
An accompanying laboratory course for CHEM 331, serving as an introduction to basic macro-and micro-scale organic techniques used to separate, isolate, and characterize organic compounds. Methods utilized include distillation, extraction, chromatography, Infrared (IR) spectroscopy. Prerequisite: CHEM 114. Corequisite: CHEM 331.

### CHEM 335 Organic Chemistry Laboratory II 1 credit
A continuation of CHEM 334, with an expansion in scope that allows incorporation of more complex synthetic problems. The lab will employ the use of thin layer chromatography (TLC) to follow reaction progress along with NMR spectroscopy to determine reaction outcomes. Prerequisite: CHEM 334. Corequisite: CHEM 332.

### CHEM 397 Special Topics 1-6 credits

### CHEM 401 Instrumental Analysis 2 credits
An examination of the theory and techniques of instrumental methods of quantitative analysis, including spectrophotometric methods, electrochemical methods, and chromatography. Offered in alternate years, 2014-2015. Prerequisite: CHEM 306.

### CHEM 402 Instrumental Laboratory 2 credits
An introduction to instrumental techniques, principles, calculations, and applications for qualitative, quantitative, and structural analysis. Offered in alternate years, 2014-2015. Prerequisite or corequisite: CHEM 401.

### CHEM 451 Physical Chemistry I 3 credits
A detailed study of thermodynamics, phase equilibria, kinetic theory and chemical kinetics. Offered in alternate years, 2013-2014. Prerequisites: CHEM 113, MATH 251, and PHYS 201.

### CHEM 452 Physical Chemistry II 3 credits
A continuation of CHEM 451, which examines quantum chemistry, atomic, and molecular structure and spectra, photochemistry, and statistical mechanics. Offered in alternate years, 2013-2014. Prerequisites: CHEM 451.

### CHEM 454 Physical Chemistry Laboratory 2 credits
An experimental-techniques course in physical chemistry (including computer-assisted instruction), with emphasis on thermodynamics, chemical kinetics, quantum chemistry, statistical mechanics, and spectroscopy. Offered in alternate years, 2013-2014. Corequisite: CHEM 452 or PHYS 452.

### CHEM 461 Advanced Inorganic Chemistry 3 credits
Inorganic chemistry based on principles of bonding, structure, and reaction mechanisms. Chemistry of representative and transition elements and their compounds are covered. Offered in alternate years, 2014-2015. Prerequisite: CHEM 113, SCI 202, and MATH 251.
CHEM 471 Biochemistry I 4 credits
A study of structural biochemistry and metabolism. The course begins with an overview of the aqueous environment and its effects on solutes, including biomolecules. Other subject matters include the chemistry of proteins, carbohydrates, nucleic acids, and lipids; the mechanisms and kinetics of enzymes; and the stoichiometry and chemistry underlying the core metabolic processes of photosynthesis and cellular respiration. Prerequisite: BIOL 150, CHEM 332, and SCI 202.

CHEM 472 Biochemistry II (with laboratory) 4 credits
A continuation of CHEM 471. A study of the molecular mechanisms by which cellular processes are controlled in prokaryotic and eukaryotic cells. Topics include the biochemistry of macromolecular processes, the structure of genes and chromosomes, the genetic and molecular techniques used to study gene expression, and the transcriptional and translational control of gene expression. The laboratory includes recombinant DNA techniques to manipulate the genome of a model organism. Prerequisites: BIOL 312 and CHEM 471.

CHEM 494 Research Problems in Chemistry 1-4 credits
An advanced, supervised laboratory or literature research experience involving methods of chemical research in an area of analytical, physical, organic, or biochemistry. A research paper and oral presentation of research results is required. Prerequisite: SCI 202.

CHEM 497 Special Topics 1-6 credits
All acts of communication and self-expression are performative. The media through which humanity communicates and expresses itself is constantly evolving. Effectively engaging that media becomes a key skill in remaining versatile, marketable, and relevant within the larger cultural, social, and economic landscape. An individual with a comprehensive background in Strategic Communication, Film Studies, or Theatre and Performance can more easily interpret, analyze, and participate in the collaborative arenas of organizational and interpersonal communication, emergent media, and theatrical performance; remaining a step ahead of trends instead of struggling to keep up with them. The Communication Arts major provides the fundamental analytical and practical skills necessary to facilitate life-long learning, allowing students to adapt to changes in their fields as their careers evolve. To help support this versatility, students majoring in Communication Arts may select a standard emphasis, or one of the three comprehensive emphases. A 12-credit Communication and Theatre nucleus provides students a liberal arts foundation supplemented by the more specific courses within each emphasis.

The Strategic Communication Emphasis provides the study of complex organizations and their use of applied communication in connecting with their audiences. Students in Strategic Communication explore interpersonal and media-based communication, and our courses often require creative work tied to real-world situations. Graduates in the Strategic Communication Emphasis have moved on to careers in public relations and advertising, government relations, issues management and events management.

The Film Studies Emphasis focuses on the study of theory, aesthetics, and history through practical, hands-on creative work in the areas of scriptwriting, visual and aural storytelling, and production management. This provides our students with a keen understanding of the role of current and emerging media in society. Our objective is for students to exit our program well prepared for careers, which may not even exist yet, in various settings related to communication. Our graduates in the Film Studies Emphasis have achieved careers in broadcasting, the motion picture industry, and major corporate media outlets as well as success in graduate programs in film at the highest international level.

The Theatre and Performance Studies Emphasis provides students with an in-depth, multi-disciplinary, and hands-on approach to the role of theatre and live performance. Theatre mirrors the nature of life in all its rich variety. To work effectively within the theatre arts requires a broad knowledge upon which to draw. To that end, the Theatre and Performance Studies emphasis believes in giving students a full range of instruction and experience in the theatre arts—practice, history, and theory—along with the full benefits of a liberal arts education. In addition, the Performance Studies curriculum intersects a broad study of performance with literature, narrative, culture, and a dialogue for social change. By thinking critically about cultural performance, students are given the opportunity to explore, challenge and sometimes re-define traditional concepts of what performance is. Graduates in the Theatre and Performance Studies Emphasis have gone on to successful careers in the professional performance industry, graduate school, education, legal and social work, and other related fields.

The standard Communication Emphasis allows for the greatest flexibility and efficiency for transfer students, double majors, and those students seeking the broadest possible experience across all of the Communication Arts emphases, while still provided a balance between theory and practice.
Admission to the Program: All degree-seeking students who wish to major in Communication Arts must be formally admitted to the program. For admission, a student must:

1. have demonstrated a minimum competency by completing COM 202 Academic Writing and Inquiry, COM 205 Communication Arts I, each with a grade of “C” or above;
2. have completed a letter of application, admission form and portfolio (guidelines provided in COM 284, Sophomore Seminar); and
3. have an overall grade-point average of 2.500 or above (at the time of the application).

All majors must have an overall grade-point average of 2.500 or above in order to graduate.

**FACULTY**

Professors Michael R. Brooks, Paul A. Edwards, Terence S. Schliesman, and Karin Waidey; Associate Professor Jack Lucido; Assistant Professor Anthony Miccoli; Senior Lecturer Courtney P. Fullmer.

**DESCRIPTION OF THE PROGRAMS**

The 12-credit Communication Arts Nucleus is required for all Communication Arts Majors.

**Communication Arts Nucleus**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 205</td>
<td>Communication Arts I</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 284</td>
<td>Sophomore Seminar</td>
<td>1 cr</td>
</tr>
<tr>
<td>COM 305</td>
<td>Communication Arts II</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 405</td>
<td>Communication Arts III</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 484</td>
<td>Communication Arts Seminar</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

**Communication Arts Major: Standard Program**

**COMMUNICATION EMPHASIS**

A minimum of 36 credits is required including the 12-credit Communication Arts Nucleus, 12 credits of upper-division Communication Arts electives and the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 121</td>
<td>Introduction to Theatre</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 241</td>
<td>Media Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 264</td>
<td>Introduction to Production and Theory</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 274</td>
<td>Public Relations Communication</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**STRATEGIC COMMUNICATION EMPHASIS**

A minimum of 51 credits is required including the 12-credit Communication Arts Nucleus and the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 151</td>
<td>Introduction to Mass Media</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 241</td>
<td>Media Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 264</td>
<td>Introduction to Production and Theory</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 274</td>
<td>Public Relations Communication</td>
<td>3 cr</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>COM 323</td>
<td>Media/Arts Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 346</td>
<td>Multimedia Communication</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 351</td>
<td>Media Theory and Research</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 371</td>
<td>Argumentation and Conflict Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 372</td>
<td>Issues Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 474</td>
<td>Campaign Planning in Advertising and Public Information</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 499</td>
<td>COM Internship</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUAD 270</td>
<td>Principles of Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUAD 333</td>
<td>Organizational Behavior</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUAD 335</td>
<td>Marketing Communications</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUAD 345</td>
<td>Consumer Behavior</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 258</td>
<td>Introduction to Personality</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 380</td>
<td>Race, Class &amp; Gender</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

One of the following:

- BUAD 333 Organizational Behavior | 3 cr
- BUAD 335 Marketing Communications | 3 cr
- BUAD 345 Consumer Behavior | 3 cr
- PSY 258 Introduction to Personality | 3 cr
- SOC 380 Race, Class & Gender | 3 cr

**Communication Arts Major: Comprehensive Program**

**THEATRE AND PERFORMANCE STUDIES EMPHASIS**

A minimum of 54 credits is required including the 12-credit Communication Arts Nucleus, six credits of upper-division Communication Arts electives, and the following:

- COM 121 Introduction to Theatre | 3 cr
- COM 216 Dramatic Literature and Script Analysis | 3 cr
- COM 231 Technical Production I | 3 cr
- COM 235 Fundamentals of Acting | 3 cr
- COM 306 Scriptwriting | 3 cr
- COM 310 Introduction to Performance Studies | 3 cr
- COM 317 Studies in History of Performance Traditions (Special Topics taken twice) | 6 cr
- COM 323 Media/Arts Management | 3 cr
- COM 423 Presentational Aesthetics | 3 cr

Two of the following:

- COM 324 Advanced Acting | 3 cr
- COM 327 Performers for Social Change | 3 cr
- COM 330 Technical Production II | 3 cr
- COM 431 Integrated Design for Media and Performance | 3 cr

**FILM STUDIES EMPHASIS**

A minimum of 51 credits is required including the 12-credit Communication Arts Nucleus and the following:

- COM 119 Introduction to Film | 3 cr
- COM 241 Media Writing | 3 cr
- COM 261 Introduction to Audio Production | 3 cr
- COM 264 Introduction to Production & Theory | 3 cr
- COM 274 Public Relations Communication | 3 cr
- COM 306 Scriptwriting | 3 cr
- COM 346 Multimedia Communication | 3 cr
- COM 352 Advanced Cinema Studies | 3 cr
One of the following:
COM 231  Technical Production I ................................................................. 3 cr
COM 235  Fundamentals of Acting ................................................................. 3 cr

Four of the following:
COM 310 Introduction to Performance Studies ........................................... 3 cr
COM 323 Media/Arts Management ................................................................. 3 cr
COM 324 Advanced Acting ............................................................................. 3 cr
COM 330 Technical Production II ................................................................. 3 cr
COM 362 Advanced Audio Production .......................................................... 3 cr
COM 389 Media Production: Narrative ......................................................... 3 cr
COM 390 Media Production: Documentary .................................................. 3 cr
COM 406 Advanced Screen Writing & Producing ......................................... 3 cr
COM 423 Presentational Aesthetics ................................................................. 3 cr
COM 490 Advanced Media Production .......................................................... 3 cr

Communication Arts Minor
The Communication Arts Minor consists of a minimum of 18 credits:

COM 205  Communication Arts I ................................................................. 3 cr
COM 305  Communication Arts II ................................................................. 3 cr
Communication Arts electives (three credits must be upper division) .......... 9 cr

One of the following:
COM 119  Introduction to Film ................................................................. 3 cr
COM 121  Introduction to Theatre ................................................................. 3 cr
COM 151  Introduction to Mass Media .......................................................... 3 cr

COMMUNICATION ARTS COURSES

COM 119  Introduction to Film 3 credits
Students are introduced to the aesthetics of narrative and documentary motion pictures through the study of the basic elements of cinema. Topics may include story structure, cinematography, editing, sound, and lighting.

COM 121  Introduction to Theatre 3 credits
This course will include a general survey of Western theatre from Classical Greece to contemporary America. Students will learn the diverse practice of the art of theatre by studying theatre history, dramatic literature, and the practical components of acting, directing, design and production.

COM 151  Introduction to Mass Media 3 credits
An examination of media-related industries (broadcasting, journalism, advertising, public relations and online communications), and the issues related to those industries that affect contemporary public discourse.

COM 197  Special Topics 1-6 credits

COM 202  Academic Writing and Inquiry 3 credits
Students expand on the process and techniques begun in Academic Writing. Primary focus is on analytical written communication and on advocacy oral communication. Also included throughout the course is the reading of relevant academic professional writing, which promotes student awareness of the role of written and oral communication.
Communication Arts

COM 205 Communication Arts I 3 credits
This course is a study of the theory and associated terminology of visual communication including the application of concepts to film, theatre, and convergent media. Topics include aesthetics, design elements, mimesis, performance, semiotics and introduction to the primary techniques of the various communication arts. Prerequisite: ENG 102 with a minimum grade of "C-.

COM 216 Dramatic Literature and Script Analysis 3 credits
This course will introduce students to the diverse genre of dramatic literature in Western and Eastern theatre. We will study the origins of tragedy, comedy, melodrama, the rise of Realism and Anti-Realism, as well as the sub-genres within those general categories. We will also study Eastern traditions of text such as Kabuki, Noh, and Bunraku. Students will learn how to read a play on a deeper level for content, themes, historical and socio-political influences, as well as the emerging and changing aesthetics of each genre. Prerequisite: ENG 102.

COM 231 Technical Production I 3 credits
A study of how things are done behind the scenes in theatre and film and why they are done that way, including the basic customs and traditions of production work and the philosophy, aesthetics, and process of production. Intensive hands-on development of skills in the construction of sets, costumes, lights, sound, and props; the operation of rolling units, lights, flies, and sound; and production assistant duties.

COM 235 Fundamentals of Acting 3 credits
An introduction to the principles, processes, and techniques of acting. The study is designed to balance theory and performance; to explore in detail the psychological, perceptual, and conceptual linkages to the strategies, techniques, and skills of the actor; and to develop a significant sense of self-discipline on the part of the actor. Topics include warm-up and awareness skills, basic body and voice integration techniques, the theories of Stanislavski, character analysis, and performance process.

COM 241 Media Writing 3 credits
An analysis and practice of the major forms of media writing, including print, broadcast and web-based publication, with an introduction to the ways that production varies the writing of each. Prerequisite: ENG 102 with a minimum grade of "C-.

COM 261 Introduction to Audio Communication 3 credits
This course introduces the basic concepts, functions and technology of audio production as they relate to the elements of narrative and storytelling. Prerequisite COM 119, COM 121, or COM 151; or instructor permission.

COM 264 Introduction to Production and Theory 3 credits
An introduction to the theory and practice of media production including critical and aesthetic theories. Topics may include scriptwriting, producing, directing, cinematography, sound recording, editing, and standards of operation for production facilities and equipment. Prerequisites: COM 205, COM 261, and sophomore standing; or instructor permission.

COM 274 Public Relations Communication 3 credits
A study of the use of communication to establish credibility, trust, and confidence
between and among communities, employees, public agencies, civic organizations and business institutions.

**COM 284  Sophomore Portfolio**
1 credits
A course in which students familiarize themselves with the requirements for the Communication Arts program and related capstone project, formulate specific goals, and prepare strategies through which those goals can be achieved. Students will
develop an awareness of field-specific expectations required of them in professional or graduate-level work, and develop a plan for creating a portfolio that reflects that awareness. A part of the course consists of formally applying for admission to the Communication Arts program. Prerequisite or corequisite: COM 205 or instructor permission.

**COM 297  Special Topics**
1-6 credits

**COM 298  Practicum**
1-4 credits
Entry-level supervised experiences in theatre, organizational communication and journalism/mass media. Prerequisite: instructor permission.

**COM 305  Communication Arts II**
3 credits
An exploration of the philosophical and theoretical foundations of human communication, concentrating specifically on textual analysis and interpretation. Using a wide range of media, students will investigate how the particular method of communication informs, alters, and shapes the messages being consumed, and how those messages both constitute and affect self-expressive acts. Prerequisites: COM 205 and admission to the Communication Arts Program; or instructor permission.

**COM 306  Scriptwriting**
3 credits
An introduction to the fundamental tools and skills required to craft a script for performance on stage or in film/video. Students are expected to produce playscripts and screenplays of varying lengths; they are also expected to read and respond to one another’s writing. Some history of playwriting and study of prevailing models of scriptwriting are also included. Prerequisites: COM 205 and COM 222, or ENG 205, with a minimum grade of “C.”

**COM 310  Introduction to Performance Studies**
3 credits
An interdisciplinary course exploring the human desire to perform in both aesthetic and everyday settings. It explores the links between the arts and literature, anthropology, communication, sociology, and philosophy. Critical reading, written analysis, and performance of literary texts are essential elements of the course.

**COM 317  Studies in Theatre and Performance**
3 credits
An introduction to performance studies research and artistic practice through readings, discussion and creative work. Prerequisites: junior standing and instructor permission. Repeatable for a maximum of six credits among different topic areas.

**COM 323  Media/Arts Management**
3 credits
An introduction to the basic principles and structure of management as it applies to Communication Arts. Particular focus is given to management of small and mid-size non-profit media and arts organizations, and to the interrelationship between those two areas. Prerequisite: junior standing or permission of the instructor.
styles of acting including classical, Elizabethan, Restoration/18th Century, Commedia, and Advanced Contemporary acting styles; and advanced textual analysis required of actors by specific theatrical works. Repeatable for a maximum of six credits among different topic areas. Prerequisite: COM 235

**COM 327 Performers for Social Change**  
3 credits  
An in-depth look at the role of performance, predominantly theatre, for social change and community activism. Students learn about the historical movements combining performance and social change, study the theories behind the practice influenced by Paulo Freire and Augusto Boal, and have hands-on opportunities to train their own performance and writing skills in this manner. Prerequisite: instructor permission.

**COM 330 Technical Production II**  
3 credits  
An intermediate-level study of lighting and sound production for theatre and film. Instruction is provided in the proper rigging of light and sound equipment, use of control consoles and software, optics, basic electrical theory, the nature of light, and acoustics. The design and aesthetic use of light and sound are also explored. Prerequisite: COM 231 or instructor permission.

**COM 343 Persuasive and Expressive Writing on Public Issues**  
3 credits  
A writing course that draws upon the analysis and practice of both editorials and features as interpretive responses to issue-related topics in print and electronic media. Prerequisite: COM 241 or instructor permission.

**COM 346 Multimedia Communication**  
3 credits  
An exploration of the theory and application of multimedia communication principles through projects that use common interactive multimedia, animation, non-linear editing, web authoring, and desktop-publishing programs. Prerequisites: COM 205, or instructor permission.

**COM 351 Media Theory and Research**  
3 credits  
An examination of media from a theoretical, organizational perspective. Topics covered include departmental functions and duties, programming, formats, regulations and finances. Also, in the context of media theory, empirical data is explored. Prerequisite: COM 241 and COM 274, or instructor permission.

**COM 352 Advanced Cinema Studies**  
3 credits  
An in-depth study of the aesthetics and theory of cinema through the examination and critical analysis of the technical and creative elements of selected iconic Hollywood and international motion pictures. Prerequisite: Junior standing.

**COM 362 Advanced Audio Production**  
3 credits  
An in-depth study of audio design and production for film, radio, television and live theatre. Prerequisite: COM 261.

**COM 371 Argument and Conflict Management**  
3 credits  
An exploration of various conceptions and types of conflict and the role of argumentation in managing and/or resolving conflict. The study examines problem solving and decision making as common contexts in which argument occurs and conflict arises, and a continuum from formal to informal modes of conflict management/resolution is discussed and practiced by the students. Specific areas covered include formal debate, negotiation, arbitration, and the legal system.
COM 372 Issues Management 3 credits
An exploration of the communication practices and strategies used by organizations to react to current events, publicity, and society. Emphasis is placed upon persuasion, media relations, and information campaigns.

COM 378 Peer Leadership 2 credits
A course providing students theoretical foundations, practical knowledge and skills development for leadership with specific on-campus programming. Prerequisite: instructor permission.

COM 389 Media Production: Narrative 3 credits
An introduction to the theory and practice of the field-based production of narrative films. Topics emphasized may include fictional story, cinematography, lighting, sound, editing, and production management. Prerequisite: COM 264 with a minimum grade of “C.”

COM 390 Media Production: Documentary 3 credits
An introduction to the theory and practice of producing nonfiction works, including conventional documentary forms and autobiographical or experimental works. Topics may include actual story, cinematography, lighting, sound, editing, and production management. Prerequisite: COM 264 with a minimum grade of “C.”

COM 392 Independent Study in Communication Arts 1-6 credits
A detailed study in a specific area of communication arts, emphasizing individualized approaches toward development of creativity and scholarship. Prerequisites: junior or senior status and 10 credits in Communication Arts.

COM 397 Special Topics 1-6 credits

COM 398 Practicum 1-4 credits
Supervised applications and experiences in communication arts. Students assist, analyze, manage, and participate in various aspects of practical situations or job training. Prerequisites: instructor permission and completion of one of the following: COM 241, COM 261, or COM 298.

COM 405 Communication Arts III 3 credits
A multi-disciplinary and multi-media course offering significant historical, theoretical, and practical content by which to explore and discuss how meaning is conveyed in communication. Special emphasis is given to the nature of oral communication in oral societies and to the nature and function of myth, symbol, sign, and inferential reasoning. Prerequisites: COM 305 or instructor permission.

COM 406 Advanced Screenwriting and Producing 3 credits
Students are immersed in advanced screenwriting projects and pitching for independent feature film, television drama and situation comedy. Producing content may include such topics as contract law, releases, copyright, fair use, ethics, location and talent management, production management, and other administrative subject matter pertaining to film and television production. Prerequisite: COM 306 with a minimum grade of “C”.

COM 423 Presentational Aesthetics 3 credits
An examination of the theatrical performance convention from the perspective of the adaptor, director, and performer. This course offers invigorating challenges for the
director, dramaturg, actor, and designer who will work collaboratively to explore presentational mode, theatrical convention, and conscious artifice in the performance of dramatic literature, poetry, nonfiction, and prose fiction. Prerequisites: COM 231, COM 235, COM 310 and minimum junior standing; or instructor permission.

**COM 431 Integrated Design for Media and Performance**  
3 credits  
A study of designing visually for the stage and screen, with an emphasis on a unified look and a single intense effect. A strong emphasis on script analysis as a basis for design. Additional information on visual research for theatre and film including location scouting and contextual research into the background of the story. Hands-on development of skills in generating graphic communication of design ideas is included. Prerequisite: COM 231 or instructor permission.

**COM 474 Campaign Planning in Advertising and Public Information**  
3 credits  
An analysis of the many facets of information campaign planning. It explores concepts like persuasion and audience behavior, researching attitudes and effectiveness, campaign objectives and strategies, media choices, and relevant social and ethical issues. In addition, students are expected to build their own information campaigns. Prerequisite: COM 274.

**COM 484 Communication Arts Seminar**  
2 credits  
A capstone course in which students complete their individual Communication Arts portfolios, based upon their cumulative work through the COM program and guided by their specific career or graduate school goals. The seminar provides an opportunity for students to work individually, in small groups, and with the instructor to evaluate the overall effectiveness of their finished portfolios, and revise accordingly, utilizing the critical techniques, cultural awareness, and technical skills students have developed throughout the COM program. Prerequisite: COM 305

**COM 490 Advanced Media Production**  
3 credits  
Students are immersed in advanced project work. Topics may include cinematography, lighting, grip, electrical, special effects, visual effects, sound effects recording, sound design, and animation. Prerequisite: COM 389 or COM 390 with a minimum grade of “C.”

**COM 497 Special Topics**  
1-6 credits

**COM 499 Internship in Communication Arts**  
1-12 credits  
Prerequisite: instructor permission.
COMPUTER INFORMATION SCIENCE (CIS)

The Computer Information Science major is designed to provide students with the knowledge and skills for a career in software development or further study in graduate school. Our graduates have jobs in software development, IT support, web development and software security.

Computer Information Science students can pursue the 36 credit Standard major or the 49 credit Comprehensive major. Both majors share a core of course work in programming fundamentals, database management, visual application development, web development, and software engineering. The Standard major requires a minor, allowing the student additional study in an area of interest. The Comprehensive major does not require a minor but does require additional CIS course work in advanced topics and has a more rigorous math requirement.

Currently the main teaching and development language is Java. Course work also covers other general purpose languages like Python as well as web development languages and technologies such as XHTML, CSS, JavaScript, PHP, and Ruby. Many courses use SQL, the language of database manipulation. Modern software engineering techniques are practiced throughout. Course work is focused on real-world problem solving with emphasis on event driven GUIs, client-server relationships, and database driven applications. Internships with software companies are a popular option.

FACULTY

Professors Andrew G. Keck, John C. Peterson, and Daniel L. Schuster.

DESCRIPTION OF THE PROGRAMS

All Computer Information Science Majors require the 33-credit Computer Information Science Core.

CIS Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 150</td>
<td>Computers in Society</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 190</td>
<td>Computer Science I</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 191</td>
<td>Computer Science II</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 195</td>
<td>Database Management Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 250</td>
<td>Web Applications Development I</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 280</td>
<td>Data Structures</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 310</td>
<td>Visual Programming</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 320</td>
<td>Programming Languages</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 350</td>
<td>Web Applications Development II</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 410</td>
<td>Systems Analysis and Design</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 480</td>
<td>Computer Information Science Application Project</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 499</td>
<td>Internship in Computer Information Science</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Computer Information Science Major: Standard Program A minimum of 36 credits is required, including the 33-credit Computer Information Science Core and the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 140</td>
<td>College Algebra</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
Computer Information Science Major: Comprehensive Program
A minimum of 49 credits is required, including the 33-credit Computer Information Science Core and the following:

- CIS 235 Computer Networks ......................................................... 3 cr
- CIS 300 Introduction to Computer Architecture ............................ 3 cr
- CIS 412 Software Engineering .................................................... 3 cr
- MATH 151 Calculus I ................................................................. 4 cr

One of the following:

- CIS 275 Scientific Programming, Modeling, and Simulation ........ 3 cr
- MATH 200 Discrete Mathematics .............................................. 3 cr
- MATH 213 Probability and Statistics ........................................... 3 cr

Computer Information Science Minor
A minimum of 18 credits is required, including six credits of Computer Information Science electives, at least three of which must be upper-division, and the following:

- CIS 190 Computer Science I ...................................................... 3 cr
- CIS 191 Computer Science II .................................................... 3 cr
- CIS 250 Web Applications Development I ................................. 3 cr

One of the following:

- CIS 280 Data Structures ......................................................... 3 cr
- CIS 310 Visual Programming .................................................... 3 cr
- CIS 350 Web Application Development II ................................... 3 cr

CIS 120 and CIS 160 may not be used to satisfy the elective requirement. Up to three upper-division credits in the student’s major discipline may be used to meet the elective requirement with approval of the Computer Information Science coordinator.

Capstone Course Requirement. The following courses fulfill the capstone course requirement in the Computer Information Science Major: CIS 499 Internship in Computer Information Science, or CIS 480 Application Project (Information Science Emphasis).

COMPUTER INFORMATION SCIENCE COURSES

CIS 120 Information Management and Analysis 3 credits
An in-depth study of the essentials of word-processing, spreadsheets, and information management, using modern computers and software. Substantial student competence in these areas is required for further study at the University. Applications are presented from various fields.

CIS 150 Computers in Society 3 credits
An introduction to the use of computing devices and their impact on society. Topics include: how computers work, the history of computing, philosophical issues in computing, the economics of software development, intellectual property issues, privacy and security, applications of computing, legal issues, the digital divide, the role of computing in government, and computer-assisted collaboration.

CIS 160 Introduction to Web Design 3 credits
An introduction to the basics of the XHTML web page specification language, cascading style sheets (CSS) and the Plone Content Management System (CMS). Students learn to create attractive, professional web pages and websites using XHTML and CSS, including embedded graphics and multimedia. The student also learns to use a
CMS for easier webpage implementation, including add-ons such as forums and shopping carts. This course is designed for students without a background in programming and may not be used to satisfy the requirements of the Computer Information Science Major or Minor.

**CIS 190  Computer Science I**  
3 credits  
An introduction to software development. Students develop text, graphical user interface (GUI) and applet web graphical applications using object oriented techniques in Java. Emphasis is placed on good software engineering practices for problem analysis, program design, documentation, testing and debugging.

**CIS 191  Computer Science II**  
3 credits  
A continuation of CIS 190 taught in the Java programming language. Students develop stand alone GUI and console applications and applets of increasing sophistication. Topics include: arrays, objects and classes, encapsulation and inheritance, file management, dynamic data structures, searching, sorting, recursion, stacks and queues, with emphasis on abstraction and implementation and an introduction to algorithm analysis. Prerequisite: CIS 190 with a minimum grade of “C-.”

**CIS 195  Database Management Systems**  
3 credits  
An introduction to the practice and principles of relational database design, implementation and manipulation. Topics include: Structured Query Language (SQL), relational models, Entity-Relationship modeling, security, multi-user databases, transactions, Object Relational Mapping and database administration. Students will design and implement relational database applications of increasing complexity. Prerequisite: CIS 190 with a minimum grade of “C-”; prerequisite or corequisite: CIS 191.

**CIS 197  Special Topics**  
1-6 credits

**CIS 235  Computer Networks**  
3 credits  
An investigation of the transmission of data and information between computer systems. Topics include simple data communications, protocols, error control, local-area networks, wide-area networks such as the Internet packet-switching networks, and various networking models. Various data communication hardware and software are also examined. Prerequisites: CIS 191 with a minimum grade of “C-”; MATH 140 or above excluding MATH 209 and MATH 210 or Accuplacer university-level mathematics score of 75 or above.

**CIS 250  Web Applications Development I**  
3 credits  
A course studying modern web site design, focusing on embedded languages, the use of audio and visual plug-ins, web application servers, and the tools that aid development on a professional scale. Basic use of Structured Query Language is studied. Cross platform development, applications to e-commerce, Internet and Intranet are considered. At least one major project is required. Offered in alternate years, 2010-2011. Prerequisites: CIS 191 with a minimum grade of “C-”; MATH 140 or above excluding MATH 209 and MATH 210 or Accuplacer university-level mathematics score of 75 or above.

**CIS 275  Scientific Programming, Modeling, and Simulation**  
3 credits  
Designed to develop programming skills appropriate for scientific and industrial applications. Topics may include numerical solution of differential equations, singular value decomposition, and fourier analysis. Emphasis is placed on problem modeling, algorithm development and data visualization. Prerequisites: CIS 190 and MATH 151 with a minimum grade of “C-.”
CIS 280 Data Structures 3 credits
A survey of advanced data structures and algorithms. Topics include: linear lists, linked lists, arrays, tree, multi-linked lists, hashing, searching, sorting, recursion and analysis of the algorithms that use these structures. Taught in Java. Prerequisites: CIS 191 with a minimum grade of “C-“; MATH 140 or above excluding MATH 209 and MATH 210 or Accuplacer university-level mathematics score of 75 or above.

CIS 297 Special Topics 1-6 credits

CIS 300 Introduction to Computer Architecture with Assembly Language 3 credits
An introduction to computer organization using assembly-language programming. Topics include numeral systems, byte instructions, branching, indexing, computer arithmetic, subroutines, logical operators, and I/O. The fundamental concepts and terminology associated with computer hardware systems are also covered. The physical and electronic components of a computer, including processing units, memory units, and input/output devices are surveyed. Prerequisite: CIS 280 with a minimum grade of “C-.”

CIS 310 Visual Programming 3 credits
A focus on common environment and design tools used in the development and implement-ation of graphic user interfaces. Emphasis is placed on the automation of tasks and the customization of systems by programming constructs. Applications are developed for both a local environment and a broad-based use of the Internet. The implementation language is C++ or Visual Basic. May be repeated with a different implementation language. Prerequisite: CIS 280 with a minimum grade of “C-.”

CIS 320 Programming Languages 3 credits
An investigation of the theory, usage, and implementation of programming languages. Emphasis is on the theoretical basis for programming languages and practical examples of their use. Basic language paradigms are developed: imperative, functional, object-oriented, and logic. Other topics include type systems and language translation. Languages studied include C, C++, Java, Lisp, Haskell, Prolog, and Python. Prerequisite: CIS 280 with a minimum grade of “C-.”

CIS 330 Operating Systems with UNIX System Administration 3 credits
A study of the major components of operating systems, such as job and resource management in both multiprogramming and multiprocessing systems. Additionally, an introduction to the UNIX operating system includes UNIX commands, the role of the system administrator, the file system, controlling processes, programming in the shell, the network file system, and security. Prerequisite: CIS 300 with a minimum grade of “C-.”

CIS 350 Web Applications Development II 3 credits
A study of client-server applications designed around the World Wide Web. Students design and implement applications which provide access to centralized resources such as databases and mail servers from web browsers. Students utilize Perl, CGI, and SQL to construct applications such as an online shopping site, an enterprise document server, or a shared Intranet database. Security of data during transmission and storage is emphasized. Prerequisite: CIS 250 with a minimum grade of “C-.”

CIS 375 Numerical Methods 3 credits
Designed to provide students with the skills needed to solve mathematical problems using a computer. Topics include: computer arithmetic, roots of a single equation,
non-linear simultaneous equations, matrices, determinants, linear simultaneous equations, numerical integration, differential equations, interpolation, curve fitting, and other topics as time permits. Prerequisites: CIS 275 or CIS 280 with a minimum grade of “C-”; and MATH 151.

CIS 391 Computer Information Science Seminar 1 credit
An advanced topic in computing, selected by the instructor from areas of computer science not usually included in the regular curriculum, conducted in a lecture, seminar or individualized format. Student involvement through presentations is emphasized. May be taken under different topics for a total of three credits. Prerequisite: CIS 191 with a minimum grade of “C-.”

CIS 397 Special Topics 1-6 credits
CIS 410 Systems Analysis and Design 3 credits
The fundamental concepts of systems analysis and design are studied in the context of computerized information systems. Topics include high-level system construction tools, system design methodology, data representation languages such as XML, server-based system design, web services, system security, and system description languages such as UML. Also addressed is the human element in system design: working with users and domain experts to develop system requirements, and understanding the challenges of large scale system projects. Each student completes a number of systems design projects during the term. Prerequisite: CIS 310 with a minimum grade of “C-.”

CIS 412 Software Engineering 3 credits
An introduction to the fundamental principles of software engineering. Formal software development techniques and high-level software tools are emphasized. Students are taught a programming method based on the recognition and description of useful abstractions. Topics include encapsulation and reuse, design patterns, object-based design, software testing and quality, formal methods for software design, and project management. Students are expected to complete a significant project that employs techniques from the topics studied. Prerequisite: CIS 410 with a minimum grade of “C-.”

CIS 430 Computer Graphics 3 credits
A presentation of the design and use of computer-graphics systems (hardware and software) and construction of two- and three-dimensional graphics. Applications of computer graphics in business, industry, education, and communications are emphasized. Prerequisite: CIS 280 with a minimum grade of “C-.”

CIS 450 Mobile Device Programming: X 3 credits
An introduction to software development for mobile devices such as smart phones and tablet computers. Specific platforms include, among others, iOS (Apple), and Android. The course covers interface elements and device capabilities such as photo, video and sound, accelerometer, GPS, and web services. Students are expected to complete a significant project that employs techniques specific to mobile platforms. May be repeated with a different implementation platform. Prerequisite: CIS 280 with a minimum grade of “C-.”
CIS 480  Computer Information Science Application Project  3 credits
Students develop a comprehensive application project in the area of their specialization. Possible projects include software development, CAI program development, systems analysis consultation with area businesses, or development of a computer hardware/software training program. A public presentation of the project is made before the CIS faculty and students. Prerequisite: 24 credits of CIS course work, including 12 upper-division credits.

CIS 490  Workshop in Computer Information Science  1-6 credits
A series of organized meetings dealing with a topic of current interest. Offered periodically in a variety of computer-related subjects. Only three credits of this title can be applied toward a Computer Information Science Minor.

CIS 492  Independent Study in Computer Information Science  1-3 credits
A singular investigation into a unique problem agreed upon by the student and the advisor. Independent Studies (CIS 192, CIS 292, CIS 392, and CIS 492) may be repeated for a total of up to 12 credits.

CIS 497  Special Topics  1-6 credits

CIS 499  Internship in Computer Information Science  3-12 credits
Students participate in a supervised field experience with a cooperating firm in the computer science field. The sponsoring faculty member provides evaluations during periodic visitations. A formal paper is required of the student. Specific department requirements must be met to participate in this course. Prerequisite: 18 credits of Computer Information Science course work, including nine upper-division credits.
ECONOMICS (ECON)
The general goals of the Economics Program are to prepare graduates to:

• use their knowledge of economics to better understand the world around them, enabling them to make more informed decisions in their personal as well as their professional lives;
• develop skills such as critical analysis, statistical analysis, and reasoning and competency in written and oral communication; and
• apply their knowledge of economics in private enterprise or business firms, the public sector (i.e., policy making), or graduate study in economics or a related field.

Students majoring in Economics may choose the Standard Program or the Comprehensive Program Secondary Licensure Emphasis.

To graduate, all economics majors must have a grade point average of 2.500 or above in all courses for the major.

FACULTY
Professors Sally R.E. Hays, Scott A. Lazerus, and David J. Plante.

DESCRIPTION OF THE PROGRAMS
All Economics Majors require completion of the 24-credit Economics Nucleus and completion of MATH 140 College Algebra, MATH 141 Precalculus, or MATH 151 Calculus I with a minimum grade of “C-.”

Economics Nucleus
ECON 201 Macroeconomics ................................................................. 3 cr
ECON 202 Microeconomics............................................................... 3 cr
ECON 301 Intermediate Macroeconomics ........................................... 3 cr
ECON 302 Intermediate Microeconomics ............................................ 3 cr
ECON 303 International Economics and Globalization ....................... 3 cr
ECON 316 Econometrics .................................................................... 3 cr
ECON 498 Income Distribution, Poverty, and Wealth ......................... 3 cr

One of the following:
ECON 216 Statistics for Business and Economics.................................. 3 cr
MATH 213 Probability and Statistics......................................................... 3 cr

Economics Major: Standard Program
A minimum of 33 credits is required, including the 24-credit Nucleus and nine credits of upper-division Economics electives.

Economics Major: Comprehensive
Program SECONDARY LICENSURE EMPHASIS
This Emphasis qualifies students for the State of Colorado License in Social Science Education. A minimum of 72 credits is required including the 24-credit Economics Nucleus, and the following 48 credits. In addition, students must fulfill the requirements of the Secondary Licensure Option described under Education:

ECON 476 American Economic Development...................................... 3 cr
GEOG 110 World Regional Geography.............................................. 3 cr
GEOG 120 Human Geography ........................................................... 3 cr
GEOG 250  Geography of North America............................................................  3 cr
GEOL 101  Physical Geology..................................................................................  3 cr
HIST 101  World History to 1500...........................................................................  3 cr
HIST 102  World History Since 1500.................................................................  3 cr
HIST 126  U.S. History to 1865.............................................................................  3 cr
HIST 127  U.S. History Since 1865.......................................................................  3 cr
HIST 327  Colorado History ................................................................................  3 cr
POLS 180  Introduction American Government..................................................  3 cr
POLS 182  Issues in State and Local Government..............................................  3 cr
POLS 255  Introduction to Comparative Government .........................................  3 cr
POLS 476  American Political Thought II.............................................................  3 cr

One of the following:
ECON 317  Economics and Public Policy (recommended) ..................................  3 cr
Economics upper-division elective ...................................................................  3 cr

One of the following:
POLS 260  Introduction to World Politics ..........................................................  3 cr
POLS 360  American Foreign Policy ...................................................................  3 cr

Economics Minor
A minimum of 18 credits is required including the following:
ECON 201  Macroeconomics ................................................................................  3 cr
ECON 202  Microeconomics..................................................................................  3 cr

One of the following:
ECON 301  Intermediate Macroeconomics ........................................................  3 cr
ECON 302  Intermediate Microeconomics ............................................................  3 cr

Nine credits from the following:
ECON 216  Statistics for Business and Economics.............................................  3 cr
Economics upper-division electives...................................................................  6-9 cr

Capstone Course Requirement. The following courses in the Economics Major fulfill the Capstone Course Requirement: ECON 498 Income Distribution, Poverty and Wealth. Students completing the Secondary Licensure Emphasis may use student teaching to fulfill this requirement.

ECONOMICS COURSES

ECON 197  Special Topics                      1-6 credits
ECON 201  Macroeconomics                     3 credits
An introduction to the methods, models, and approaches used by economists to analyze and interpret events and policies related to the overall operation of the economy. The course endeavors to make sense of unemployment, inflation, recessions, debt and deficits, economic growth, the expanding role of the Federal Reserve, and policies to provide stability to the economy. Additional attention is given to the making of economic policy in an era of globalization. Finally, students are exposed to multiple schools of thought regarding macroeconomic reasoning. Prerequisite: ACT math score of 19 or above; SAT math score of 460 or above; pass MATH 099; or Accuplacer Elementary Algebra test score of 85 or higher, or university-level math requirement with a minimum grade of “C-.” Prerequisite or corequisite: ENG 102. GT-SS1
ECON 202  Microeconomics  3 credits
The theory of microeconomics makes use of the tools of marginal cost-benefit analysis to provide a framework for the economic analysis of decision-making. The focus is on the choices of individual firms and consumers, and the resultant outcomes in individual markets. The social implications of the functioning of competitive markets are examined, as well as the causes of market failure and the potential roles of government in correcting them. Prerequisite: ACT math score of 19 or above; SAT math score of 460 or above; pass MATH 099; or Accuplacer Elementary Algebra test score of 85 or higher, or university-level math requirement with a minimum grade of “C-.”

ECON 215  Environmental Economics  3 credits
A presentation of the analytical tools and approaches used by economists to examine and assess environmental issues, conflicts, and policies. Students are asked to use market analysis, externality analysis, cost-benefit analysis, instrument choice models, and market and non-market valuation techniques to investigate issues such as air and water quality, global warming, toxic substances, wilderness designation, and sustainable development plans. Prerequisites: MATH 105, MATH 131, MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-.”

ECON 216  Statistics for Business and Economics  3 credits
An introduction to descriptive statistics and statistical inference, with application in business, including hypothesis testing, confidence intervals, and simple regression analysis. Prerequisite: MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-.”

ECON 297  Special Topics  1-6 credits

ECON 301  Intermediate Macroeconomics  3 credits
An analysis of competing theories about the overall functioning of economies including both growth and stabilization policies. Alternative models are examined at the levels of assumptions, mechanics, dynamics, and policy implications. Theories are examined within their historical context and the sets of problems faced by the theorists. Students are asked to engage, analyze, interpret and provide a course of action for real-world cases. Prerequisites: ECON 201; ECON 202; and MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-.”

ECON 302  Intermediate Microeconomics  3 credits
Intermediate Microeconomics extends the analysis of individual economic behavior and the functioning of markets learned in ECON 202 by incorporating the more sophisticated microeconomic models used in more advanced economic analysis. Topics include the theories of the consumer and the firm, the functioning of market, and the impact of market structure on price formation. Prerequisites: ECON 202; MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-”; ECON 201 recommended.

ECON 303  International Economics and Globalization  3 credits
An exploration of economic, political, and social effects of globalization. This is examined from the perspectives of trade, development, finance, and the environment. The first half of the course focuses on the impacts of international trade. This includes preferential trading relations, protectionism, global trade agreements, competitiveness, and possible conflicts between trade and social objectives. The second
half of the course focuses on international monetary relations and regimes. This includes understanding the balance of payments, exchange rate determination, currency crises, and international debt. Prerequisites: ECON 201; MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-”; ECON 202 recommended.

**ECON 315 Labor Economics** 
3 credits
The central questions in the field of labor economics are how wages are determined, and why a market economy provides such a vast range of possible rewards to human labor. To answer them, this course examines the role of market forces (the supply of and demand for labor) as well as that of social, political, and economic institutions. Prerequisites: ECON 202; MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-”; ECON 201 recommended.

**ECON 316 Econometrics** 
3 credits
The application of advanced statistical methods and modeling to an empirical understanding of economic issues. Combines elements of statistical reasoning with economic theory and provides an excellent opportunity to combine concepts learned in previous economics courses. Topics covered include multiple regression analysis, model specification, dummy variables, multicollinearity, heteroscedasticity, autocorrelation, limited dependent variables, simultaneity, time series, forecasting, and methodological issues. Prerequisites: ECON 201; ECON 202; and ECON 216 or MATH 213.

**ECON 317 Economics and Public Policy** 
3 credits
An examination of the field of public economics, the branch of economics concerned with the reasons for market failure (monopoly, public goods, externalities, information asymmetry) and the potential for government policies to correct them. The application of the tools of economic analysis to understanding the causes of and potential solutions to social problems of current interest are emphasized. Prerequisites: ECON 202; MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-”; ECON 201 recommended.

**ECON 319 Industrial Organization** 
3 credits
A study of the branch of economics that analyzes the performance of industries in their role as producers of goods and services. Provides tools for analyzing and evaluating interactions between market structure (the number and size of firms in an industry), firm conduct, and industry performance. The role of government, through antitrust and other regulation, in improving the efficiency of industries and thus the economic system as a whole, is also considered. In addition, the theoretical tools of industrial analysis are used to perform case studies of actual industries. Prerequisites: ECON 202; MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-.”

**ECON 350 History of Economic Thought** 
3 credits
An examination of the development of economic thought and economic methodology from the pre-capitalist era to the present, with emphasis on placing the development of economic theory into its historical and political context. Major topics include the early classical school (Smith, Ricardo, Marx), the rise of modern neoclassical economics, and critical responses to mainstream theory. Prerequisites: ECON 201; ECON 202; MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-.”
ECON 361  Money, Banking, and Financial Markets  3 credits
A survey of the core topics relating to the monetary sector of the economy. This includes an examination of the role and nature of money, financial institutions and markets, banking structure and regulation, determinants of interest rates, central bank policy, exchange rates, and the international monetary system. Attention is also given to particular monetary episodes such as the Great Depression, the Latin American debt crisis, the collapse of the Mexican Peso, and the Asian monetary collapse. Prerequisites: ECON 201; MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-.”

ECON 370  Natural Resource Economics  3 credits
A study of the efficient and equitable use of society’s scarce natural resources. This course discusses the application of economic theory to natural resource problems, such as externalities and resource extraction. Particular attention will be placed on Western United States issues, including water, energy, mineral extraction, forestry, and public land use. Prerequisites: ECON 202 or ECON 215; MATH 140, MATH 141, or MATH 151 with a minimum grade of “C-.”

ECON 397  Special Topics  1-6 credits

ECON 476  American Economic Development  3 credits
An inquiry into sources and character of American economic development. A survey is provided of several key moments in American political economy such as the market revolution, reconstruction, populism, progressivism, the Great Depression, the New Deal, and globalization. Students are asked to engage the ideas, social movements, and institutions that have shaped the modern American economy. Prerequisite: instructor permission.

ECON 492  Independent Study  1-4 credits

ECON 497  Special Topics  1-6 credits

ECON 498  Income Distribution, Poverty and Wealth  3 credits
A seminar-style examination of the causes and consequences of historical trends in income and wealth distribution in the United States, concentrating especially on the trend toward increasing inequality that began in the 1970s. Topics include: empirical analysis of distributional data; causal analysis based on both microeconomic and macro-economic analysis; the roles of institutional change, social attitudes, and government policy; and both positive and normative evaluations of the economic and social consequences. This course fulfills the Economics Capstone Requirement.

ECON 499  Internship in Economics  1-6 credits
The Economics Internship gives Economics majors who have completed 18 credits of economics the opportunity to apply their analytical skills in the service of businesses, government, and the community. Prerequisites: 18 credits of Economics courses including ECON 201; ECON 202; ECON 216 or MATH 213; and instructor permission.
The Teacher Education Program at Western State Colorado University is accredited by the Colorado Department of Education, and the Colorado Commission on Higher Education. The Teacher Education Program currently maintains a 100 percent pass rate for licensing assessments for Colorado educators as reported to Title II for those who complete the program. The faculty of the Teacher Education Program is committed to creating a community of teachers who are competent in their subject matter, pedagogical content knowledge, pedagogical knowledge, and teaching skills. By developing a professional knowledge base and researching and reflecting on the connection between theory and experience, students realize that pedagogical decisions educators make hold implications that extend well beyond traditional educational goals of individual achievement. It is necessary for pre-service teachers to understand and accept the responsibility for creating a community that recognizes and appreciates diversity, and for which individual members possess the content knowledge, skills, and abilities needed to think critically, solve problems, and make responsible decisions.

**FACULTY**

Assistant Professor James M. Woytek; Associate Professor Gaye Jenkins; Lecturers Brooke M. Hanks and Cori Woytek.

**TEACHER EDUCATION PROGRAM**

The Teacher Education Program is a licensure program in the State of Colorado that prepares students to function as professionals in a variety of educational settings. The Teacher Education Program offers elementary, secondary, and K-12 endorsement options.

Students pursuing Elementary licensure must major in Interdisciplinary Studies/Liberal Arts.

Students pursuing Secondary licensure may choose from the following majors: Biology, Chemistry, Economics, English, Geology, Politics and Government, History, or Mathematics.

Students pursuing K-12 licensure may choose from the following majors: Art, Exercise and Sport Science, Music, or Spanish.

**Admission to the Teacher Education Program.** Students seeking admission to the Teacher Education Program for initial teacher licensure in the state of Colorado must meet the following requirements:

1. Admission Career Counseling. Prior to, while enrolled in, or after the basic level education course, students must meet with an education faculty member to discuss licensure and career options.

2. Completion of EDUC 000 Education Gateway Course with a satisfactory grade.

3. Each teacher education candidate must pass a basic skills competency exam in the areas of reading, writing, and mathematics prior to taking EDUC 340. There will be an assessment fee for taking the competency assessment.
4. Fingerprints. Students must submit the completed fingerprint form or provide documentation verifying that fingerprints are on file with the Colorado Department of Education and have completed the FBI clearance. Students submitting the fingerprint form will be required to pay a processing fee.

5. Completion of all course work within the academic major. Students must complete all course work required within the academic major prior to beginning the education courses and the internship or have content and education advisor permission.

6. Completion of EDUC 340 Brain-based Learning Motivation and Achievement.

7. A grade of “C-” or above in all courses required in the academic major and all Education courses.

8. GPA. Students must have an overall GPA of 2.750 or above.

9. State Licensure Exam. Students must pass the appropriate State Licensure Exam(s) for their content area prior to beginning the one year of education course work and internship.

10. Submission of an Application for the Year-Long Internship, which includes attendance at all planning meetings and seminars.

**Elementary Licensure**

A student seeking licensure as an elementary teacher (grades K-6) must complete the Interdisciplinary Studies/Liberal Arts academic major, all other university requirements, and the Elementary Licensure requirements. Students pursuing the Elementary Licensure option must meet all of the requirements for admission to the Teacher Education Program.

Students must complete all course work required within the academic major prior to beginning the year of education course work and complementary internship or have documented content and education advisor permission.

The internship experience begins each fall, and students may be placed in more than one K-6 classroom for one full year. Students have in-state or out-of-state placement options. The year-long internship experience begins each August with EDUC 404 Creating Positive Learning Environments, taught five days on the Western campus. After attending this course, students will follow the K-6 school year calendar for the school in which they have accepted placement, not the Western calendar (i.e., begin the year on the day that new teachers report to work, take K-6 school holidays, participate in K-6 school professional opportunities, end the last day that teachers are required to report for work for the school year, etc). This schedule extends from approximately the first of August through the first part of June.

Master mentor teachers are selected carefully to ensure that Western interns have strong role models. The potential mentor teacher will self-assess his or her knowledge of the standards and standard elements. Students accepting internship placements are expected to successfully complete the year-long internship. Students who do not successfully complete the internship will be withdrawn from the Teacher Education Program and must appeal to the Selection and Retention Committee for readmittance.

The other education courses in the program are offered online throughout the year. The internship is in K-6 classrooms a minimum of 24 hours per week with extended mentor teachers. During this year-long internship, the intern is applying and extending
the pedagogical knowledge that he or she is learning in the Education courses. To be recommended for elementary licensure, the student intern must perform at “3, Proficiency” level in all relevant standard/standard elements in the elementary (K-6) classroom and earn a score of “3, Proficiency” on each standard element in the licensure electronic work sample. Student interns must demonstrate the ability to apply the standard/standard element in an elementary classroom setting, assess K-6 student learning, and evaluate their own teaching performance. “3, Proficiency” is the level expected of well prepared, first-year teachers.

The Elementary Licensure Program requires 30 credits of education course work:
- EDUC 000 Education Gateway Course................................................................. 0 cr
- EDUC 340 Brain-based Learning Motivation and Achievement ..................... 3 cr
- EDUC 400 Foundations for Literacy: Phonology and Linguistics ................. 3 cr
- EDUC 401 Assessment for Prevention and Intervention ................................. 3 cr
- EDUC 402 Reading Comprehension, Vocabulary, and Fluency ................... 3 cr
- EDUC 404 Creating Positive Learning Environments ...................................... 3 cr
- EDUC 405 Data-driven Instructional Practices ............................................... 3 cr
- EDUC 408 Teaching Writing with the Brain in Mind ...................................... 3 cr
- EDUC 413 Mathematical Investigations ........................................................... 3 cr
- EDUC 459 Elementary Student Teaching ....................................................... 1-6 cr

Secondary and K-12 Licensure
A student seeking licensure as a secondary teacher (grades 7-12) or K-12 teacher must complete an appropriate academic major, all other university requirements, and the Secondary/K-12 Licensure requirements. The secondary academic major may be: Biology, Chemistry, Economics, English, Geology, Politics and Government, History, or Mathematics. The K-12 academic major may be: Art, Exercise and Sport Science, Music, or Spanish. Students pursuing the secondary or K-12 Licensure option must meet all of the requirements for admission to the Teacher Education Program. Students must complete all course work required within the academic major prior to beginning the year of education course work and complementary internship or have content advisor and education advisor permission. For students taking content courses during the year of education course work and complementary internship, the Teacher Education Internship Coordinator is responsible for meeting with content area faculty members to ensure that all requirements and expectations are met during this year. The internship experience begins each fall, and students are placed in more than one K-12 classroom for one full year. Students have in-state or out-of-state placement options. The year-long internship experience begins each August with EDUC 403 Curriculum, Assessment, Technologies, and Pedagogies, a five-day course taught on the Western campus. After completing this course, students follow the K-12 school year calendar for the school in which they have been placed, not the Western State Colorado University calendar (i.e., begin the year on the day that new teachers report to work, take K-12 school holidays, participate in K-12 school professional opportunities, end the last day that teachers are required to report for work for the school year, etc). This schedule extends from approximately the first of August through the first part of June.

Master mentor teachers are selected carefully to ensure that Western interns have
strong role models. The potential mentor teachers self-assess their knowledge of the standards and standard elements. The principal of the host school completes a checklist documenting criteria for selection of mentor teachers before a student is placed at the host school. Upon receiving an internship placement and prior to accepting the placement, a student is expected to arrange for, and have an interview with, the mentor teachers and observe in their classrooms. Students accepting an internship placement will be expected to successfully complete the year-long internship. Students who do not successfully complete the internship will be withdrawn from the Teacher Education Program and must appeal to the Selection and Retention Committee for readmittance.

The other education courses in the program are offered online throughout the year. The internship is in K-12 classrooms and requires a minimum of 24 hours per week with experienced mentor teachers in the same content area in which the intern is seeking licensure. During this year-long internship, the intern is applying and extending the pedagogical knowledge that he or she is learning in the Education courses.

To be recommended for secondary or K-12 licensure in a content area, the student/intern must perform at “3, Proficiency” level in all relevant standard/standard elements in the secondary or K-12 classroom and earn a score of “3, Proficiency” on each standard element in the licensure electronic work sample. The student-intern must demonstrate the ability to apply each standard and standard element in a secondary or K-12 classroom setting, assess secondary or K-12 student learning, and evaluate his/her own teaching performance. “3, Proficiency” is the level expected of well-prepared, first-year teachers.

The Secondary (with the exception of students seeking Secondary English Licensure) and K-12 Licensure Program requires 27 credits of education course work:

- EDUC 000 Education Gateway Course........................................................................... 0 cr
- EDUC 340 Brain-Based Learning Motivation and Achievement................................. 3 cr
- EDUC 403 Instruction and Assessment in the Content Area........................................ 3 cr
- EDUC 404 Creating Positive Learning Environments.................................................. 3 cr
- EDUC 405 Data-driven Instructional Practices.............................................................. 3 cr
- EDUC 406 Content Area Literacy.................................................................................. 3 cr
- EDUC 408 Teaching Writing with the Brain in Mind..................................................... 3 cr
- EDUC 420 Application of Classroom Strategies to Engage All Learners.................. 3 cr

Student Teaching Course:
- EDUC 409 Secondary Student Teaching.................................................................... 1-6 cr
- EDUC 410 K-12 Student Teaching................................................................................ 1-6 cr

The Secondary English Licensure Program requires 30 credits of education course work:

- EDUC 000 Education Gateway Course........................................................................... 0 cr
- EDUC 340 Brain-based Learning Motivation and Achievement.................................... 3 cr
- EDUC 401 Assessment for Prevention and Intervention.............................................. 3 cr
- EDUC 402 Reading Comprehension, Vocabulary and Fluency................................. 3 cr
- EDUC 403 Instruction and Assessment in the Content Area......................................... 3 cr
- EDUC 404 Creating Positive Learning Environments.................................................. 3 cr
- EDUC 405 Data-driven Instructional Practices.............................................................. 3 cr
Student Disposition and Performance Assessment. During the semester in which students are enrolled in EDUC 000 Education Gateway Course, EDUC 340 Brain Based Learning Motivation and Achievement, and the internship, students are evaluated by the Teacher Education faculty and K-12 teacher mentor(s) in terms of their potential for becoming effective teachers. This process of evaluating professional teaching dispositions is used for screening Teacher Education students for support needs and/or continuation in the Teacher Education Program.

Recommendation for Initial Licensure. Students must meet the following requirements during the last semester of their internship year:

1. successfully complete all responsibilities of an intern;
2. perform at least at a “3, Proficiency” on each relevant standard element as evaluated by mentor teachers, supervisors of the internship, and/or course professors;
3. submit a complete work sample to the Teacher Education office for final approval, as stipulated in the work sample requirements handout, and earn a score of no less than “3, Proficiency” on each standard element of the licensure work sample; and
4. apply for licensure from the Colorado Department of Education within the five years immediately following program completion.

Teacher Education Program Selection and Retention Process. Throughout the Teacher Education Program, students are systematically assessed by the Selection and Retention Committee from the Teacher Education Program with respect to performance, disposition, motivation, and demonstrated potential as a teacher. The Selection and Retention process has three purposes: 1) to act as a screening and counseling review, 2) to resolve a problematic situation, and 3) to provide an opportunity for faculty and students to develop a professional growth plan.

Evidence of unsatisfactory performance, disposition, motivation, or demonstrated potential results in withdrawal from the program. A student who does not pass each education course in the Teacher Education Program with at least a “C-” has one semester (or until the next time the semester course is offered) to remove the “D” or “F” with a grade of “C-” or above; or be withdrawn from the Program. Before admission to the Teacher Education Program, students must complete the prerequisite education course (EDUC 340 Brain Based Learning Motivation and Achievement) with a “C-“or above, and have an overall GPA of 2.75 or above. Anyone who fails two or more courses in the Teacher Education Program is withdrawn from the Program.

In considering transfer credit for required education courses, the Selection and Retention Committee considers the transfer of courses that were taken no more than 10 years prior to admission to the Teacher Education Program based on current state licensure requirements. Copies of official transcripts, course descriptions, and/or course syllabi must be submitted to the Teacher Education Program for a determination of transfer credit.

Selection and Retention Procedures. Students who appeal Program policy and procedures must abide by the selection and retention procedures process. This process involves submitting materials to the Teacher Education Selection and Retention
Committee for review. These materials include:

1. a letter describing admission requirements that have been met, a statement of the problem, and a plan for correcting the problem;
2. a copy of the student’s transcript(s) and current course schedule; and
3. additional materials supporting the student’s appeal.

**EDUCATION COURSES**

**EDUC 000 Education Gateway Course**

0 credits

Students explore the professional opportunities and practices of the teaching discipline. Designed to provide participants a variety of designated experiences with K-12 students so they are able to make informed decisions about becoming teachers. Students facilitate field experiences with school-age students both at the elementary and secondary levels. Students attend two one-hour long seminars and participate in 10 hours of subsequent field experiences. This course is required for admission to the Teacher Education Program. Graded Satisfactory/Unsatisfactory only.

**EDUC 197 Special Topics in Education**

1-6 credits

**EDUC 297 Special Topics in Education**

1-6 credits

**EDUC 340 Brain-based Learning Motivation and Achievement**

3 credits

A foundation course in key aspects of schooling such as legal, assessment, diverse student needs, current brain research, and literacy. A practical application of cognitive processes and brain research is used. Course includes an integrated variety of approaches to teaching and learning—including cooperative learning, differentiated instruction, research-based strategies, skills for success in writing, technology integration, structuring schools and learning to ensure accountability for results. Prerequisite: passing scores on Basic Skills Competency Exam in Mathematics, Reading, and Writing; completion of EDUC 000, including ten hours of field experiences; no more than two semesters prior to internship.

**EDUC 392 Independent Study**

1-3 credits

A course for qualified, upper-level students with specialized interests in a particular area of advanced study in Teacher Education.

**EDUC 397 Special Topics in Education**

1-6 credits

**EDUC 400 Foundations for Literacy: Phonology and Linguistics**

3 credits

A study and application of scientifically-based methods of teaching and reinforcing fundamental reading skills. Cognitive processes of literacy, including phonology, morphology, orthography and etymology. Focus placed on English language structure as it affects decoding and encoding. Additionally, methods for diverse groups of students, including students with disabilities, students from culturally and linguistically diverse populations, and high-achieving students are covered. Prerequisite: admission to the Teacher Education Program.

**EDUC 401 Assessment for Prevention and Intervention**

3 credits

This is an in-depth application of assessment techniques and instruments in coordination with state standards, No Child Left Behind and Individuals with Disabil-
ity Education Act, 2004. Includes standardized testing and knowledge of literacy including five essential components of reading: phonemic awareness, phonics, vocabulary, fluency, and comprehension. Analysis of data to design and monitor instruction and intervention for universal, targeted, and intensive needs of diverse groups of students, including students with disabilities, students from culturally and linguistically diverse populations, and high-achieving students. Prerequisite: admission to the Teacher Education Program.

EDUC 402 Reading Comprehension, Vocabulary, and Fluency 3 credits
A study and application of scientifically based methods of teaching and reinforcing reading comprehension, vocabulary fluency, oral and written language skills. Cognitive processes of literacy, including phonology, morphology, orthography, etymology, semantics, syntax, discourse, pragmatics and English language structure as it affects meaning. Additionally, methods for diverse groups of students, including students with disabilities, students from culturally and linguistically diverse populations, and high-achieving students are covered. Prerequisite: admission to the Teacher Education Program.

EDUC 403 Instruction and Assessment in the Content Area 3 credits
An introduction to the concepts, methods, techniques, and assessment practices used to effectively teach secondary and K-12 students. Emphasis is placed on structures for lesson and unit planning, implementation of the Colorado State Standards, literacy and math integration, research based instructional strategies, content specific technologies, and management techniques. Prerequisite: admission to the Teacher Education Program.

EDUC 404 Creating Positive Learning Environments 3 credits
A foundation course to prepare students to create appropriate learning environments both inside and outside the classroom. Students learn effective lesson planning, classroom management, medical protocol and sound legal disciplinary practices that are characterized by acceptable student behavior and efficient use of time. The students learn to perpetuate the democratic system by understanding the relationships among the various governmental entities that create laws, rules, regulations and policies. Students apply educational practices to ensure safe and orderly schools. Prerequisite: admission to the Teacher Education Program.

EDUC 405 Data-driven Instructional Practices 3 credits
An in-depth application of standards-based instruction and assessment practices. Students design curriculum maps and plan short and long range standards-based lessons and units for diverse student populations based on their respective content areas. Students are taught to integrate literacy, math, and technology into their standards-based instructional plans encompasses the development and utilization of various types of curriculum based measures both formal and informal in order to accurately document and report ongoing student achievement. Students learn to use assessment data to drive standards-based curriculum that measure student knowledge, understanding, and skills. Technology is utilized to manage and communicate assessment results and their implications to students, parents, professionals, administrators and the community. At the end of this course, students reflect and evaluate their own performance, and articulate that teaching is a worthy career.
Prerequisite: admission to the Teacher Education Program.

EDUC 406 Content Area Literacy 3 credits
An application of current research on brain-based learning, reading and writing and its integration in the content area. Students implement the essential components of reading: phonemic awareness, phonics, vocabulary, fluency, comprehension, motivation, and engagement within the content area. In addition, there is a focus on content area study and test taking skills. Prerequisite: admission to the Teacher Education Program.

EDUC 407 Maximizing Learning Through 21st Century Skills 3 credits
An inquiry into the 21st century environment schools need to cultivate in order to maximize learning. This course prepares teachers to create technology-rich learning environment that enhance student growth and achievement. Prerequisite: admission to the Teacher Education Program.

EDUC 408 Teaching Writing with the Brain in Mind 3 credits
An application of cognitive processes associated with various kinds of learning. Within the context of writing assessment and instruction, students learn to employ a wide range of teaching techniques to match the intellectual, emotional and social level of each classroom student. Students apply expert content knowledge to enrich and extend student learning and apply individual educational plans. Prerequisite: admission to the Teacher Education Program.

EDUC 409 Secondary Student Teaching 1-6 credits
Student teaching in a 7-12 school setting on the average of 24 hours per week, over the course of the academic year, in collaboration with mentor teachers. This course can be repeated twice for credit. Prerequisite: admission to the Teacher Education Program.

EDUC 410 K-12 Student Teaching 1-6 credits
Student teaching in a K-12 school setting on the average of 24 hours per week, over the course of the academic year, in collaboration with mentor teachers. This course can be repeated twice for credit. Prerequisite: admission to the Teacher Education Program.

EDUC 413 Mathematical Investigations 3 credits
An application of the research-based practices for instruction in math. Focus is placed on the foundations for assessing and teaching math by addressing basic skills, critical thinking skills, conceptual understanding, real life applications, and diverse learner needs. Students implement and review specific assessment practices, teaching structures, intervention strategies, and technology applications within a standards-based framework of instruction. Prerequisite: admission to the Teacher Education Program.

EDUC 420 Application of Classroom Strategies to Engage All Learners 3 credits
Study and apply effective research-based strategies for high levels of attention and engagement for all learners. Prerequisite: admission to the Teacher Education Program.

EDUC 459 Elementary Student Teaching 1-6 credits
Student teaching in an elementary school setting. The student teaching experience averages 24 hours per week over the course of the academic year and is in collaboration with mentor teachers. May repeat twice for credit. Prerequisite: admission to licensure program.
EDUC 492  Independent Study  1-3 credits
A course for qualified, upper-level students with specialized interests in a particular area of advanced study in Teacher Education.

EDUC 493  Research Problems  1-4 credits

EDUC 497  Special Topics in Education  1-6 credits
The English program at Western State Colorado University provides its majors an opportunity to study language, literature, writing, and secondary teaching. Upon graduation, English majors can:

- employ multiple perspectives in producing and analyzing texts;
- employ a critical, historical, and cultural sense of the traditions of English, American, and world literatures;
- generate and develop an effective writing project in at least one genre.

Those in the Comprehensive Program with the writing emphasis can also:

- generate and develop effective writing projects in a variety of genres for a variety of writing occasions;
- locate appropriate venues for their writing and submit compatible work for publication.

Those in the Comprehensive Program with secondary education licensure can also be licensed to teach literature and writing in secondary schools in Colorado.

**Faculty**

Professors T. Christine Jespersen, Alina M. Luna, and Mark D. Todd;
Senior Lecturers JoAnne M. Arai-Brown and Courtney P. Fullmer;
Lecturers Jennifer McArdle and Shelley E. Read.

**Description of the Programs**

English majors and minors must complete the required course ENG 250 Critical Approaches to Literature with a minimum grade of “C” before registering for upper-division courses in English.

**English Major: Standard Program**

A minimum of 39 credits is required, including a three-credit, upper-division literature elective, and the following:

- ENG 205 Introduction to Creative Writing ........................................................ 3 cr
- ENG 250 Critical Approaches to Literature ........................................................ 3 cr
- ENG 358 Global Literatures ................................................................................ 3 cr
- ENG 371 Literary Theory and Criticism................................................................ 3 cr
- ENG 394 Junior Seminar .................................................................................... 3 cr
- ENG 494 Senior Seminar .................................................................................... 3 cr

**One of the following:**

- ENG 230 Environmental Literature .................................................................... 3 cr
- ENG 237 Women and Literature .......................................................................... 3 cr
- ENG 238 Literary Culture of the American West ................................................. 3 cr

**One of the following:**

- ENG 300 Creative Writing: Fiction ....................................................................... 3 cr
- ENG 301 Creative Writing: Poetry ....................................................................... 3 cr
- ENG 303 Environmental Writing .......................................................................... 3 cr
- ENG 305 Creative Writing: Non-fiction ............................................................... 3 cr

**Two of the following:**

- ENG 372 British Literature: Medieval and Renaissance Texts ............................ 3 cr
ENG 373  British Literature: Milton Through the Romantics......................... 3 cr
ENG 374  British Literature: The Victorians to the Present Day................... 3 cr
ENG 463  Major British Authors ................................................................. 3 cr

Two of the following:
ENG 384  American Literature—Early to Civil War................................ 3 cr
ENG 385  American Literature—Civil War to Present................................. 3 cr
ENG 464  Major American Authors ............................................................. 3 cr

**English Major: Comprehensive Program**

**Creative Writing Emphasis**

A minimum of 54 credits is required, including three credits of an upper-division literature elective, and the following:

- COM 241 Media Writing................................................................. 3 cr
- COM 343 Persuasive and Expressive Writing on Public Issues.............. 3 cr
- ENG 205 Introduction to Creative Writing...................................... 3 cr
- ENG 250 Critical Approaches to Literature..................................... 3 cr
- ENG 358 Global Literatures ............................................................ 3 cr
- ENG 371 Literary Theory and Criticism.......................................... 3 cr
- ENG 394 Junior Seminar................................................................. 3 cr
- ENG 405 Advanced Writing............................................................ 3 cr
- ENG 445 Literary Magazine Submission and Production................ 3 cr
- ENG 494 Senior Seminar................................................................. 3 cr

*Three of the following*

- COM 306 Scriptwriting...................................................................... 3 cr
- ENG 300 Creative Writing: Fiction.................................................. 3 cr
- ENG 301 Creative Writing: Poetry.................................................... 3 cr
- ENG 303 Environmental Writing..................................................... 3 cr
- ENG 305 Creative Writing: Non-fiction.......................................... 3 cr

*Two of the following:

- ENG 372 British Literature: Medieval and Renaissance Texts........... 3 cr
- ENG 373 British Literature: Milton Through the Romantics............. 3 cr
- ENG 374 British Literature: The Victorians to the Present Day........ 3 cr
- ENG 463 Major British Authors....................................................... 3 cr

*Two of the following:

- ENG 384 American Literature—Early to Civil War.......................... 3 cr
- ENG 385 American Literature—Civil War to Present........................ 3 cr
- ENG 464 Major American Authors.................................................. 3 cr

**Secondary Licensure Emphasis**

The Secondary Licensure Emphasis requires 51 credits, including three credits of upper-division English electives. English 352 Children’s Literature may not be used as an elective in English. In addition, students must fulfill the requirements of the Secondary Licensure Option (see description under Education).

The following courses are required:

- COM 216 Dramatic Literature and Script Analysis............................... 3 cr
- COM 241 Media Writing .................................................................... 3 cr
- ENG 205 Introduction to Creative Writing........................................ 3 cr
- ENG 220 Grammar and the English Language..................................... 3 cr
ENG 250 Critical Approaches to Literature................................................. 3 cr
ENG 358 Global Literatures ......................................................................... 3 cr
ENG 370 Myth and Culture........................................................................... 3 cr
ENG 371 Literary Theory and Criticism...................................................... 3 cr
ENG 384 American Literature—Early to Civil War..................................... 3 cr
ENG 385 American Literature—Civil War to Present.................................... 3 cr
ENG 394 Junior Seminar............................................................................... 3 cr

One of the following:
COM 306 Scriptwriting............................................................................... 3 cr
ENG 300 Creative Writing: Fiction................................................................. 3 cr
ENG 301 Creative Writing: Poetry................................................................. 3 cr
ENG 303 Environmental Writing................................................................. 3 cr
ENG 305 Creative Writing: Non-fiction......................................................... 3 cr

Two of the following:
ENG 230 Environmental Literature............................................................. 3 cr
ENG 237 Women and Literature................................................................. 3 cr
ENG 238 Literary Culture of the American West......................................... 3 cr
ENG 248 Film Arts: Film as Literature/Literature as Film............................ 3 cr
ENG 331 Literature and Ethnicity................................................................. 3 cr
ENG 337 Women Writers............................................................................. 3 cr

Two of the following:
ENG 372 British Literature: Medieval and Renaissance Texts...................... 3 cr
ENG 373 British Literature: Milton through the Romantics.......................... 3 cr
ENG 374 British Literature: The Victorians to the Present Day.................... 3 cr

English Minor
A minimum of 18 credits is required for a Minor in English including twelve credits of electives, and the following:

ENG 205 Introduction to Creative Writing.................................................. 3 cr
ENG 250 Critical Approaches to Literature.................................................. 3 cr

Capstone Course Requirement. The following course in the English Major fulfills the capstone course requirement: ENG 494 Senior Seminar. Students completing the Secondary Licensure Emphasis may use student teaching to fulfill this requirement. English majors must pass three credits of course work in ENG 494 with a minimum grade of “C.”

English Assessment Program. All English majors and minors are required to participate in and successfully pass skills/knowledge assessment testing in English. Assessment tests are conducted thus: 1) as a component of the required course ENG 250 Critical Approaches to Literature; 2) as a designated semester project in the Junior Seminar, or a designated project in ENG 405 Advanced Writing (writing emphasis); and 3) a final graduation requirement incorporated into ENG 494 Senior Seminar.
ENGLISH COURSES

ENG 099 Basic Writing 3 credits
Provides students with practice in generating and developing writing about academic topics and preparation for ENG 102 Academic Writing. For students who do not meet the University Level Entry Standards set by the Colorado Commission on Higher Education. Offered through Extended Studies for an additional fee. Credit does not count toward graduation. Graded Satisfactory/Unsatisfactory only.

ENG 102 Academic Writing 3 credits
Provides students the opportunity to practice strategies for developing writing projects on unfamiliar topics in unfamiliar formats to become more effective and efficient writers. Writers learn to practice strategies for making writing more comprehensible for readers and to use a wide range of writing processes for getting started, developing, organizing, and polishing writing projects. Prerequisites (one of the following): ENG 099; ACT English score of 18 or higher to demonstrate writing proficiency and ACT Reading score of 17 or higher to demonstrate reading proficiency; SAT Critical Reading score of 440 or higher to demonstrate writing proficiency and SAT Critical Reading score of 430 or above to demonstrate reading proficiency; Accuplacer Sentence Skills test score of 95 or higher and Accuplacer Reading Comprehension test score of 80 or higher; or combination of ACT, SAT, and Accuplacer scores to fulfill both reading and writing proficiencies. GT-CO1

ENG 150 Introduction to Literature 3 credits
An introduction to literature with focus on a specific theme, form, or topic. Prerequisites (one of the following): ENG 099; ACT English score of 18 or higher to demonstrate writing proficiency and ACT Reading score of 17 or higher to demonstrate reading proficiency; SAT Critical Reading score of 440 or higher to demonstrate writing proficiency and SAT Critical Reading score of 430 or above to demonstrate reading proficiency; Accuplacer Sentence Skills test score of 95 or higher and Accuplacer Reading Comprehension test score of 80 or higher; or combination of ACT, SAT, and Accuplacer scores to fulfill both reading and writing proficiencies; open only to first and second-year students who have completed fewer than 60 credits.

ENG 197 Special Topics 1-6 credits
A study of a particular topic of interest to students of English to be announced each time the course is offered.

ENG 205 Introduction to Creative Writing 3 credits
An introduction to the basic techniques of writing fiction and poetry. Models of each are studied, and students write and share pieces in both of these literary forms. Prerequisite: ENG 102 with a minimum grade of “C-.”

ENG 220 Grammar and the English Language 3 credits
A study of English grammar focusing on standard English. Students are also introduced to the history of the English language. Prerequisite: ENG 102 with a minimum grade of “C-.”

ENG 230 Environmental Literature: Studies in 3 credits
A study of environmental literature. Students analyze the formal and thematic characteristics of the literature. To inform critical interpretations, students read relevant cultural and environmental theory. The theme or topic is announced each semester. Prerequisite: ENG 102 with a minimum grade of “C-.” GT-AH2
ENG 237 Women and Literature  3 credits
Critical study of selected topics, themes, or issues about women as they are interpreted in popular and classic literary works. Specific titles to be announced each time the course is offered. Prerequisite: ENG 102 with a minimum grade of “C-.”

ENG 238 Literary Culture of the American West  3 credits
A study of traditional and nontraditional forms of Western literature, including the multicultural diversity of the region. Prerequisite: ENG 102 with a minimum grade of “C-.”

ENG 240 Writing Center Workshop  2 credits
Students investigate methods of the writing process and study personal communications of tutoring. Strategies include studying the learning styles of all students. Prerequisite: instructor permission.

ENG 248 Film Arts: Film as Literature/Literature as Film  3 credits
A focus on the development of film and its cultural impact, with special emphasis on the relationship between film as a visual medium and literature as a verbal medium. After examining a selection of short stories and novels and the film adaptations based upon them, students are given the opportunity to write some film criticism of their own. Prerequisite: ENG 102 with a minimum grade of “C-.”

ENG 250 Critical Approaches to Literature  3 credits
Students study a variety of genres as a basis of learning to write literary analysis. Focus is on an understanding of the varied perspectives from which a text can be approached, and how readers construct meaning based not only upon the text itself, but also the context in which it is studied. The critical approach as well as theme or topic may vary. Prerequisite: ENG 102 with a minimum grade of “C-.”

ENG 254 Formula Fiction  3 credits
A focus on works that adhere to a specific “formula” announced on a rotating basis and selected from such sub-genres as science fiction, fantasy, mysteries, romance, westerns, or horror. Readings explore the relationship of formula to the craft of storytelling. Course may be repeated for credit when taken with a different emphasis. Prerequisite: ENG 102 with a minimum grade of “C-.”

ENG 255 Ancient World Literature  3 credits
A study of ancient texts and their relation to their own time, and to ours. Since an understanding of these writings is important for reading English literature, the focus of the course is on Western texts central to that tradition. However, students may also read selected works from non-Western cultures in order to give them a taste of the diversity of the ancient world. Works studied may include selections from the Bible (Hebrew Scriptures and New Testament), Homer’s writings, poetry and theatre of Classical Greece, Chinese poetry from the Book of Songs, a selection from the Mahabharata, and Roman poetry, particularly Virgil and Ovid. Prerequisite: ENG 102 with a minimum grade of “C-.”

ENG 270 Folklore  3 credits
A study of one or more areas of folklore with a focus on American folklore. Possible areas include folksong, folk tales and legends, customs and festivals, dance and drama, proverbs, traditions, beliefs, recipes, and games. Prerequisite: ENG 102 with a minimum grade of “C-.”
ENG 297  Special Topics  1-6 credits
A study of a particular topic of interest to students of English to be announced each time the course is offered.

ENG 300  Creative Writing: Fiction  3 credits
Models are studied, and students read and respond to one another’s writing. This course may incorporate narrative theory. Prerequisite: ENG 205 with a minimum grade of “C.”

ENG 301  Creative Writing: Poetry  3 credits
Instruction is given on the techniques and terminology of poetry writing. Models are studied, and students read and respond to one another’s writing. Prerequisite: ENG 205 with a minimum grade of “C.”

ENG 303  Environmental Writing  3 credits
A workshop approach to help writers develop a portfolio of essays suitable for publication in outdoor, environmental, and other appropriate magazines. To enhance their essays, writers read and analyze theoretical and published environmental texts. Prerequisite: ENG 205 with a minimum grade of “C.”

ENG 305  Creative Writing: Non-fiction  3 credits
Models are studied, and students read and respond to one another’s writing. Prerequisite: ENG 205 with a minimum grade of “C.”

ENG 331  Literature and Ethnicity: Studies in:  3 credits
A focus on United States literatures reflective of specific identities and cultures. Students examine format and thematic characteristics of a particular literature. To enhance critical understanding, students read and analyze relevant theoretical approaches to race, ethnicity, and culture. A specific focus is announced each time the course is taught. Examples include Native American, African American, and Borderlands literature. Course may be repeated once for credit with a different title, but may be counted only once toward the major. Prerequisite: ENG 250 with a minimum grade of "C."

ENG 334  Poetry: Studies in:  3 credits
An in-depth study of poetry as a genre through selections of British, American, and world literature. Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 335  Drama: Studies in:  3 credits
An in-depth study of drama as a genre through selections of British, American, and world literature. Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 336  Prose: Studies in:  3 credits
A focus on prose fiction, including such genres as short stories, novellas, and novels. Depending upon the instructor’s specific emphasis, examples of any one or more of these genres may be selected for the term. Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 337  Women Writers  3 credits
Analysis of the poetry, drama, or fiction of women writers. Emphasis is on 19th century, 20th century, or contemporary writers. Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 352  Children’s Literature  2 credits
A survey of traditional and modern literature providing an opportunity to discuss topics such as reader-response theories, critical literacy, objective and subjective criticism, cen-
Global Literatures: Studies in:  3 credits
A study of literatures from around the globe that considers the artistry, culture, and diverse social conditions of various countries. A specific focus is announced each time the course is offered. Possible topics may include “Colonialism and Globalization,” “The Sacred Texts,” and “War and Revolution.” Course may be repeated once for credit with a different title, but may be counted only once toward the major. Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 370 Myth and Culture  3 credits
An introduction to the role of myth in literature and in our contemporary world. Examining myth from various perspectives, including the archetypal, the course focuses upon myth as a means for understanding aspects of our society’s cultures. Offered in alternate years. Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 371 Literary Theory and Criticism  3 credits
An introduction to some of the primary conversations structuring debates in literary theory and criticism. Students learn to identify central questions, assumptions, and conflicts in theoretical and critical texts. Students also gain an understanding of the ways that theory and criticism influence their immediate experiences in English courses. Prerequisites: ENG 250 with a minimum grade of “C” and at least one 300-level literature course, or instructor permission.

ENG 372 British Literature: Medieval and Renaissance Texts  3 credits
A study of British Literature focusing on the major genres for the Anglo-Saxon, Middle English, and Renaissance periods, ending with the Metaphysical poets (800 A.D. to early 1600s). Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 373 British Literature: Milton through the Romantics  3 credits
A study of British works of poetry, fiction, drama, and essay produced from 1660 to 1830. Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 374 British Literature: The Victorians to the Present Day  3 credits
A study of British works of poetry, fiction, drama, and essay produced from 1830 to the present day. Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 384 American Literature–Early to Civil War  3 credits
An exploration of authors and texts in American literature up to 1865. Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 385 American Literature–Civil War to Present  3 credits
An exploration of authors and texts in American literature from 1865 to the present. Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 394 Junior Seminar: Studies in:  3 credits
Students comprehensively engage a given topic and the critical conversations pertaining to it. The research component of the course allows students to participate in and extend scholarly dialogue. A specific focus is announced each time the course is offered. Prerequisites: ENG 250 with a minimum grade of “C” and ENG 371.

ENG 396 Writing Center Assistantship  1-3 credits
Students apply knowledge obtained in ENG 240 in directed field experiences in Writing Center tutoring. Prerequisite: ENG 240.
ENG 397  Special Topics  1-6 credits
A study of a particular topic of interest to students of English to be announced each time the course is offered. Course may be repeated once for credit with a different title, but may be counted only once toward the major. Prerequisite: ENG 250 with a minimum grade of “C.”

ENG 405  Advanced Writing  3 credits
An opportunity to deepen writing practiced at the junior level, with increased attention to voice and style. This course seeks to develop an awareness of the broader community of writers that includes those with not only similar but also differing writing goals. Prerequisites: ENG 250 with a minimum grade of “C” and at least two 300-level writing courses.

ENG 445  Literary Magazine Submission and Production  3 credits
Focus alternates between literary magazine submissions and literary magazine production. Submission discussion includes aesthetics and techniques for revising and polishing work for submission. During the production focus students participate in the editorial production of a fiction anthology including acquisition and proofreading of manuscripts. Course may be repeated for up to six credits, only three credits of which may count as an elective in the major. Prerequisite: ENG 250 with a minimum grade of “C”; ENG 300, ENG 301, ENG 303, or ENG 305 with a minimum grade of “C”; or instructor permission.

ENG 463  Major British Authors:  3 credits
An in-depth study of selected, significant authors that approaches works from similar or cross-historical periods of British literature. Course may be repeated once for credit when taken with a different emphasis. Prerequisites: ENG 250 with a minimum grade of “C” and minimum junior standing.

ENG 464  Major American Authors:  3 credits
An in-depth study of selected, significant authors that approaches works from similar or cross-historical periods of American literature. Course may be repeated once for credit when taken with a different emphasis. Prerequisites: ENG 250 with a minimum grade of “C” and minimum junior standing.

ENG 475  Theories of Reading and Writing Discourse  3 credits
A focus on composition and writing center theory and its practical applications. In addition to taking the course, students work with a faculty member in a lower-division English course or in the writing center in order to implement theoretical material in teaching situations. The course may be repeated twice for credit. Only three credits may count toward a major or minor in English. Graded Satisfactory/Unsatisfactory only. Prerequisite: instructor permission.

ENG 492  Independent Study  1-6 credits
An opportunity for individual study about topics in English, to be selected by the students, in cooperation with their advisors and with the permission of the regular faculty member supervising the study. A maximum of six credits may count toward a major in English. The course is repeatable until that maximum credit is met. Prerequisites: 12 credits of English; ENG 250 with a minimum grade of “C.”
ENG 494  Senior Seminar: Studies in:  3 credits
The Senior Seminar serves as the Standard Major’s capstone experience and focuses on announced thematic topics that allow students to demonstrate competencies developed in the major. The theme or topic is announced for each spring. Prerequisite: senior standing.

ENG 497  Special Topics  1-6 credits
A study of a particular topic of interest to students of English to be announced each time the course is offered. Course may be repeated once for credit with a different title, but may be counted only once toward the major. Prerequisite: ENG 250 with a minimum grade of “C.”
ENVIRONMENT AND SUSTAINABILITY (ENVS)

The Environment and Sustainability Program focuses on the interactions of humans and the natural environment. Specifically, the Program studies the structure and function of natural systems, examines how social, political, and economic activity impacts those systems, and experiments with resilient solutions to unsustainable human impacts.

Goals of the Environment and Sustainability Program include:

• Applying the knowledge and methods of natural sciences to understand and analyze environmental problems and solutions.
• Implementing social science findings and frameworks to develop local, national, and global sustainable solutions.
• Using the insights of environmental history, literature, and ethics to inform current decision making.
• Developing interdisciplinary critical thinking, communication, and problem solving skills to foster community and ecological resilience.
• Fostering leadership in sustainability, effective environmental citizenship, and career and advanced study opportunities in environmental fields.

FACULTY
Professor John C. Hausdoerffer;
Assistant Professor and Director of the Colorado Water Workshop Jeffrey Sellen;
Assistant Professor Jonathan D. Coop.

ENVIRONMENT AND SUSTAINABILITY COUNCIL
Jeffery Sellen, ENVS Director; Kevin D. Alexander, Biology; Jonathan D. Coop, ENVS, Biology, ENVS; Daniel M. Cress, Sociology; Matthew H. Ebbott, Recreation and Outdoor Education; Christopher W. Greene, Business Administration; John C. Hausdoerffer, ENVS, Philosophy; Sally E. Hays, Economics; Jack F. Lucido, Communication; Patrick A. Magee, Biology; John Mason, Physics; M. Brooke Moran, Recreation and Outdoor Education; William L. Niemi, Politics and Government; Jeffrey Sellen, Environmental Studies; Lynn L. Sikkink, Anthropology; Heather Thiessen-Reily, History

DESCRIPTION OF THE PROGRAMS

Environment and Sustainability Major: Standard Program
A minimum of 39 credits is required.

ENVS 100 Introduction to Environment and Sustainability................................. 3 cr
ENVS 200 Writing the Environment ........................................................................ 3 cr
ENVS 301 Science of Sustainability and Resilience .............................................. 3 cr
ENVS 350 U.S. and Western Environmental Politics ............................................ 3 cr
ENVS 390 Environmental Monitoring ................................................................. 4 cr
ENVS 400 Applied Sustainability ........................................................................ 3 cr
ENVS 410 Environmental Ethics .......................................................................... 3 cr

One of the following:
ENVS 360 Global Environmental Policy .......................................................... 3 cr
ENVS 370 Water Policy and Politics ................................................................. 3 cr
ENVS 375 Seminar in Water Topics .................................................................. 3 cr

Required supporting courses:
BIOL 130 Environmental Biology ...................................................................... 3 cr
BIOL 135 Environmental Biology Lab ............................................................. 1 cr
PHYS 125 Energy and the Environment ............................................................ 3 cr
ECON 215 Environmental Economics .............................................................. 3 cr

One of the following:
HWTR 200 This Is the Headwaters ................................................................. 1 cr
HWTR 398 Headwaters Conference .................................................................. 1 cr

And one of the following:
ECON 216 Statistics for Business and Economics ........................................... 3 cr
MATH 213 Probability and Statistics .................................................................. 3 cr
SOC 211 Quantitative Research Methods .......................................................... 3 cr

Environment and Sustainability Major: Comprehensive Program

Students have two options for a comprehensive major: a 62-credit Water Emphasis or the 57-credit Individualized Contract.

WATER EMPHASIS

A minimum of 62 credits is required.

ENVS 100 Introduction to Environment and Sustainability .................................. 3 cr
PHYS 125 Energy and the Environment .............................................................. 3 cr
BIOL 130 Environmental Biology .................................................................... 3 cr
BIOL 135 Environmental Biology Lab ............................................................. 1 cr
GEOL 101 Physical Geology .............................................................................. 3 cr
GEOL 105 Physical Geology Lab ....................................................................... 1 cr
ENVS 200 Writing the Environment .................................................................. 3 cr
ECON 215 Environmental Economics .............................................................. 3 cr
ENVS 301 Science of Sustainability and Resilience .......................................... 3 cr
GEOG 340 Introduction to Geographic Information Systems ............................ 3 cr
ENVS 350 U.S. & Western Environmental Politics ............................................ 3 cr
ENVS 370 Water Policy and Politics .................................................................. 3 cr
ENVS 373 The Water Planet ............................................................................. 3 cr
ENVS 375 Seminar in Water Topics .................................................................. 1-3 cr
ENVS 376 The Colorado Water Workshop ....................................................... 1 cr
ENVS 390 Environmental Monitoring .............................................................. 4 cr
ENVS 400 Applied Sustainability ........................................................................ 3 cr
ENVS 410 Environmental Ethics ........................................................................ 3 cr

One of the following:
HWTR 200 This Is the Headwaters ................................................................. 1 cr
HWTR 398 Headwaters Conference .................................................................. 1 cr
One of the following:
ECON 216 Statistics for Business and Economics ............................................ 3 cr
MATH 213 Probability and Statistics ................................................................. 3 cr
SOC 211 Quantitative Research Methods........................................................ 3 cr

Two of the following:
ROE 293 Outdoor Pursuits Education—Water Based ......................................... 3 cr
ECON 370 Natural Resource Economics ............................................................ 3 cr
ENVS 360 Global Environmental Policy ............................................................ 3 cr
BUAD 410 Water and Environmental Law ......................................................... 3 cr
BIOL 476 Aquatic Ecology (with Lab)................................................................. 4 cr

One of the following:
ENVS 420 Natural History of the Gunnison Basin ............................................. 3 cr
ENVS 430 Watersheds of the World ................................................................. 3 cr
ENVS 499 Environmental Studies Internship .................................................... 3-6 cr

Admission to Recreation and Outdoor Education courses for declared Water Emphasis students is based on instructor permission and available seats.

**INDIVIDUALIZED CONTRACT EMPHASIS**
This Emphasis allows students to design a curriculum in consultation with an Environment and Sustainability advisor and with the approval of the Environment and Sustainability Council. A minimum of 57 credits is required including the 39-credit Standard Major. Proposals for an Individualized Contract should be developed before the second semester of the junior year, and applicants must have a minimum of a 3.200 GPA in the major and a 3.000 overall GPA. Consult an Environment and Sustainability advisor for details.

**Environment and Sustainability and Business Administration Coordinated Double Major:**
If a student elects to complete an Environment and Sustainability Major: Standard Program and the coordinated Business Administration Major: Standard Program, the student must take ECON 202 Microeconomics instead of ECON 215 Environmental Economics; and ENVS 360 Global Environmental Policy must be elected. ECON 216 must be elected, with MATH 140 as its prerequisite.

**Environment and Sustainability Minor**
A minimum of 18 credits is required for a Minor in Environment and Sustainability including twelve credits of ENVS or HWTR electives, and the following:

- ENVS 100 Intro to Environment and Sustainability ........................................ 3 cr
- ENVS 200 Writing the Environment ............................................................... 3 cr

**Capstone Course Requirement.** The following course in the Environment and Sustainability Major fulfills the capstone course requirement: Applied Sustainability.
# ENVIRONMENT AND SUSTAINABILITY COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 100</td>
<td>Introduction to Environment and Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 197</td>
<td>Special Topics</td>
<td>1-6</td>
</tr>
<tr>
<td>ENVS 200</td>
<td>Writing the Environment</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 292</td>
<td>Independent Study</td>
<td>1-3</td>
</tr>
<tr>
<td>ENVS 301</td>
<td>Science of Sustainability and Resilience</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 350</td>
<td>U.S. and Western Environmental Politics</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 360</td>
<td>Global Environmental Policy</td>
<td>3</td>
</tr>
</tbody>
</table>

**ENVS 100 Introduction to Environment and Sustainability (3 credits)**

An interdisciplinary, historical analysis of the development of environmental problems, movements, and philosophies. Students apply historical lessons to critically examine sustainable solutions locally and globally. GT-SS2

**ENVS 197 Special Topics (1-6 credits)**

**ENVS 200 Writing the Environment (3 credits)**

Students develop communication skills through presentations and writing on a variety of environmental issues appropriate to a wide variety of audiences. Through environmental essays, writing for nonprofit websites, grant proposals, and other forms of environmental writing, students are introduced to a broad range of skills needed for effective communication. Focus throughout the course on the analysis of arguments and texts further develops students’ analytical and communication skills. Prerequisite: ENVS 100; COM 202 is recommended.

**ENVS 292 Independent Study (1-3 credits)**

**ENVS 297 Special Topics (1-6 credits)**

**ENVS 301 Science of Sustainability and Resilience (3 credits)**

A holistic inquiry into how humans might live the next chapter of our history, guided by the ecological principles of sustainability and resilience. Environmental problems and their possible solutions are analyzed critically and quantitatively; field experiences on campus and in the community involve students directly in the application of these principles. Themes include sustainable agriculture, green building, renewable energy, and conservation and restoration. Prerequisites: BIOL 130, BIOL 135, PHYS 125

**ENVS 350 U.S. and Western Environmental Politics (3 credits)**

An historical and contemporary investigation of U.S. environmental policies with an applied focus on the impact of national policy on the ecosystems and cultures of the American West. Reciprocally, this course traces how public lands agencies, social movements, historical land uses, and diverse cultures in the West shape U.S. environmental policy. Students combine analysis and discussion of major U.S. policies, prominent theories and issues, and student-led environmental service projects to better understand environmental challenges. Prerequisites: ENVS 100, ENVS 200 or COM 202, ECON 370

**ENVS 360 Global Environmental Policy (3 credits)**

A critical examination of key perspectives, economic and political processes, policy actors, and institutions involved in global environmental issues. Students analyze ecological, cultural, and social dimensions of international environmental concerns and governance as they have emerged in response to increased recognition of global environmental threats, globalization, and international contributions to understanding of these issues. The focus of the course encourages students to engage and evaluate texts within the broad policy discourse on globalization, justice, and the environment. Prerequisites: ENVS 100; ENVS 200, ECON 201 or SCI 202; junior standing or instructor approval.
ENVS 370 Water Policy and Politics 3 credits
Study of the history, politics and institutions related to water policy and administration with comparative reference to different regions of the United States and internationally. Attention is given to the industrial development of the East and the created water resources of the arid West as a way to understand changing social sentiments toward water and water policy. The course also examines water pollution laws and water management. Prerequisites: ENVS 100; ECON 201 or ENVS 200 or SCI 202; junior standing or instructor approval.

ENVS 373 The Water Planet 3 credits
An advanced water science course specifically designed for students interested in water related environmental science and policy. Topics include the physical and chemical properties of natural fresh waters and the movement and reservoirs of fresh water within the water cycle. The course includes several hands-on exercises and field experiences where students investigate and analyze natural waters in the Gunnison Basin. Prerequisites: GEOL 101; GEOL 105, and one of the following: CHEM 101 or CHEM 111.

ENVS 375 Seminar in Water Topics 1-3 credits
An occasional offering that may include water topics in politics and policy, ethics and philosophy, or science. Prerequisite: ENVS 200 and ENVS 301, or instructor permission.

ENVS 376 The Colorado Water Workshop 1 credit
A three-day annual conference bringing students together with a variety of water users, managers, ranchers, environmentalists, regulators and others involved in water issues for presentations and discussion on matters ranging from specific municipal or water district projects to major basin-wide planning for the great rivers of the West to global issues of water use and protection. Topics vary from year to year. Prerequisite: ENVS 350 and ENVS 370, or instructor permission.

ENVS 390 Environmental Monitoring 4 credits
A field-work based study of local (Gunnison Basin) environmental problems. Numerous monitoring techniques are implemented based on principles of biology, chemistry, and geology. The emphasis is on collaborative and integrative group projects dealing directly with real-world environmental problems. Prerequisites: ENVS 301 and one of the following: ECON 216, MATH 213 or SOC 211.

ENVS 392 Independent Study 1-6 credits

ENVS 397 Special Topics 1-6 credits

ENVS 400 Applied Sustainability 3 credits
A field-based, collaborative, problem-solving experience that addresses a current issue in environmental sustainability. Implementing frameworks such as resilient and systems thinking, students collect information, analyze results, write a report, publicly present their findings, and begin to implement solutions informed by their analysis. Students learn basic skills for transforming their ENVS education into compelling environmental professional career possibilities. Prerequisites: ENVS 350 and ENVS 390.

ENVS 410 Environmental Ethics 3 credits
A seminar on the complexities of environmental issues from a philosophical perspective.
The course also offers a survey of the evolution of environmental moral philosophy as well as in-depth analysis of major thinkers in the field. Students confront ethical concerns from both historical and personal perspectives, with an emphasis on the ability to critically evaluate and apply these perspectives to their work in environmental fields. Prerequisite: ENVS 301 and 350; or PHIL 335.

ENVS 420  Natural History of the Gunnison Basin  3 credits
An overview of place-based natural history, current ecological research, and current environmental issues facing the region. Prerequisites: ENVS 100 and instructor permission.

ENVS 430  Watersheds of the World  3 credits
This field course is designed to provide students with an introduction to important science and policy issues in selected watersheds throughout the world. Students receive an overview of place-based natural history, current ecological research, and current environmental issues and policy facing the region. Examples include the local and global effects of resource extraction, tourism, air and water pollution, land use changes, and global climate change. This is an expedition course (approximately 3 weeks) and is experiential in nature. Prerequisites: ENVS 100 and instructor permission.

ENVS 497  Special Topics  1-6 credits

ENVS 499  Internship in Environmental Studies  1-6 credits
An opportunity to apply skills and knowledge from course work to an employment setting. Prerequisite: approval from an Environment and Sustainability advisor and the Program Director.
EXERCISE AND SPORT SCIENCE (ESS)

The mission of the Exercise and Sport Science Program is to prepare students for careers focused on promoting healthy lifestyles and enhancing performance in exercise, sport, and physical activity settings. Students with a major or minor in Exercise and Sport Science can pursue entry-level careers in teaching, fitness, sport, and wellness in both private and public sectors. The Exercise and Sport Science Program also provides students with the background necessary to complete professional certifications and pursue a graduate degree in physical therapy and other allied health fields, exercise physiology, cardiac rehabilitation, or sport studies.

To graduate, all exercise and sport science majors must complete ESS 181 Foundations of Exercise and Sport Science and ESS 185 Lifetime Wellness with a minimum grade of “C”:

FACULTY
Professor Kathleen M. Kinkema; Associate Professor Ashwin J. Patel;
Assistant Professors Christina A. Buchanan and Lance Dalleck.

DESCRIPTION OF THE PROGRAMS

Exercise and Sport Science Nucleus:
ESS 181 Foundations of Exercise and Sport Science ........................................... 3 cr
ESS 185 Lifetime Wellness .................................................................................... 3 cr
ESS 320 Psychology of Sport and Physical Activity .............................................. 3 cr
ESS 490 Sociology of Sport and Physical Activity............................................. 3 cr
ESS 495 Senior Seminar in Exercise and Sport Science ...................................... 3 cr

Exercise and Sport Science Major: Standard Program

EXERCISE AND SPORT SCIENCE EMPHASIS
A minimum of 38 credits is required, including the 15-credit Exercise and Sport Science Nucleus, First Aid/CPR competency, and the following:
ESS 201 Essentials of Human Anatomy and Physiology (with laboratory)........ 4 cr
ESS 275 Motor Development and Learning....................................................... 3 cr
ESS 280 Biomechanics....................................................................................... 3 cr
ESS 330 Exercise Physiology.............................................................................. 3 cr
ESS 331 Exercise Physiology Lab........................................................................ 1 cr

Three of the following:
ESS 282 Principles of Sport and Fitness Management..................................... 3 cr
ESS 290 Curriculum Development and the Learning Environment................... 3 cr
ESS 340 Mental Training for Peak Performance.............................................. 3 cr
ESS 346 Psychology of Coaching....................................................................... 3 cr
ESS 355 Psychology of Injury............................................................................ 3 cr
ESS 360 Sport Nutrition and Supplementation.................................................. 3 cr
ESS 363 Adapted Physical Activity.................................................................... 3 cr
ESS 365 Topics in Physical Activity ................................................................. 3 cr
ESS 370 Essentials of Strength Training and Conditioning.............................. 3 cr
ESS 382 Management of Sport and Fitness Facilities........................................ 3 cr
Exercise and Sport Science

**SPORT AND FITNESS MANAGEMENT EMPHASIS**

A minimum of 46 credits is required, including the 15-credit Exercise and Sport Science Nucleus, First Aid/CPR competency, and the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Introduction to Financial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACC 202</td>
<td>Introduction to Managerial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Microeconomics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ESS 282</td>
<td>Principles of Sport and Fitness Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>ESS 385</td>
<td>Program Design for Physical Activity Settings</td>
<td>3 cr</td>
</tr>
<tr>
<td>ESS 405</td>
<td>Practicum in Exercise and Sport Science</td>
<td>1 cr</td>
</tr>
<tr>
<td>ESS 450</td>
<td>Risk Management in Physical Activity Settings</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 140</td>
<td>College Algebra</td>
<td>3 cr</td>
</tr>
<tr>
<td>ROE 333</td>
<td>Recreation and Sport Marketing</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

*One of the following:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 220</td>
<td>Computer Applications in Business</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIS 120</td>
<td>Information Management and Analysis</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

*One of the following:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESS 382</td>
<td>Management of Sport and Fitness Facilities</td>
<td>3 cr</td>
</tr>
<tr>
<td>ROE 466</td>
<td>Facilities Management</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Exercise and Sport Science Major: Comprehensive Program**

**EXERCISE SCIENCE EMPHASIS**

A minimum of 60 credits is required, including the 15-credit Exercise and Sport Science Nucleus, the 19-credit Exercise Science Core, First Aid/CPR competency, and the completion of either the clinical track or the health fitness track:

**Exercise Science Core**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESS 275</td>
<td>Motor Development and Learning</td>
<td>3 cr</td>
</tr>
<tr>
<td>ESS 280</td>
<td>Biomechanics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ESS 298</td>
<td>Fitness Instruction</td>
<td>3 cr</td>
</tr>
<tr>
<td>ESS 330</td>
<td>Exercise Physiology</td>
<td>3 cr</td>
</tr>
<tr>
<td>ESS 331</td>
<td>Exercise Physiology Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>ESS 410</td>
<td>Assessment and Exercise Prescription</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

*One of the following:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 300</td>
<td>Basic Nutrition</td>
<td>3 cr</td>
</tr>
<tr>
<td>ESS 360</td>
<td>Sport Nutrition and Supplementation</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Clinical Track (33-34 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150</td>
<td>Biological Principles (with laboratory)</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOL 372</td>
<td>Human Anatomy and Physiology I (with laboratory)</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOL 373</td>
<td>Human Anatomy and Physiology II (with laboratory)</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry Laboratory</td>
<td>1 cr</td>
</tr>
</tbody>
</table>
CHEM 113  General Chemistry II.......................................................... 3 cr
CHEM 114  General Chemistry Laboratory II...................................... 1 cr
ESS 430  Topics in Clinical Exercise Physiology.............................. 3 cr
MATH 140  College Algebra.............................................................. 3 cr
PHYS 140  Introductory Physics (with laboratory).............................. 4 cr

One of the following:
PSY 345  Biological Psychology (with laboratory)............................ 4 cr
PSY 369  Health Psychology............................................................. 3 cr
PSY 368  Abnormal Psychology.......................................................... 3 cr
PSY 475  Clinical Psychology............................................................. 3 cr

Health Fitness Track (25 credits)
ESS 201  Essentials of Human Anatomy and Physiology (with laboratory).... 4 cr
ESS 370  Essentials of Strength Training and Conditioning.................. 3 cr
ESS 385  Program Design for Physical Activity Settings...................... 3 cr
ESS 405  Practicum in Exercise and Sport Science............................. 1 cr
ESS 450  Risk Management in Physical Activity Settings..................... 3 cr

One of the following:
ESS 382  Sport and Fitness Facility Management.............................. 3 cr
ROE 466  Facilities Management...................................................... 3 cr

Three of the following:
ESS 340  Mental Training for Peak Performance.................................. 3 cr
ESS 355  Psychology of Injury............................................................ 3 cr
ESS 363  Adapted Physical Activity.................................................... 3 cr
ESS 365  Topics in Physical Activity.................................................... 3 cr

K-12 Physical Education Emphasis
A minimum of 52 credits is required, including the 15-credit Exercise and Sport Science Nucleus, First Aid/CPR competency, and the following:
ESS 201  Essentials of Human Anatomy and Physiology (with laboratory)...... 4 cr
ESS 275  Motor Development and Learning.......................................... 3 cr
ESS 280  Biomechanics................................................................. 3 cr
ESS 290  Curriculum Development and the Learning Environment........... 3 cr
ESS 330  Exercise Physiology............................................................ 3 cr
ESS 331  Exercise Physiology Lab...................................................... 1 cr
ESS 350  Instructional Assessment in Physical Education........................ 2 cr
ESS 363  Adapted Physical Activity.................................................... 3 cr
ESS 392  Methods of Secondary Activities........................................... 3 cr
ESS 395  Methods of Elementary Activities.......................................... 3 cr
ESS 396  Methods of Alternative Physical Education............................ 3 cr
ROE 189  Principles of Outdoor Recreation........................................ 3 cr

Three of the following:
ESS 210  Skill Development and Analysis: Net/Wall Games.................... 1 cr
ESS 211  Skill Development and Analysis: Invasion Games...................... 1 cr
ESS 212  Skill Development Analysis: Target/Fielding Games................... 1 cr
ESS 213  Skill Development and Analysis: Dance.................................... 1 cr

Students seeking Colorado licensure must fulfill the requirements for K-12 Physical Education Licensure (see description under Education).
Exercise and Sport Science Minor

This Minor consists of 18 credits including:

ESS 181  Foundations of Exercise and Sport Science............................................ 3 cr
ESS 185  Lifetime Wellness ...................................................................................... 3 cr
ESS electives at the 200-level or above
(excluding ESS 276 and ESS 221-229) ....................................................................... 12 cr

Exercise and Sport Science Minor: Sport Psychology

Concentration This minor consists of 18 credits including:

ESS 320 Psychology of Sport and Physical Activity................................................. 3 cr
ESS 340 Mental Training for Peak Performance...................................................... 3 cr
ESS 346 Psychology of Coaching............................................................................ 3 cr
ESS 355 Psychology of Injury.................................................................................. 3 cr
One of the following:
ESS 275  Motor Development and Learning.......................................................... 3 cr
ESS 490 Sociology of Sport and Physical Activity................................................... 3 cr
One of the following:
PSY 368 Abnormal Psychology............................................................................. 3 cr
PSY 369 Health Psychology................................................................................... 3 cr

Capstone Course Requirement. The following course in the Exercise and Sport Science Major fulfills the capstone course requirement: ESS 495 Senior Seminar in Exercise and Sport Science. Students completing the K-12 Physical Education Emphasis may use student teaching to fulfill this requirement.

Exercise and Sport Science Courses

All Exercise and Sport Science service courses (numbered 100-172) are beginner level unless otherwise designated.

ESS 100  Intercollegiate Athletics: Basketball 1 credit
Open to members of the intercollegiate athletic basketball team. May be taken one time for credit. Prerequisite: coach/instructor permission.

ESS 101  Intercollegiate Athletics: Cross Country 1 credit
Open to members of the intercollegiate athletic cross country team. May be taken one time for credit. Prerequisite: coach/instructor permission.

ESS 102  Intercollegiate Athletics: Football 1 credit
Open to members of the intercollegiate athletic football team. May be taken one time for credit. Prerequisite: coach/instructor permission.

ESS 103  Intercollegiate Athletics: Indoor Track 1 credit
Open to members of the intercollegiate athletic indoor track team. May be taken one time for credit. Prerequisite: coach/instructor permission.

ESS 104  Intercollegiate Athletics: Outdoor Track 1 credit
Open to members of the intercollegiate athletic outdoor track team. May be taken one time for credit. Prerequisite: coach/instructor permission.

ESS 105  Intercollegiate Athletics: Volleyball 1 credit
Open to members of the intercollegiate athletic volleyball team. May be taken one time for credit. Prerequisite: coach/instructor permission.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESS 106</td>
<td>Intercollegiate Athletics: Wrestling</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Open to members of the intercollegiate athletic wrestling team. May be taken one time for credit. Prerequisite: coach/instructor permission.</td>
<td></td>
</tr>
<tr>
<td>ESS 107</td>
<td>Intercollegiate Athletics: Soccer</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Open to members of the intercollegiate athletic soccer team. May be taken one time for credit. Prerequisite: coach/instructor permission.</td>
<td></td>
</tr>
<tr>
<td>ESS 108</td>
<td>Intercollegiate Athletics: Swimming</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Open to members of the intercollegiate athletic swimming team. May be taken one time for credit. Prerequisite: coach/instructor permission.</td>
<td></td>
</tr>
<tr>
<td>ESS 112</td>
<td>Select Activities in Recreation, Exercise and Sport Science</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>A specific activity is offered as student interest, facilities, faculty, and equipment are available.</td>
<td></td>
</tr>
<tr>
<td>ESS 114</td>
<td>Fly Fishing</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>An introduction to the activity, equipment, safety procedures, and terminology to develop proficiency in the fundamental skills of fly fishing.</td>
<td></td>
</tr>
<tr>
<td>ESS 126</td>
<td>Tennis</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Provides the novice the opportunity to develop basic tennis skills. Particular emphasis is placed on the forehand and backhand strokes and the service. Students are introduced to singles and doubles play and court etiquette. Provide one can of tennis balls.</td>
<td></td>
</tr>
<tr>
<td>ESS 131</td>
<td>Physical Conditioning</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Students develop the knowledge of how to improve cardiovascular endurance, strength, and flexibility in a natural outdoor setting. Students learn how to plan and carry out activities without dependency on others.</td>
<td></td>
</tr>
<tr>
<td>ESS 132</td>
<td>Weight Training</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>The theory and practice of weight training. Information is presented concerning physiological and bio-mechanical adaptations accompanying resistive training, reasonable methods of improving athletic performance, and methods of resistance training that can lead to improved quality of life.</td>
<td></td>
</tr>
<tr>
<td>ESS 134</td>
<td>Ski Conditioning</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>An introduction and practice in a combination of activities to provide the student with a systematic approach to ski conditioning and all-around physical conditioning.</td>
<td></td>
</tr>
<tr>
<td>ESS 135</td>
<td>Mountain Bike Riding</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Students develop general knowledge of and proficiency in the activity, equipment, safety procedures, and terminology of the fundamental skills of mountain bike riding.</td>
<td></td>
</tr>
<tr>
<td>ESS 137</td>
<td>Triathlon Training</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Students become familiar with the components of a successful triathlon training program. Students are taught to maximize their potential in swimming, biking, and running and to rotate these sports to maximize their time and energy.</td>
<td></td>
</tr>
<tr>
<td>ESS 160</td>
<td>Swimming (Beginning)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>An introduction to swimming designed to equip the students with the basic water-safety skills and knowledge needed to be reasonably safe while in, on, or about the water.</td>
<td></td>
</tr>
</tbody>
</table>
ESS 161 Swimming (Intermediate) 1 credit
Satisfactory completion of these skills leads to the Red Cross Intermediate and Swimmer's Certificate.

ESS 170 Lifeguard Training 2 credits
Provides the individual with the knowledge and skills designed to save one’s own life or the life of another in the event of an emergency, with certification by the American Red Cross.

ESS 172 Water Safety Instruction 3 credits
Satisfactory completion of these skills leads to the Red Cross WSI Certificate.

ESS 181 Foundations of Exercise and Sport Science 3 credits
An introduction to the field of exercise and sport science. An overview of philosophical, historical, and scientific foundations, current trends and issues, professional opportunities, and skills and competencies required for careers in a wide variety of physical activity settings.

ESS 185 Lifetime Wellness 3 credits
Provides conceptual and experiential components designed as a basis for developing a healthier lifestyle.

ESS 197 Special Topics 1-6 credits

ESS 201 Essentials of Human Anatomy and Physiology (with Lab) 4 credits
An introduction to basic anatomy and physiology of all human systems. Lab and lecture are integrated.

ESS 210 Skill Development and Analysis: Net and Wall Games 1 credit
Skill development and analysis in net and wall games, including tennis, volleyball, pickleball, handball, and badminton. Learning and application of content in a developmental model, history, scoring, rules, terminology, equipment, and safety considerations are included.

ESS 211 Skill Development and Analysis: Invasion Games 1 credit
Skill development and analysis for invasion games, including soccer, lacrosse, team hand-ball, speedball, basketball, ultimate Frisbee, and flagball. Learning and application of content in a developmental model, history, scoring, rules, terminology, equipment, and safety considerations are included.

ESS 212 Skill Development and Analysis: Target and Fielding Games 1 credit
Skill development and analysis for target and fielding games including bowling, archery, golf (traditional and disc), softball, and bocce. Learning and application of content in a developmental model, history, scoring, rules, terminology, equipment, and safety considerations are included.

ESS 213 Skill Development and Analysis: Dance 1 credit
Skill development and analysis for a variety of dance forms including fitness, folk, country, social, and ballroom. Learning and application of content in a developmental model, history, scoring, rules, terminology, equipment, and safety considerations are included.

ESS 221 Methods of Coaching Football 2 credits
The fundamental principles and play of football, including a basic defensive and offen-
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESS 276</td>
<td>Emergency Response</td>
<td>3 credits</td>
</tr>
<tr>
<td>ESS 280</td>
<td>Biomechanics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ESS 282</td>
<td>Principles of Sport and Fitness Management</td>
<td>3 credits</td>
</tr>
<tr>
<td>ESS 290</td>
<td>Curriculum Development and the Learning Environment</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Essive game plan, the fundamentals and techniques involved in coaching football, a basic outline of coaching the quarterback, the moral and ethical responsibilities of the coach to game participants, administration, etc., as well as coaching philosophy and interpretation of the rules.

**ESS 223 Methods of Coaching Basketball**  
A study of individual fundamentals and techniques, as well as team offensive and defensive patterns and strategies involved in coaching basketball.

**ESS 225 Methods of Coaching Wrestling**  
An introduction to all phases of wrestling. Fundamental movements and techniques, rule interpretations, and approved coaching ethics are covered.

**ESS 227 Methods of Coaching Track and Field**  
The techniques and fundamentals of each track and field event. The course also includes the important phase of practical track meet management.

**ESS 229 Methods of Coaching Volleyball**  
Lecture and discussion with research assignments and practicum work. An understanding of basic offenses (6-0 and 4-2), basic defensive coverage and rotations, service reception, and serving sets are presented.

**ESS 275 Motor Development and Learning**  
An application of the knowledge of motor development and learning to physical activity across the lifespan. This class introduces the physiological, perceptual, and cognitive, as well as the affective changes that occur in motor development and learning across the lifespan. Prerequisite: ENG 102 with a minimum grade of “C-”.

**ESS 276 Emergency Response**  
Students are provided essential knowledge and skills needed to develop CPR and advanced first-aid capabilities. For students who might be required to provide first aid frequently and for special interest groups. Exercise and Sport Science majors have first option for this course.

**ESS 280 Biomechanics**  
Basic bone, joint, muscle and movement information is presented and used to gain an understanding of basic biomechanical principles including body levers, correct and efficient movement, and application of movement to the varied aspects of health, wellness, teaching, and sport. Prerequisites: ESS 181, ESS 185, ESS 201 or BIOL 372, completion of the University Mathematics course requirement.

**ESS 282 Principles of Sport and Fitness Management**  
A focus on the administration of programs within the sport and fitness industries. Topics include administrative theories and concepts, personnel, communication and problem-solving, fiscal management, budgeting, ethical considerations, and program evaluation. Prerequisite: ENG 102 with a minimum grade of “C-”; ESS 181 or ROE 182; or instructor permission.

**ESS 290 Curriculum Development and the Learning Environment**  
A comprehensive overview of materials, suggested teaching methods, procedures, techniques, well-directed and well-selected activities, and ways of evaluating physical education in K-12 schools.
ESS 298 Fitness Instruction 3 credits
Students develop knowledge and skills to plan and implement group fitness classes as well as personal training sessions. Topics include: risk management, exercise plans, group fitness instruction, personal training, fitness pedagogy, training special populations, cardiovascular fitness, resistance training, flexibility training, and core stability. Prerequisite: ESS 201 or BIOL 372.

ESS 320 Psychology of Sport and Physical Activity 3 credits
A variety of issues and research areas in the psychology of sport and physical activity are addressed. Topics covered include an overview of the development of sport and exercise psychology, personality theories, exercise and mood, exercise adherence, goal setting, motivation, psychological interventions for athletes, and cohesion theories. Prerequisite: minimum junior standing.

ESS 330 Exercise Physiology 3 credits
An emphasis on the theory and principles of exercise physiology to health, physical fitness, and athletic performance in diverse populations. Prerequisites: ESS 201 or both BIOL 372 and BIOL 373.

ESS 331 Exercise Physiology Lab 1 credit
Basic laboratory techniques of exercise physiology correlating with ESS 330. Laboratory experiences include aerobic and anaerobic exercise, body composition, strength, flexibility, and body composition and other indicators of exercise. Prerequisites: completion of the University Mathematics course requirement; Corequisite: ESS 330.

ESS 340 Mental Training for Peak Performance 3 credits
An application of theories and concepts of sport psychology. This course focuses on application of specific psychological skills necessary for high level performance and assisting students in teaching others those same skills. Prerequisite: ESS 320 or instructor permission.

ESS 346 Psychology of Coaching 3 credits
An exploration of psychological factors involved in coaching and leadership. Relevant theory and research, as well as practical applications, are discussed. Topics include expert coaching characteristics and behaviors, leadership and motivational styles, the coach-athlete relationship, stresses of coaching, reinforcement strategies, ethics in coaching, and issues related to youth sport coaching. Prerequisites: ESS 320, minimum junior standing or instructor permission.

ESS 350 Instructional Assessment in Physical Education 2 credits
A study of planning, administering, and evaluating accountability systems in physical education settings. Multiple assessment strategies for psychomotor, cognitive and affective learning objectives are presented. Students select and/or construct assessment tools to match specific learning outcomes in the K-12 physical education curriculum. Prerequisites: Prerequisites: ESS 181, completion of the University Mathematics course requirement and ESS 290.

ESS 353 Coordinated School Health Programs 1 credit
Overview of coordinated school health programs with a focus on the school health education curriculum. Other components include school health services, healthy school environments, nutrition services, counseling, psychological, and social services, health
Exercise and Sport Science

ESS 355  Psychology of Injury  3 credits
An exploration of psychological factors involved in sport-related injuries and the rehabilitation process. Course content includes relevant theory and research as well as practical applications. Topics include: stress, responses to injury, mental skills used to manage injury (i.e., goal setting, motivation, and confidence), social support, potential psychological problems faced during rehabilitation, and returning to sport after injury. Prerequisites: ESS 320, minimum junior standing or instructor permission.

ESS 360  Sport Nutrition and Supplementation  3 credits
A focus on concepts geared to promote peak performance based upon nutritional intake. An understanding of macronutrient ingestion along with other essential nutrients is gained and applied in detail to the physically active population. This includes an understanding of the metabolic effect of food. The pros and cons of select sport supplements are discussed and applied to real-life scenarios. Prerequisites or co-requisites: ESS 330 and ESS 331.

ESS 363  Adapted Physical Activity  3 credits
Students develop knowledge and skills necessary to work with individuals having diverse needs in physical education, recreation, sport, fitness, or rehabilitation settings. Content includes planning, instructional design, assessment, coordination of resources, and advocacy in physical activity settings. Prerequisites: ESS 275 and minimum junior standing.

ESS 365  Topics in Physical Activity:  3 credits
An interdisciplinary study of the role of physical activity under a variety of conditions and settings, and for a variety of populations. Content focuses on current research and practice as it relates to the topic under consideration. Topics rotate annually. Can be repeated up to three times for credit if a different topic is selected. Prerequisites: ESS 181, ESS 185; ESS 201 or BIOL 372; minimum junior standing.

ESS 370  Essentials of Strength Training and Conditioning  3 credits
An inquiry into exercise prescription and conditioning in the form of resistance training, including free and fixed weights, Olympic lifts, and plyometrics. Muscular adaptations to anaerobic and aerobic training, testing and evaluation, program design, and appropriate training routines and lifting technique for a variety of populations are included. Content aligns with certification exam requirements for the Certified Strength and Conditioning Specialist (CSCS) from the National Strength and Conditioning Association (NSCA). Prerequisite: ESS 330 or instructor permission.

ESS 382  Management of Sport and Fitness Facilities  3 credits
A study of the principles, guidelines and recommendations for planning, construction and the use and maintenance of indoor and outdoor sports, physical education, recreational and fitness facilities. Prerequisite: ESS 181.

ESS 385  Program Design for Physical Activity Settings  3 credits
A focus on the principles of behavior modification and how they apply to program design and implementation in physical activity settings. Comprehensive behavior modification programs within exercise, wellness or sport settings are designed. Prerequisite: ESS 185.
ESS 392 Methods of Secondary Activities 3 credits
For students planning to obtain licensure in physical education. A variety of curriculum models (e.g., tactical, sport education, social responsibility) are used to present individual, dual and team sport activities. Lesson and unit plans are developed, implemented and assessed in keeping with Colorado and NASPE standards as they relate to secondary physical education. Prerequisites: two of the following: ESS 210, ESS 211, ESS 212, ESS 213; ESS 290; minimum junior standing. Prerequisite or corequisite: ESS 350.

ESS 395 Methods of Elementary Activities 3 credits
Units covered may include apparatus and tumbling, dance, and games. Each unit breaks down into sub-units, and progressions are emphasized. Lesson and unit plans are developed, implemented, and assessed in keeping with national standards and as they relate to elementary physical education. Competencies in the basic skills of each unit are also tested. Prerequisites: ESS 290, minimum junior standing; admission to the major or instructor permission. Prerequisites: two of the following: ESS 210, 211, 212, 213; ESS 290; and minimum junior standing; Prerequisite or corequisite: ESS 350.

ESS 396 Methods of Alternative Physical Education 3 credits
Units covered may be Nordic skiing, rock climbing, orienteering, camping, mountain biking, and adventure activities. Lesson and unit plans are developed, implemented, and assessed in keeping with national standards as they relate to secondary physical education. Prerequisites: ESS 290, ROE 189, and minimum of junior standing.

ESS 397 Special Topics 1-6 credits

ESS 405 Practicum in Exercise and Sport Science 1 credit
Pre-professional experience in a physical activity setting. Such experiences include observing and participating in the professional activities associated with the particular setting. Students work with an Exercise and Sport Science faculty member to select an approved practicum experience, and are required to develop an approved learning contract. May be repeated once for credit (in a different setting). Prerequisites: ESS 181, ESS 185, junior or senior standing.

ESS 410 Assessment and Exercise Prescription 3 credits
Students work with assessment formats, appraisal techniques, and metabolic calculations to gain information needed to construct exercise prescriptions designed to meet individual needs for different segments of the population. Prerequisites: ESS 331 and ESS 298 or instructor permission.

ESS 430 Topics in Clinical Exercise Physiology 3 credits
A study of diseased populations, including, but not limited to, exercise therapy in cardiac and cancer patients. Course content focuses on the etiology and pathophysiology of disease, electrocardiogram and diagnostic stress test interpretation, specialized exercise prescription, and other topics at the discretion of the instructor. Prerequisites: ESS 330 and ESS 331.

ESS 450 Risk Management in Physical Activity Settings 3 credits
A focus on risk assessment and management for physical activity professionals. Topics covered include risk assessment, standard of care, negligence, forms to limit liability, constitutional law as relevant for physical activity professionals, development of a risk management plan, and risk reduction strategies. Prerequisites: junior or senior
ESS 490 Sociology of Sport and Physical Activity 3 credits
A focus on the social organization of sport and physical activity and their relationship to the institutional structure, cultural patterns, and dynamics of American society. Students use different sociological approaches/theories to analyze sport and physical activity and to analyze current issues and problems in sport and physical activity settings. Prerequisite: minimum junior standing.

ESS 492 Independent Study 1-4 credits
For qualified upper-level students who have specialized interests in a particular area of advanced study in Exercise and Sport Science.

ESS 495 Senior Seminar in Exercise and Sport Science 3 credits
A capstone course required for all ESS majors addressing issues, ethical considerations, problem-solving and decision-making, leadership and communication in the discipline. Students integrate content from their course of study, write and speak in discipline-specific formats, and complete a comprehensive self-assessment in preparation for graduate school, internship, or entry-level job. Prerequisite: ESS 181, ESS 185, senior standing. Students are encouraged to take this course during their final semester.

ESS 496 Field Experiences 1-6 credits
Directed field experiences in teaching, coaching, and laboratory settings. Guidelines for the field experiences are provided and agreed upon at the beginning of the course.

ESS 497 Special Topics 1-6 credits

ESS 498 Internship in Exercise and Sport Science 6-9 credits
An opportunity for in-depth work at a site in an area of exercise and sport science. The experiences must meet standards of the department and the University. Prerequisites: satisfactory grade in ESS 405, overall GPA of 2.750, department advisor permission, and completion of all major course requirements.
**French (FREN)**

The French program allows its students to study the language, literature, and culture of France and French-speaking countries. Graduates of the French Minor are expected to have an understanding of and proficiency in comprehending, speaking, reading, and writing French; to be acquainted with the phonology of modern French dialects and to explore the sound system; to be able to read, discuss, critique and appreciate the literary value of Francophone literature; and to be familiar with and appreciate Franco civilization and culture. Opportunities to study in Canada or France are provided.

Some graduates who minored in French are teachers and professors, while others work for the federal government or with major corporations concerned with international business. They are also prepared for a variety of other positions, such as court translators, interpreters, and hotel managers in resort areas.

**Faculty**

Professor Helynne H. Hansen.

**Description of the Program**

French Minor

The French minor consists of 18 credits of French courses and laboratory work (beyond FREN 101 and 102) to be selected with an advisor. The 18 credits are to be chosen from the following:

- FREN 254  Intermediate French I.............................................................. 3 cr
- FREN 255  Intermediate French II ............................................................ 3 cr
- FREN 256  French Literature in Translation .............................................. 3 cr
- FREN 264  French Conversation and Composition I................................. 3 cr
- FREN 380  History of French Civilization.................................................. 3 cr
- FREN 392  Independent Study.................................................................... 1-6 cr
- FREN 432  Contemporary French Life....................................................... 3 cr
- FREN 490  Workshop in France ................................................................. 1-8 cr

**French Courses**

**FREN 101  Elementary French I** 3 credits

An introduction to understanding, speaking, writing, and reading French. Reserved for students with fewer than two years of high school French.

**FREN 102  Elementary French II** 3 credits

A continuation of FREN 101. Prerequisite: FREN 101 or equivalent.

**FREN 254  Intermediate French I** 3 credits

A continuation of the elementary course with special emphasis on speaking and writing the language. Prerequisites: FREN 101 and FREN 102 or equivalent (two years or more of high school French).

**FREN 255  Intermediate French II** 3 credits

A systematic review of French grammar through translation and reading of modern texts. Prerequisites: FREN 254 or equivalent.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 256</td>
<td>French Literature in Translation</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>A survey of well-known and respected works of French-language literature, from the Middle Ages through modern times that have been translated into English. All class discussion and writing assignments are in English. Prior French-language courses are not required.</td>
<td></td>
</tr>
<tr>
<td>FREN 264</td>
<td>French Conversation and Composition I</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>Intensive conversation and composition to achieve competency in the target language. Prerequisite: FREN 254 or equivalent.</td>
<td></td>
</tr>
<tr>
<td>FREN 297</td>
<td>Special Topics</td>
<td>1-6 credits</td>
</tr>
<tr>
<td>FREN 380</td>
<td>History of French Civilization</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>A survey of the history, institutions, and arts of the French nation, from its origin to the present. Conducted in French except when the course is offered through the Honors Program. Prerequisite: FREN 255 or equivalent.</td>
<td></td>
</tr>
<tr>
<td>FREN 392</td>
<td>Independent Study</td>
<td>1-6 credits</td>
</tr>
<tr>
<td></td>
<td>An opportunity for individual research on topics of interest to students (literature, business, education, media), studied from the French perspective. Prerequisite: FREN 254.</td>
<td></td>
</tr>
<tr>
<td>FREN 397</td>
<td>Special Topics</td>
<td>1-6 credits</td>
</tr>
<tr>
<td>FREN 432</td>
<td>Contemporary French Life</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>An introduction to the customs and contemporary lifestyles of native speakers of the French language, from France and its various regions to French-speaking Europe, Africa, and North America. The course provides insights that enable students to relate to and interact with people of the French-speaking world. Prerequisite: FREN 255.</td>
<td></td>
</tr>
<tr>
<td>FREN 490</td>
<td>Workshop in France</td>
<td>1-8 credits</td>
</tr>
<tr>
<td></td>
<td>A series of workshops, offered in France or other French-speaking countries of the world, which are designed to study various aspects of contemporary issues in modern France: business, media, society, etc.</td>
<td></td>
</tr>
<tr>
<td>FREN 492</td>
<td>Independent Study</td>
<td>1-4 credits</td>
</tr>
<tr>
<td></td>
<td>A special study in areas of student interest. May be taken for a maximum of four credits.</td>
<td></td>
</tr>
<tr>
<td>FREN 497</td>
<td>Special Topics</td>
<td>1-6 credits</td>
</tr>
</tbody>
</table>
**GEOGRAPHY (GEOG)**

Geographers study places, natural and human-altered landscapes, and processes by which people make their livelihood and give their lives meaning, and in so doing, create and modify their environments. The Geography Program at Western State Colorado University emphasizes the study of human geography while providing background in sciences that improve our understanding of the natural environment through courses offered by other disciplines.

A minor in Geography complements a major in many other disciplines including Biology, Business Administration, Economics, English, Environmental Studies, Geology, History, Politics and Government, Psychology, and Sociology.

**FACULTY**

Professor Philip L. Crossley.

**DESCRIPTION OF THE PROGRAM**

**Geography Minor**

A minimum of 21 credits is required including:

- GEOG 110 World Regional Geography ................................................................. 3 cr
- GEOG 120 Introduction to Human Geography .................................................... 3 cr
- GEOG 222 Map and Air Photo Interpretation ...................................................... 3 cr
- GEOG 250 Geography of North America ............................................................ 3 cr
- One of the following:
  - BIOL 130 Environmental Biology ................................................................. 3 cr
  - GEOL 101 Physical Geology ............................................................................. 3 cr
  - PHYS 120 Meteorology ..................................................................................... 3 cr
- Two of the following:
  - ANTH 320 Cultural Ecology ............................................................................ 3 cr
  - ENVS 360 Global Environmental Policy ......................................................... 3 cr
  - GEOG 330 Urban Geography ............................................................................ 3 cr
  - GEOG 340 Introduction to Geographic Information Systems ......................... 3 cr
  - GEOG 351 Geography of Latin America and the Caribbean ......................... 3 cr
  - GEOG 499 Internship in Geography ................................................................ 3 cr

**GEOGRAPHY COURSES**

**GEOG 110  World Regional Geography 3 credits**

A survey of the major regions of the contemporary world—defined according to a combination of biophysical, cartographic, cultural, religious, linguistic, political, and economic criteria. Emphasis is given to understanding regional characteristics and processes, and to relationships between events and processes occurring in different regions. Current events of major importance are incorporated where appropriate. GT-SS2

**GEOG 120  Introduction to Human Geography 3 credits**

A thematic study of cultural landscapes and the processes by which people create and modify them. Topics of discussion range from ancient to modern, rural to urban, local to international, and include themes as diverse as the origins and spread of agriculture, migration and immigration, urban morphologies and social interactions, ethnicity, development and underdevelopment, and environmental concerns.
GEOG 197  Special Topics  1-6 credits

GEOG 222  Map and Air Photo Interpretation  3 credits
Acquaints students with the basic principles and techniques of map making and interpretation, and with the features, methods of interpretation, and limitations of aerial photography. Emphasis is on the skilled use of topographic maps, creation and interpretation of thematic maps, and interpretation of rural and urban cultural landscapes from various forms of aerial photography.

GEOG 250  Geography of North America  3 credits
A survey of the major biophysical, cultural, and economic regions of the United States and Canada. Major themes of human geography including demography, migration, land use change, and ecological concerns are addressed in appropriate regional contexts. Prerequisite: GEOG 120 or sophomore standing. GT-SS2

GEOG 297  Special Topics  1-6 credits

GEOG 330  Urban Geography  3 credits
A thematic approach to making sense of cities. Topics include ancient and modern forms of urbanization, how cities create their own climates, and how they function as economies, places of residence, interaction, segregation, and meaning. Prerequisite: GEOG 120 or sophomore standing.

GEOG 340  Introduction to Geographic Information Systems  3 credits
An introduction to the concepts and techniques of Geographic Information Systems (GIS). Topics covered include fundamentals of mapping, data formats, data acquisition, and quantitative analysis of spatial data. The laboratory component emphasizes practical applications of GIS to contemporary problems including but not limited to watershed analysis, land-use planning, environmental assessment, and market analysis. Prerequisites: GEOG 222 or GEOL 105; university-level mathematics requirement with a minimum grade of “C-”; junior standing or instructor permission.

GEOG 351  Geography of Latin America and the Caribbean  3 credits
A thematic study of the physiographic and cultural regions of Latin America and the major historical and contemporary geographic processes that characterize the region. Major topics of discussion include climate and physiography, environmental concerns and human rights, the nature of Latin American cities, pre-Hispanic and modern agriculture, and the nature of contemporary economic processes in the region. Prerequisite: GEOG 120 or sophomore standing.

GEOG 392  Independent Study  1-6 credits
An opportunity for detailed study and/or research by advanced students. Prerequisites: GEOG 110 and GEOG 120.

GEOG 397  Special Topics  1-6 credits

GEOG 497  Special Topics  1-6 credits

GEOG 499  Internship in Geography  1-3 credits
Provides the opportunity for advanced students to apply skills and knowledge gained from course work to an applied setting typical of those in which geographers are employed. Prerequisite: junior standing and completion of all other geography requirements.
**GEOLOGY (GEOL)**

Geology is the study of the Earth. This includes the study of rocks and minerals, topography, the tectonics of the Earth (earthquakes, volcanism, and mountain building), the physical history of the Earth, and the history of life on the Earth. In studying the Earth, the Geology student is closely involved with the related sciences of chemistry, physics, and mathematics. The interrelationship between Earth processes and man is stressed in many Geology classes. Western State Colorado University is a particularly wonderful place to study Geology because of the natural setting that enables field studies to be utilized in all Geology classes.

The Geology Major successfully prepares students for entry-level positions in the petroleum and mineral industries, in environmental science, or in various government agencies. Students are also well prepared to enter graduate programs in Geology. The program meets or exceeds American Geological Institute standards.

**FACULTY**

Professors Robert P. Fillmore and Allen L. Stork;
Associate Professor David W. Marchetti;
Moncrief Chair in Petroleum Geology and Assistant Professor Timothy F. Wawrzyniec.

**DESCRIPTION OF THE PROGRAMS**

The Geology program provides a Comprehensive Major with an area of emphasis selected according to the interests and career goals of the student. These emphases are: geology, geoarchaeology, petroleum geology, and secondary licensure in earth-space science. The program requirements for the various emphases range from 60 to 69 credits.

The Secondary Licensure in Earth-Space Science Emphasis qualifies students for the State of Colorado License in Science Education. Other Geology emphases may also be used for secondary licensure but may require additional classes.

**Geology Major: Comprehensive Program**

**GEOLOGY EMPHASIS**

The Standard Geology Emphasis requires a minimum of 66 credits:

- **GEOL 101** Physical Geology ................................................................. 3 cr
- **GEOL 105** Physical Geology Laboratory ................................................. 1 cr
- **GEOL 201** Historical Geology (with laboratory) ..................................... 4 cr
- **GEOL 302** Geoscience Writing ........................................................... 2 cr
- **GEOL 305** Mineralogy (with laboratory) ................................................. 4 cr
- **GEOL 310** Stratigraphy/Sedimentation (with laboratory) ....................... 4 cr
- **GEOL 311** Igneous/Metamorphic Petrology (with laboratory) ............... 4 cr
- **GEOL 320** Geomorphology (with laboratory) ......................................... 4 cr
- **GEOL 345** Structural Geology (with laboratory) ..................................... 4 cr
- **GEOL 450** Field Geology ....................................................................... 4 cr
- **GEOL 495** Research Seminar in Geology (must be repeated for 2 credits) .... 2 cr

*One of the following:*

- **GEOL 411** Research in Volcanology and Petrology (with laboratory) ....... 3 cr
- **GEOL 420** Research in Quaternary Geology (with laboratory) ............... 3 cr
GEOL 465 Research in Basin Analysis (with laboratory)......................... 3 cr
Required supporting courses:
CHEM 111 General Chemistry I................................................................. 3 cr
CHEM 112 General Chemistry Laboratory I............................................... 1 cr
CHEM 113 General Chemistry II .................................................................. 3 cr
CHEM 114 General Chemistry Laboratory II.............................................. 1 cr
MATH 151 Calculus I .................................................................................... 4 cr
MATH 251 Calculus II .................................................................................... 4 cr
One of the following:
CIS 190 Computer Science I........................................................................ 3 cr
GEOG 340 Introduction to Geographic Information Systems .................. 3 cr
MATH 213 Probability and Statistics......................................................... 3 cr
MATH 252 Calculus III ................................................................................ 4 cr
Either both:
PHYS 170 Principles of Physics I (with laboratory) .................................. 4 cr
PHYS 171 Principles of Physics II (with laboratory) .................................. 4 cr
or both:
PHYS 200 General Physics I (with laboratory) .......................................... 4 cr
PHYS 201 General Physics II (with laboratory) ......................................... 4 cr

GEOARCHAEOLOGY EMPHASIS
The Geoarchaeology Emphasis requires a minimum of 60 credits:
GEOL 101 Physical Geology.......................................................................... 3 cr
GEOL 105 Physical Geology Laboratory....................................................... 1 cr
GEOL 201 Historical Geology (with laboratory) .......................................... 4 cr
GEOL 302 Geoscience Writing...................................................................... 2 cr
GEOL 310 Stratigraphy/Sedimentation (with laboratory) ......................... 4 cr
GEOL 320 Geomorphology (with laboratory) ............................................. 4 cr
GEOL 345 Structural Geology (with laboratory) ........................................ 4 cr
GEOL 450 Field Geology................................................................................ 4 cr
One of the following:
GEOL 420 Research in Quaternary Geology (with laboratory) ............... 3 cr
GEOL 465 Research in Basin Analysis (with laboratory) ......................... 3 cr
Required supporting courses:
ANTH 107 Introduction to General Anthropology .................................... 3 cr
ANTH 218 Physical Anthropology (with laboratory)................................ 4 cr
ANTH 219 Archaeology (with laboratory).................................................. 4 cr
ANTH 230 Cultural Anthropology (with laboratory) ................................ 4 cr
GEOG 340 Introduction to Geographic Information Systems .................. 3 cr
Two of the following:
ANTH 322 Analysis of Material Culture (with laboratory) ....................... 4 cr
ANTH 333 Archaeology of Colorado........................................................... 3 cr
ANTH 469 Archaeology Field School......................................................... 4 cr
Either:
CHEM 101 Introduction to Inorganic Chemistry........................................ 3 cr
or both of the following:
CHEM 111 General Chemistry I................................................................. 3 cr
CHEM 112 General Chemistry Laboratory I............................................... 1 cr
One of the following:
ANTH 265 Anthropological Writing and Statistics ................................................ 3 cr
MATH 213 Probability and Statistics ................................................................. 3 cr

**PETROLEUM GEOLGY EMPHASIS**
A minimum of 69 credits is required:

GEOL 101  Physical Geology.............................................................................. 3 cr
GEOL 105  Physical Geology Laboratory.......................................................... 1 cr
GEOL 201  Historical Geology (with laboratory) ............................................. 4 cr
GEOL 302  Geoscience Writing......................................................................... 2 cr
GEOL 305  Mineralogy (with laboratory)............................................................ 4 cr
GEOL 310  Stratigraphy/Sedimentation (with laboratory).............................. 4 cr
GEOL 345  Structural Geology (with laboratory).............................................. 4 cr
GEOL 346  Subsurface Geology (with laboratory)............................................ 4 cr
GEOL 352  Applied Geophysics (with laboratory)............................................ 4 cr
GEOL 430  Hydrogeology.................................................................................. 3 cr
GEOL 450  Field Geology.................................................................................. 4 cr
GEOL 455  Petroleum Geology (with laboratory).............................................. 4 cr
GEOL 465  Research in Basin Analysis (with laboratory)................................. 3 cr
GEOL 495  Geology Seminar............................................................................. 1 cr

Required supporting courses:

CHEM 111  General Chemistry I ........................................................................ 3 cr
CHEM 112  General Chemistry Laboratory I..................................................... 1 cr
CHEM 113  General Chemistry II ..................................................................... 3 cr
CHEM 114  General Chemistry Laboratory II................................................... 1 cr
MATH 151  Calculus I ....................................................................................... 4 cr
MATH 251  Calculus II ..................................................................................... 4 cr
PHYS 170  Principles of Physics I (with laboratory).......................................... 4 cr
PHYS 171  Principles of Physics II (with laboratory)......................................... 4 cr

**SECONDARY LICENSURE IN EARTH-SPACE SCIENCE EMPHASIS**

Students interested in pursuing this comprehensive program should consult with the Teacher Education Program advisor in addition to the advisor in their major as soon as possible. The Secondary Licensure in Earth-Space Science Emphasis requires a minimum of 68 credits, and the requirements of the Secondary Licensure Program (see description under Education).

Geology requirements:

GEOL 101  Physical Geology.............................................................................. 3 cr
GEOL 105  Physical Geology Laboratory.......................................................... 1 cr
GEOL 201  Historical Geology (with laboratory) ............................................. 4 cr
GEOL 302  Geoscience Writing......................................................................... 2 cr
GEOL 305  Mineralogy (with laboratory)............................................................ 4 cr
GEOL 310  Stratigraphy/Sedimentation (with laboratory).............................. 4 cr
GEOL 345  Structural Geology (with laboratory).............................................. 4 cr
GEOL 450  Field Geology.................................................................................. 4 cr
GEOL 495  Research Seminar in Geology....................................................... 1 cr
Required supporting courses:

- BIOL 150 Biological Principles (with laboratory) ........................................ 4 cr
- BIOL 151 Diversity and Patterns of Life (with laboratory) ........................ 4 cr
- BIOL 301 General Ecology ........................................................................ 3 cr
- CHEM 111 General Chemistry I ................................................................ 3 cr
- CHEM 112 General Chemistry Laboratory I ................................................ 1 cr
- CHEM 113 General Chemistry II ................................................................. 3 cr
- CHEM 114 General Chemistry Laboratory II ............................................... 1 cr
- PHYS 110 Solar System Astronomy ............................................................ 3 cr
- PHYS 120 Meteorology ............................................................................. 3 cr
- PHYS 170 Principles of Physics I (with laboratory) .................................... 4 cr
- PHYS 171 Principles of Physics II (with laboratory) .................................... 4 cr

One of the following:

- MATH 141 Precalculus ............................................................................. 4 cr
- MATH 151 Calculus I ............................................................................. 4 cr

Geology Minor

A minimum of 18 credits including:

- GEOL 101 Physical Geology .................................................................... 3 cr
- GEOL 105 Physical Geology Laboratory .................................................. 1 cr
- GEOL 201 Historical Geology (with laboratory) ....................................... 4 cr

Ten credits from the following:

- GEOL 220 Field Geology of Western North America .............................. 1 cr

Or Geology courses numbered 300 or above

Capstone Course Requirement. The following courses fulfill the capstone course requirement in the Geology Major: GEOL 495 Research Seminar in Geology, plus one of the following: GEOL 411 Research in Volcanology and Petrology, GEOL 420 Research in Quaternary Geology, or GEOL 465 Research in Basin Analysis (Geology Emphasis); GEOL 420 Research in Quaternary Geology, or GEOL 465 Research in Basin Analysis (Geoarchaeology Emphasis); GEOL 465 Research in Basin Analysis (Petroleum Geology Emphasis); EDUC 409 Secondary Student Teaching (Secondary Licensure in Earth-Space Science Emphasis).

GEOLOGY COURSES

GEOL 101 Physical Geology .......................... 3 credits

An introductory class that emphasizes the environmental aspects of geology. The course covers the basic principles of physical geology, such as minerals, rocks, plate tectonics, earthquakes, volcanoes, and origin of landscapes by mass wasting, rivers, glaciers, ground water, and nearshore processes. Throughout this course, focus is on the effect of geology on human society through the study of geologic hazards, energy resources, and mineral resources. GT-SC2

GEOL 105 Physical Geology Laboratory .......... 1 credit

An introduction to identification of minerals and rocks and a discussion of their genesis followed by a study of landscapes formed by mass wasting, rivers, glaciers, ground water, and nearshore processes. Many of these principles are observed on local field trips. Prerequisite or corequisite: GEOL 101. GT-SC1

GEOL 197 Special Topics ............................... 1-6 credits
GEOL 201  Historical Geology (with laboratory)  4 credits
A study of the interpretation of the geologic history, structure, and evolution of the Earth with emphasis on methods and concepts rather than factual information. Colorado geo-logic history and various principles are observed during three or four field trips. Topics and concepts such as geophysics, continental drift, and plate tectonics are integrated into discussions of Earth history. Prerequisites: GEOL 101 and GEOL 105.

GEOL 220  Field Geology of Western North America  1 credit
An illustration of basic geologic principles using field trips to classic localities throughout western North America. Field trips change each year depending on student interest. Past field trips have gone to the Grand Canyon as well as other locales. A student may earn a maximum of two credits under this course number. Prerequisite: GEOL 201 or instructor permission.

GEOL 240  Introduction to Petroleum and Mining Geology  3 credits
A survey of the physical and chemical processes responsible for the distribution of hydro-carbon and mineral resources in the Earth’s crust and techniques for hydrocarbon and mineral resource exploration, assessment, and development. Includes field trips to oil and gas and mining operations in Colorado and Utah. Prerequisites: GEOL 101 and GEOL 105

GEOL 297  Special Topics  1-6 credits

GEOL 300  Geology Field Trip  1-6 credits
Provides students exposure to varied geologic terranes and settings. The course normally consists of preparatory lectures and the actual field trip, followed by a paper, talk, or examination. Students may earn a maximum of six credits under this course title. Prerequisite: GEOL 201.

GEOL 302  Geoscience Writing  2 credits
An introduction to the proper methods and accepted formats of written, graphical, and oral communication in the geological sciences. These skills are addressed through critical evaluation and discussion of the geological literature, by writing reports, review papers and research proposals, and giving oral presentations. Prerequisites: ENG 102 with a grade of “C-” or above and GEOL 201. Corequisite: GEOL 310.

GEOL 305  Mineralogy (with laboratory)  4 credits
An introduction to the study of minerals. Important topics include the crystallography, crystal chemistry, and optics of important rock and ore forming minerals. Emphasis is placed on the crystal chemistry and stability of major silicate mineral groups. The laboratory emphasizes the field identification of minerals and the application of optics to the identification of minerals in thin section. Prerequisites: GEOL 101, GEOL 105, MATH 141. Prerequisite or corequisite: CHEM 111 and CHEM 112.

GEOL 310  Stratigraphy and Sedimentation (with laboratory)  4 credits
A study of the basic principles and origins of sedimentary rock units. Topics studied include sub-division of the geologic column and geologic time, depositional systems, stratigraphic nomenclature and rules, principles of correlation—including a review of modern geophysical, geochemical, and chronostratigraphic methods, biostratigraphy, and event stratigraphy. Laboratory includes measurement of sections, examination of depositional systems in the field, and surface and subsurface stratigraphic techniques, including geophysical-log interpretation and computer mapping. Prerequisites: GEOL 201 and ENG 102 with a minimum grade of “C-”.
GEOL 311  Igneous and Metamorphic Petrology (with laboratory)  4 credits
A study of igneous and metamorphic rocks, including their classification, field
relations, tectonic setting, phase petrology, mineralogy, and geochemistry. The
laboratory emphasizes both field identification of rocks and the use of petrographic
microscopes. Several field trips are included. Prerequisite or corequisite: CHEM 113
and CHEM 114.

GEOL 320  Geomorphology (with laboratory)  4 credits
A study of the processes that create the landforms we see at the Earth’s surface. In
particular, processes associated with modern and ice-age climate are studied includ-
ing erosion and weathering, soil formation, flooding, glaciation, and mass wasting.
The laboratory emphasizes field-observation and data-collection techniques, and the
interpretation of aerial photographs. Prerequisites: GEOL 101 and GEOL 105;
CHEM 101 or CHEM 111.

GEOL 345  Structural Geology (with laboratory)  4 credits
A study of the deformation of the Earth’s crust. The course begins with a study of
the forces and movements within the crust which cause folding and faulting of
rocks and a description of the resulting structures. These topics are followed by an
analysis of the regional tectonic patterns of the Earth’s surface and theories for their
origin. Prerequisite: GEOL 201 with a minimum grade of “C-“and MATH 141.

GEOL 346  Subsurface Geology (with laboratory)  4 credits
An advanced undergraduate course in subsurface structural and stratigraphic meth-
ods pertinent to petroleum, groundwater, environmental, and tectonics investiga-
tions. The course applies traditional and computer-assisted techniques to subsurface
problems. Students gain experience in integrating surface geology with subsurface
well and geophysical data. Prerequisite: GEOL 310. Prerequisite or corequisite:
GEOL 345.

GEOL 352  Applied Geophysics (with laboratory)  4 credits
An advanced undergraduate course in the theoretical and practical application of
physics to geology. Lectures cover seismic, gravity, and magnetic theory. Laboratory
exercises and lecture problem sets emphasize the interpretation of real-world data,
with application to problems in stratigraphy, structure, hydrology, environmental
geology, mining, and oil and gas. Students gain proficiency in the use of several
advanced analysis and modeling software packages. Prerequisite: GEOL 310. Prerequisites or corequisites: GEOL 345 and PHYS 170.

GEOL 360  Isotope Geochemistry  3 credits
A study of the distribution and movement of chemical elements and isotopes in the
gelogic environment. Topics include nucleosynthetic processes and the isotopic
abundances of the elements; geochronology using radioactive decay schemes,
including U-Pb, Rb-Sr, Sm-Nd, K-Ar, U-series isotopes, and cosmogenic isotopes;
trace element partitioning; and the use of stable isotopes in geothermometry and
ore petrogenesis. Examples illustrate the use of radiogenic and stable isotopes in
petrology and their application to study of the Earth and Solar system and the
evolution of the crust and mantle. Prerequisites: GEOL 305 with a “C-” or better
and CHEM 113 and 114.

GEOL 362  Environmental Geochemistry  3 credits
An advanced geology course covering the low-temperature chemistry of the near-
surface geologic environment. Topics include equilibrium thermodynamics, natural-water geochemistry, the carbonate system, mineral weathering, basic organic geochemistry and the evolution of Earth’s atmosphere. Students gain quantitative problem solving skills through comprehensive problem sets and the collection and analysis of real-world geochemical data. Prerequisite: GEOL 305 with a “C-“ or better and CHEM 113 and 114.

GEOL 397  Special Topics  1-6 credits

GEOL 411 Research in Volcanology and Petrology (with laboratory)  3 credits
An examination of the physical volcanology, petrology, and petrogenesis of volcanic rocks. A strong emphasis is placed on fieldwork and the description of the volcanic rocks of the Gunnison Basin and adjacent regions. The course is topical in nature and emphasizes individual and/or group research projects through study of the geologic literature, the collection of geologic data, and the presentation of results. Prerequisite: GEOL 311.

GEOL 420  Research in Quaternary Geology (with laboratory)  3 credits
A study of the geology and climate of Quaternary Period, a time commonly referred to as the ice ages. Topics include glacier dynamics, glacial landforms and soils, methods of dating Quaternary deposits, and paleoclimate modeling. The laboratory emphasizes individual or group research projects that explore the Quaternary geology of the Gunnison and Crested Butte area. Projects are presented at the standard expected for a professional presentation. Prerequisites: GEOL 310, GEOL 320, and CHEM 111.

GEOL 430  Hydrogeology  3 credits
A study of the occurrence, movement, and chemical properties of groundwater. Topics include the hydrologic cycle, surface-water hydrology, principles of ground water flow, and natural water chemistry. Class assignments focus on quantitative analysis and modeling of groundwater data. Prerequisites: GEOL 310, CHEM 111, and MATH 151. Prerequisite or corequisite: PHYS 170 or PHYS 200.

GEOL 450  Field Geology  4 credits
An emphasis on field observation, proper geologic mapping techniques—on both maps and aerial photos—and interpretation and synthesis of field data into a report. Different geologic terrains in Colorado or other states are examined. Ideally, this course should be taken during the Summer semester, immediately prior to the senior year. Prerequisites: GEOL 310 and GEOL 345; or instructor permission.

GEOL 455  Petroleum Geology (with laboratory)  4 credits
A study of the physical and chemical processes responsible for the distribution of hydrocarbons and associated fluids in the Earth’s crust and techniques for hydrocarbon exploration and resource assessment. Topics include the principle components of Petroleum Systems Analysis, including: the maturation, expulsion, and migration of hydrocarbons; hydrocarbon reservoirs; hydrocarbon seals; and structural, stratigraphic, and unconventional hydrocarbon traps. Laboratories include geochemical modeling of source rocks, geophysical log analysis and correlation, seismic interpretation, computer mapping, and a regional field trip. Prerequisites: GEOL 310 and GEOL 345.

GEOL 465  Research in Basin Analysis (with laboratory)  3 credits
A study of sedimentary processes and environments, including the tectonic origin of sedimentary basins. This includes the most common terrestrial and marine depositional
systems and their relationships. A strong emphasis is placed on field relations and research on the sedimentary rocks of Western Colorado and the Colorado Plateau. The course is topical in nature and requires individual and/or group research projects through the study of the geologic literature, the collection of geologic data in the field, and the presentation of results. Prerequisites: GEOL 310 and CHEM 113.

**GEOL 493  Independent Study in Geology  
1-4 credits**
Advanced undergraduates can engage in independent research projects under the direction of a faculty member. Topics may include any research specialty in geology or geophysics depending on the mutual interests of the student and faculty.

**GEOL 495  Geology Seminar  
1 credit**
A seminar where advanced undergraduate students can develop critical reading and thinking skill through discussion and presentation of research literature. Topics are chosen from the current research literature. A student may earn a maximum of four credits under this course title. Prerequisite: GEOL 305, GEOL 310, GEOL 320, or GEOL 345.

**GEOL 497  Special Topics  
1-6 credits**
**HEADWATERS REGIONAL STUDIES (HWTR)**

Western State Colorado University sits near the headwaters of the major rivers of the American Southwest and the lower Midwest—the South Platte and Arkansas Rivers that are part of the great Mississippi-Missouri Basin, the Rio Grande, and the central tributaries of the Colorado River. Surrounded by the geographically, ecologically, and culturally diverse “learning laboratories” of the Headwaters region, Western is uniquely situated for using “place” as a medium for integrated learning. These two Headwaters classes are designed to help students develop cross-disciplinary relationships with the qualities of the region that attract many students to the University.

**HEADWATERS COURSES**

**HWTR 100  First Year Seminar**  
1 credit  
An introduction to Western’s interactive educational experience and the diverse learning environments of the Gunnison Valley. Through a multidisciplinary study of the Headwaters region, this course provides students with skills for success in higher education and access to resources in the campus community. A discussion-based seminar, course may include regular convocations, community service projects, workshops, and field experiences. Academic themes include an introduction to the liberal arts, community sustainability, and the social, natural, and cultural surroundings of the region. First year students are required to attend Orientation and are expected to enroll in the first year seminar.

**HWTR 200  Introduction to the Headwaters**  
1 credit  
A fall offering that gives students a broad cross-disciplinary overview of the Headwaters Region surrounding the University, with some field trips out into the region and an opportunity to look into some of the issues impacting the region.

**HWTR 398  Headwaters Conference**  
1 credit  
An annual three-day gathering on campus each fall, bringing together writers and scholars, local community leaders and activists, artists, government officials, and other interested citizens from the colleges and communities of the Headwaters Region to consider challenges and opportunities confronting the region. Students attend and participate in the conference, complete applied research projects throughout the month following the conference, and write a paper about the experience in the context of their own lives and future plans. A student may take the course four times for credit. Prerequisites: junior standing or instructor permission.
HISTORY (HIST)

In a world increasingly characterized by the ten-second soundbite, our understanding of world events is often limited to the superficial. Despite the speed and intensity of these events, the conflicts and achievements of our times emerge from long established influences and sequences of events. The study of history adds both breadth and depth to an individual’s understanding of our fast-changing world. History provides the means to discover how the past shapes and affects the present and how seemingly unrelated events and forces connect to frame human endeavors. There is something profoundly enduring about the study of history, as it allows us to realize the complexity of human affairs from a multitude of perspectives. It is both an intellectually satisfying and eminently practical pursuit. History majors at Western acquire and sharpen skills that enrich educational experiences and increase employment opportunities in a number of fields. Such skills include: cause and effect analysis, critical evaluation and organization of evidence, document and data base research, development and understanding of analytical frameworks, and organization and synthesis of information—all skills essential to solving problems and presenting results.

The History and Geography Club and the History Honor Society, Iota Nu Chapter of Phi Alpha Theta, the historian’s honorary society, are active on campus.

FACULTY

Professors Wallace G. Lewis, James M. Stewart, Heather Thiessen-Reily, and Duane L. Vandenbusche.

DESCRIPTION OF THE PROGRAMS

History Major: Standard Program

A minimum of 39 credits is required including the following:

Two of the following 100 level courses:
- HIST 101 World History to 1500................................................................. 3 cr
- HIST 102 World History Since 1500............................................................ 3 cr
- HIST 126 U.S. History to 1865................................................................. 3 cr
- HIST 127 U.S. History Since 1865............................................................ 3 cr
- HIST 402 Seminar in History ................................................................. 3 cr

Two of the following courses in regional history:
- HIST 250 History of the Middle East ......................................................... 3 cr
- HIST 254 History of Africa ........................................................................ 3 cr
- HIST 260 History of Latin America .......................................................... 3 cr

and the following:
- HIST 402 Seminar in History ................................................................. 3 cr

History electives numbered 300 or above.................................................... 24 cr

No more than six credits in independent study or correspondence courses can be counted toward any History Major.

History Major: Comprehensive Program

The comprehensive program in History is the Secondary Licensure Emphasis. This Emphasis does not require a separate minor, and it allows the student to pursue a course of study in which History is integrated with other disciplines within the social sciences.

SECONDARY LICENSURE EMPHASIS

This emphasis qualifies students for the State of Colorado License in Social Science Education. A minimum of 66 credits is required, including:
HIST 101 World History To 1500................................................................. 3 cr
HIST 102 World History from 1500 .......................................................... 3 cr
HIST 126 US History to 1865 ................................................................. 3 cr
HIST 127 US History from 1865 ............................................................. 3 cr
HIST 327 Colorado History ................................................................. 3 cr
Three upper division History electives ............................................... 3 cr
HIST 402 Seminar in History................................................................. 3 cr

Three of the following:
HIST 330 Colonial American History.................................................. 3 cr
HIST 333 The Revolutionary Era and Early National Period............... 3 cr
HIST 336 Antebellum, Civil War and Reconstruction, 1830-1877 .......... 3 cr
HIST 340 Reform and Reorganization in American Society ............... 3 cr
HIST 343 Depression and World War II............................................... 3 cr
HIST 346 Recent American History..................................................... 3 cr
HIST 348 History of the Trans-Mississippi West .................................. 3 cr
HIST 349 History of the Hispanic Southwest....................................... 3 cr

Two of the following:
HIST 311 Medieval History...................................................................... 3 cr
HIST 312 Renaissance and Reformation Era, 1350-1600 ....................... 3 cr
HIST 315 The Old Regime and the French Revolution ......................... 3 cr
HIST 316 19th Century Europe ............................................................. 3 cr
HIST 318 20th Century Europe ............................................................. 3 cr
HIST 354 Conflict in Africa ................................................................... 3 cr
HIST 360 Mexico ................................................................................... 3 cr
HIST 364 Women in Latin American History ....................................... 3 cr
HIST 365 Latin American Revolutions .................................................. 3 cr

One of the following:
HIST 250 History of the Middle East .................................................... 3 cr
HIST 254 History of Africa ..................................................................... 3 cr
HIST 260 History of Latin America....................................................... 3 cr

In addition, the student must fulfill the requirements of the Secondary Licensure Program (see description under Education), and the following:
ECON 201 Macroeconomics .................................................................. 3 cr
ECON 202 Microeconomics .................................................................. 3 cr
ECON 303 International Economics and Globalization ....................... 3 cr
GEOG 110 World Regional Geography ............................................... 3 cr
GEOG 120 Introduction to Human Geography ...................................... 3 cr
GEOG 250 Geography of North America ............................................ 3 cr
POLS 180 Introduction to American Government .................................. 3 cr
POLS 182 Issues in State and Local Government .................................. 3 cr
POLS 255 Comparative Government ................................................... 3 cr

No more than six credits of independent study or correspondence can be counted toward any History Major.

**History Minor**

A minimum of 21 credits is required including 12 credits of upper-division History electives, and the following:

One of the following:
HIST 101 World History to 1500............................................................. 3 cr
HIST 101  World History to 1500 3 credits
A survey of the cultural, political, religious, artistic, technological and philosophical journeys of human beings, from the prehistoric age, the birth of civilization and emergence of agriculture to the establishment of great empires and the impact of the great religious and philosophical revolutions of the ancient and medieval world. GT-HI1

HIST 102  World History Since 1500 3 credits
A continuation of HIST 101 and a survey of the transformation of human development as a result of modernization. Students consider the rise and fall of empires and shifting regional influences as a result of the emergence of the transatlantic region. Europe’s revolutionary transformation and its impact on the world; the rise of global interaction and conflict; the colonial and post-colonial eras and the resulting tensions and achievements of these events are examined within the context of modernity. GT-HI1

HIST 126  U.S. History to 1865 3 credits
A survey of American history from its European beginnings to the Civil War, providing description and analysis of the historical development of politics, economics, society, and foreign policy. Attention is given to the people and forces that influenced these developments. GT-HI1

HIST 127  U.S. History Since 1865 3 credits
A survey of American history from the Civil War to modern times, providing description and analysis of the major developments and trends in politics, economics, society, and foreign policy. Attention is given to the people and forces that influenced and shaped the American experience. GT-HI1

HIST 197  Special Topics 1-6 credits

HIST 250  History of the Middle East 3 credits
Students are introduced to some of the major historical events and patterns of the region which are then related to the politics of the modern Middle East (mainly the 20th and 21st centuries). Specific topics include the rise and nature of Islam, the achievements of Medieval Islamic civilization, the significance of the Ottoman Empire, rivalries with the West, the establishment of Israel and the nature of the Modern Middle East crisis. GT-HI1

HIST 254  History of Africa 3 credits
A survey of sub-Saharan African history from earliest times to the present, with particular emphasis on social, cultural, economic, and political responses to imperialist or other outside influences.

HIST 260  History of Latin America 3 credits

No more than three credits of HIST 492 Independent Study may be used to satisfy the upper-division electives.

**Capstone Course Requirement:** The following course in the History Major fulfills the Capstone Course Requirement: HIST 402 Seminar in History.
A survey of the major events, issues and themes of Latin American History from pre-Columbian times through the modern era. Tracing the development of political, cultural, social, and economic institutions resulting from the interaction of New and Old World cultures, students reflect upon the diverse responses of peoples in the region to the impact of change. Through the study of the complexities of indigenous cultures, colonialism, nation-building and identity politics, and the impact of modernity and globalization, students learn how larger human processes impact this particular region of the world and how the challenges and achievements of Latin America today are reflected in the region’s historical experiences.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 297</td>
<td>Special Topics</td>
<td>1-6</td>
</tr>
<tr>
<td>HIST 309</td>
<td>The History of Modern Germany 1871-1945</td>
<td>3</td>
</tr>
<tr>
<td>HIST 311</td>
<td>Medieval History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 312</td>
<td>Renaissance and Reformation Era, 1350-1600</td>
<td>3</td>
</tr>
<tr>
<td>HIST 315</td>
<td>The Old Regime and the French Revolution</td>
<td>3</td>
</tr>
<tr>
<td>HIST 316</td>
<td>19th Century European History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 318</td>
<td>20th Century European History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 327</td>
<td>Colorado History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 330</td>
<td>Colonial American History</td>
<td>3</td>
</tr>
</tbody>
</table>

Examines the cultural and political forces which led to the creation of Germany and then shaped its behavior through two world wars. Topics include the role of nationalism, the failure of liberalism, the causes of racism, and the nature of the Nazi regime. Prerequisite: minimum sophomore standing or instructor permission.

A study of Europe’s history and political and religious institutions from the beginning of the reign of Diocletian to the Babylonian Captivity of the Church. Prerequisite: minimum sophomore standing or instructor permission.

A course which covers the Babylonian Captivity of the Roman Catholic Church; the artistic, literary, and political developments of Renaissance Italy and Northern Europe; the subsequent emergence of the Protestant Reformation; and the religious wars which engulfed Europe. Prerequisite: minimum sophomore standing or instructor permission.

A study of the origins, character, and significance of the French Revolution. This course begins with an examination of the relation of the Old Regime to the failure of absolutism and concludes with a discussion of the general nature of revolution and social change. Prerequisite: minimum sophomore standing or instructor permission.

A study of Europe from the Congress of Vienna to the outbreak of World War I. Prerequisite: minimum sophomore standing or instructor permission.

A study of World War I and the search for peace, the rise of totalitarian democracy, social and economic tensions, Europe in the era of the Cold War, and the “semblance of peace.” Prerequisite: minimum sophomore standing or instructor permission.

A study of the history of Colorado from prehistoric times to the modern era, emphasizing the Native American and Spaniard, mining, cattle, transportation and farming frontiers, and problems of the 20th century involving water, energy, and growth. Prerequisite: minimum sophomore standing or instructor permission.

A study of the colonial origins of American institutions with an emphasis on government and society. Topics include the singular developments which occurred in the Chesapeake Bay area and New England, the first westward movements, women and the family, and intellectual endeavors from 1607 to the French and Indian War. Prerequisite: minimum sophomore standing or instructor permission.
HIST 333  The Revolutionary Era and Early National Period  3 credits  
An examination of the causes of the American Revolution and the development of politics and society during the early Republic. Major topics include the development of political parties, the shift from Jeffersonian to Jacksonian democracy, the burgeoning reform movements, and the status of the yeoman farmer and his family in both northern and southern societies. Prerequisite: minimum sophomore standing or instructor permission.

HIST 336  Antebellum, Civil War and Reconstruction, 1830-1877  3 credits  
A study of the history of the United States during the 19th century, with special attention given to the Civil War, its causes, conflicts, and aftermath. Prerequisite: minimum sophomore standing or instructor permission.

HIST 340  Reform and Reorganization in American Society  3 credits  
American history in the Gilded Age and the eras of agrarian and progressive reform between the end of Reconstruction and the election of Herbert Hoover. Emphasis is placed upon the social, political, economic, and cultural changes that occurred in response to rapid industrialization. Prerequisite: minimum sophomore standing or instructor permission.

HIST 343  Depression and World War II  3 credits  
An exploration of the ramifications that the economic collapse had on America’s social, economic, cultural, and political life. The United States’ entrance into the World War II is also discussed, with major focus on the changes that took place, both internally and abroad, because of the conflict. Prerequisite: minimum sophomore standing or instructor permission.

HIST 346  Recent American History  3 credits  
A history of the United States since 1945 with emphasis on the Cold War, the Eisenhower years, the turbulent decade of the 1960s, and the transformations of the 1970s and 1980s. Prerequisite: minimum sophomore standing or instructor permission.

HIST 348  History of the Trans-Mississippi West  3 credits  
A history of the Trans-Mississippi West from 1800 to the present time, emphasizing the Native Americans, Spanish settlement, and Westward Expansion. Manifest Destiny, mining and cattle frontiers, settlement of the Great Plains and the Rocky Mountains, closing of the western frontier, and the “New West” of today. Prerequisite: minimum sophomore standing or instructor permission.

HIST 349  History of the Hispanic Southwest  3 credits  
Students examine the historical development of Hispanic settlement and culture in the American Southwest from its inception to the present day. Students study the interaction of Hispanic communities with nomadic and settled indigenous peoples and with Anglo ranchers, settler and commercial interests. From the 16th century settlements to the Mexican-American War and the territory’s incorporation into the United States to the development of the Chicano identity in the 20th century, students analyze the American Southwest, as a patria chica of success and failure, achievement and potential. Prerequisite: junior standing or instructor permission.

HIST 350  Environmental History of the Borderlands  3 credits  
Students examine the process of historical development of the Borderlands region between Mexico and the United States and consider its implications for the region's environment. Settlement patterns, a blending of cultural and ethnic identities, economic development and integration and emerging social tensions have resulted in an environ-
mental transformation of the region with far-reaching implications for both nations south of the Rio Grande/Bravo. Prerequisite: junior standing or instructor permission.

**HIST 351 A History of Russia and the Soviet Union**  
3 credits  
A study of the roots of modern Russia in the Imperial period to the present era, emphasizing the ideas and events which contributed to the 1917 Revolution and to the development of the Soviet Union. Prerequisite: minimum sophomore standing or instructor permission.

**HIST 354 Conflict in Africa**  
3 credits  
Students explore the historical, political, social and economic forces at play in Africa which have resulted in the high level of conflict the continent has and is experiencing. Using a case study approach, the students explore the historical context for current and on-going African conflicts to gain a deeper understanding of the complexities of the challenges and achievements of the continent. Prerequisite: junior standing or instructor permission.

**HIST 360 Mexico**  
3 credits  
A broad survey of Mexican history from pre-Columbian times to the present, with particular emphasis on social, cultural, political and economic issues. This course also examines Mexico’s relations with Europe during the colonial and early national periods and with the United States during the 19th and 20th centuries. Prerequisite: minimum sophomore standing or instructor permission.

**HIST 364 Women in Latin American History**  
3 credits  
A survey of the roles of women in Latin American history. This course examines indigenous, hispanic and mestizo women in economic, cultural, social and political roles from the pre-Columbian era to the modern period. Prerequisite: minimum sophomore standing or instructor permission; HIST 260 is recommended.

**HIST 365 Latin American Revolutions**  
3 credits  
Beginning with an examination of theories of revolution, students explore how the theoretical relates to events in Latin American history. Students examine the development of revolutionary consciousness and the role of women, indigenous peoples and the rural and urban masses in revolutionary movements throughout the region. Students consider the influence of revolution on Latin American artistic expression. Finally, students investigate specific historical case studies of Latin American revolutions. Prerequisite: junior standing or instructor permission.

**HIST 397 Special Topics**  
1-6 credits

**HIST 399 Internship in History**  
1-3 credits
History majors and minors obtain archival and museum experience through direct, supervised contact with archivists, curators and professionals from related areas. Prerequisites: junior standing and instructor permission. Graded Satisfactory/Unsatisfactory only.

**HIST 402 Seminar in History**  
3 credits
A research seminar required for History majors. Focusing on a specified topic within the subject area, participants discuss issues and methods of historical writing and research and apply scholarship skills by writing a research paper or completing an approved appropriate project. History majors should take this course during or after their second semester of the junior year. Students in the Secondary Licensure program must complete a comparative history topic for completion of this course. Prerequisite: junior or senior standing and instructor permission.

**HIST 492 Independent Study**  
1-4 credits
A special study in areas of student interest. May be taken for a maximum of four credits.
HONORS PROGRAM (HNRS)

The Western Honors Program provides enhanced and challenging academic programming to a carefully selected group of highly motivated and accomplished students from all disciplines. The Honors Program at Western seeks to promote the goals of a liberal arts education by providing students with the opportunity to become autonomous learners within a highly supportive and collaborative academic community. Honors students are encouraged and challenged to free themselves from not only external constraints on the acquisition of knowledge and understanding but also from internal limitations that can prevent critical thinking, reflective analysis, and responsible choice. The Honors Program and its courses enable students to develop the capacity for informed analysis and responsible evaluation and a willingness to submit discoveries and conclusions to an academic community of their peers and mentors to be mutually investigated and critiqued. Small class size, extensive interaction among peers and teachers, experiences outside the traditional classroom, and interdisciplinary and multidisciplinary approaches to education are all features of the program. Such opportunities allow students to explore avenues of intellectual inquiry with-in and outside of their selected majors and minors.

Program Benefits. Honors students have the opportunity to become a part of a scholarly community comprised of faculty and students committed to the pursuit of intellectual inquiry and academic excellence. Benefits of membership in the Western Honors Program also include automatic eligibility for Honors classes, use of the Honors Center, computer lab and classroom in Taylor Hall, participation in Honors Orientation and Honors activities, priority registration, and special recognition at graduation upon completion of the program. Students may also register for Honors Special Topics classes or develop independent and special Honors projects which offer challenging and accelerated learning experiences inside and outside the regular course offerings.

Admission Requirements. Students qualified to become part of the Western Honors Program are invited to apply for membership as incoming students or in their first or second year of study at Western (transfer and upper-division students are considered on an individual basis). Invitations to apply to the program are extended to students who have achieved a 3.50 cumulative grade point average in high school or at Western or have completed International Baccalaureate programs. Students may also be nominated to the program by a faculty member if they achieve the required grade point average and exhibit the program’s academic and intellectual characteristics.

Program Requirements. Continuation and completion of the program is based upon maintaining an overall 3.50 grade point average as well as completing the program requirements. Service learning is a valued component of the Honors Core and incorporated into the HNRS 200 Honors Forum course. A maximum of two additional credits of service learning from the following courses HNRS 202 Service Learning in Honors, ENG 240 Writing Center Workshop, HNRS 302 Service Learning in Honors, ENG 396 Writing Center Assistantship, HNRS 402 Service Learning in Honors, may be used to satisfy program requirements. Students are recommended to take a minimum of one Honors course per academic year.
**HONORS COUNCIL**

Dan Cress, Honors Director; Robin Bingham, Biology; Paul A. Edwards, Communication Arts; Nancy Gauss, Library; Ashvin J. Patel, Exercise and Sport Science; Don E. Seastrum, Art

**DESCRIPTION OF THE PROGRAM**

A minimum of 21 credits is required:

- **HNRS 100** The Gateway................................................................. 3 cr
- **HNRS 200** Honors Forum (repeated twice for 2 credits).................. 1 cr
- **HNRS 304** Introduction to the Great Conversation ......................... 1 cr
- **HNRS 400** Oxford Tutorial .......................................................... 1 cr
- **Honors General Education courses**.................................................. 6 cr

*Eight credits from the following (at least six credits must be upper division):*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 240</td>
<td>Writing Center Workshop</td>
<td>2 cr</td>
</tr>
<tr>
<td>ENG 396</td>
<td>Writing Center Assistantship</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>HNRS 101</td>
<td>Honors Colloquium</td>
<td>1 cr</td>
</tr>
<tr>
<td>HNRS 197</td>
<td>Special Topics</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>HNRS 201</td>
<td>Honors Colloquium</td>
<td>1 cr</td>
</tr>
<tr>
<td>HNRS 202</td>
<td>Service Learning in Honors</td>
<td>1-2 cr</td>
</tr>
<tr>
<td>HNRS 297</td>
<td>Special Topics</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>HNRS 301</td>
<td>Honors Colloquium</td>
<td>1 cr</td>
</tr>
<tr>
<td>HNRS 302</td>
<td>Service Learning in Honors</td>
<td>1-2 cr</td>
</tr>
<tr>
<td>HNRS 303</td>
<td>Honors Field Studies</td>
<td>1-2 cr</td>
</tr>
<tr>
<td>HNRS 305</td>
<td>Place as Text</td>
<td>2-3 cr</td>
</tr>
<tr>
<td>HNRS 397</td>
<td>Special Topics</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>HNRS 402</td>
<td>Service Learning in Honors</td>
<td>1-2 cr</td>
</tr>
<tr>
<td>HNRS 401</td>
<td>Honors Colloquium</td>
<td>1 cr</td>
</tr>
<tr>
<td>HNRS 403</td>
<td>Honors Field Studies</td>
<td>1-2 cr</td>
</tr>
<tr>
<td>HNRS 492</td>
<td>Independent Study</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>HNRS 494</td>
<td>Thesis Preparation</td>
<td>1 cr</td>
</tr>
<tr>
<td>HNRS 495</td>
<td>Thesis</td>
<td>2-3 cr</td>
</tr>
<tr>
<td>HNRS 497</td>
<td>Special Topics</td>
<td>1-3 cr</td>
</tr>
</tbody>
</table>

*The six Honors General Education credits will be redistributed to Honors Electives for students who enter the Honors program with completed General Education programs either through Western or gtPathways.

**HONORS COURSES**

**HNRS 100** The Gateway 3 credits

Through the Gateway students are introduced to different ways of knowing thereby laying the foundation for the further development of a liberal arts education. Students enhance their capacity for informed analysis, responsible evaluation and effective argument construction leading to the ability to base actions and decisions upon the former. The students are encouraged to recognize value in varying epistemologies and engage in an active and intellectual exchange of ideas as part of an academic community formed via students’ and instructors’ co-investigation of various topics and disciplines. The course culminates with student-chosen and directed group presentations. Prerequisites: admission to the Honors Program and participation in the Honors Orientation program.
HNRS 101  Honors Colloquium  1 credit
A complement to courses offered outside of the Honors program. Through formal arrangement between a course instructor and the Honors Program, the instructor and student develop an additional course project(s) to allow the Honors student enrolled in the class deeper engagement with the course material. Honors students who successfully complete both the Colloquium and the course to which it is linked receive Honors credit for both. May be taken more than once. Prerequisite: Completion of the Honors Colloquium project form in consultation with supervising faculty and the Honors Director.

HNRS 197  Special Topics  1-3 credits

HNRS 200  Honors Forum  1 credit
An application of the core principles of the Honors Program including active learning, interpretation, integration and collaborative learning. Students engage in active investigation and intellectual exchange of ideas and information surrounding a theme or topic agreed upon by all students in the class. The entire class determines an appropriate vehicle for a public presentation of their work and must demonstrate coherent understanding of the selected issue or topic rather than presenting a collection of separate insights. Prerequisites: HNRS 100, and sophomore standing.

HNRS 201  Honors Colloquium  1 credit
A complement to courses offered outside of the Honors program. Through formal arrangement between a course instructor and the Honors Program, the instructor and student develop an additional course project(s) to allow the Honors student enrolled in the class deeper engagement with the course material. Honors students who successfully complete both the Colloquium and the course to which it is linked receive Honors credit for both. May be taken more than once. Prerequisite: Completion of the Honors Colloquium project form in consultation with supervising faculty and the Honors Director.

HNRS 202  Service Learning in Honors  1-2 credits
Service Learning in Honors complements university course offerings by adding a hands-on service learning component with a community organization or community project. Through formal arrangement between an instructor and the Honors Program, the instructor meets with Honors students enrolled in the class to help provide specific disciplinary insights on issues affecting local communities, providing students with an opportunity to apply concepts, theories, and methods to practical real-world issues. Students gain familiarity with social problems and social responses, learn about communities as informed citizens, and gain expertise about the relationship between their roles as students and citizens. Honors students who complete both the Service Learning and the course to which it is linked receive Honors credit for both. Service Learning may be taken more than once. Prerequisite: Completion of the Honors Service Learning project form in consultation with supervising faculty and the Honors Director.

HNRS 297  Special Topics  1-3 credits

HNRS 301  Honors Colloquium  1 credit
A complement to courses offered outside of the Honors program. Through formal arrangement between a course instructor and the Honors Program, the instructor and
student develop an additional course project(s) to allow the Honors student enrolled in the class deeper engagement with the course material. Honors students who successfully complete both the Colloquium and the course to which it is linked receive Honors credit for both. May be taken more than once. Prerequisite: Completion of the Honors Colloquium project form in consultation with supervising faculty and the Honors Director.

**HNRS 302  Service Learning in Honors**  
1-2 credits  
Service Learning in Honors complements university course offerings by adding a hands-on service learning component with a community organization or community project. Through formal arrangement between an instructor and the Honors Program, the instructor meets with Honors students enrolled in the class to help provide specific disciplinary insights on issues affecting local communities, providing students with an opportunity to apply concepts, theories, and methods to practical real-world issues. Students gain familiarity with social problems and social responses, learn about communities as informed citizens, and gain expertise about the relationship between their roles as students and citizens. Honors students who complete both the Service Learning and the course to which it is linked receive Honors credit for both. Service Learning may be taken more than once. Prerequisite: Completion of the Honors Service Learning project form in consultation with supervising faculty and the Honors Director.

**HNRS 303  Honors Field Experience**  
1-2 credits  
Honors students develop field experiences outside the classroom to complement courses with-out specified field experiences or to develop a more in-depth project for disciplinary-based field experiences. Through formal arrangement between the instructor and the Honors Program, the instructor meets with Honors students enrolled in the class to develop a specific field experience related to the course material. Honors students who successfully complete both the Field Experience and the course to which it is linked receive Honors credit for both. May be taken more than once. Prerequisite: Completion of the Honors Field Experience project form in consultation with supervising faculty and the Honors Director.

**HNRS 304  Introduction to the Great Conversation**  
1 credit  
An introduction to the ongoing discussion of the timeless and universal ideas that are the foundation of Western Civilization. Students pursue the study of these ideas through guided reading of selections taken from the range of Western intellectual history. Prerequisites: HNRS 100, and junior standing, or instructor permission.

**HNRS 305  Place as Text**  
2-3 credits  
Provides Honors students with opportunities to integrate experiences of theory and observation with place, time and self through a site-specific active learning experience. Students participate in a series of orientation sessions and complete associated assignments in preparation for a site visit. The class travels to a selected site and explores the concept of “extending text’ and mapping the site from a variety of multi and inter-disciplinary perspectives. Modeled on the National Collegiate Honors Council City as Text program. Students may take this course twice for credit. Prerequisite: junior standing.

**HNRS 397  Special Topics**  
1-3 credits
HNRS 400  Oxford Tutorial  1 credit
Honors students come together as autonomous learners in a supportive academic community to investigate a mutually decided upon theme or topic relating to a liberal arts education and constructive citizenship. Students are expected to illustrate a mastery of the goals promoted by the Honors Program and a liberal arts education including the rigorous application of analysis resulting in a coherent and integrated understanding of the selected theme or topic. Provides an opportunity to engage in larger philosophical inquiry and debate. Prerequisite: HNRS 200, HNRS 304 and senior standing or instructor permission.

HNRS 401  Honors Colloquium  1 credit
A complement to courses offered outside of the Honors program. Through formal arrangement between a course instructor and the Honors Program, the instructor and student develop an additional course project(s) to allow the Honors student enrolled in the class deeper engagement with the course material. Honors students who successfully complete both the Colloquium and the course to which it is linked receive Honors credit for both. May be taken more than once. Prerequisite: Completion of the Honors Colloquium project form in consultation with supervising faculty and the Honors Director.

HNRS 402  Service Learning in Honors  1-2 credits
Service Learning in Honors complements university course offerings by adding a hands-on service learning component with a community organization or community project. Through formal arrangement between an instructor and the Honors Program, the instructor meets with Honors students enrolled in the class to help provide specific interdisciplinary insights on issues affecting local communities, providing students with an opportunity to apply concepts, theories, and methods to practical real-world issues. Students gain familiarity with social problems and social responses, learn about communities as informed citizens, and gain expertise about the relationship between their roles as students and citizens. Honors students who complete both the Service Learning and the course to which it is linked receive Honors credit for both. Service Learning may be taken more than once. Prerequisite: Completion of the Honors Service Learning project form in consultation with supervising faculty and the Honors Director.

HNRS 403  Honors Field Experience  1-2 credits
Honors students develop field experiences outside the classroom to complement courses without specified field experiences or to develop a more in-depth project for disciplinary-based field experiences. Through formal arrangement between the instructor and the Honors Program, the instructor meets with Honors students enrolled in the class to develop a specific field experience related to the course material. Honors students who successfully complete both the Field Experience and the course to which it is linked receive Honors credit for both. May be taken more than once. Prerequisite: Completion of the Honors Field Experience project form in consultation with supervising faculty and the Honors Director.

HNRS 492  Independent Study  1-3 credits
An opportunity for Honors students to undertake detailed study and/or research into a unique topic or issue stemming from an interdisciplinary or multi-disciplinary approach under supervision of the Honors Director and appropriate regular faculty. May be taken for a maximum of three credits in one semester. Maximum credit toward Honors Program is six credits.
HNRS 494  Thesis Preparation  1 credit
An introduction to the process of developing a thesis project. Students will undertake initial research on a potential thesis topic, develop a research plan and write a thesis proposal in preparation of writing an Honors thesis.

HNRS 495  Thesis  2-3 credits
The student is required to complete a written thesis based on advanced study in a self designed research project and present his/her findings to the Honors Council in a public forum. The project must be supervised by a faculty member from a field of study relevant to the student’s thesis. Prerequisites: junior or senior standing; good standing in the Honors Program; and successful completion of at least nine hours in Honors, including HNRS 100 and HNRS 494.

HNRS 497  Special Topics  1-3 credits
The Interdisciplinary Studies/Liberal Arts Major prepares students to be effective elementary educators and is aligned with the Model Content Standards for the State of Colorado. The depth and breadth of the Interdisciplinary Studies/Liberal Arts Major curriculum prepared students to successfully teach in a Colorado standards-based classroom or be prepared to enter other education and training job opportunities.

FACULTY
Assistant Professor James M. Woytek; Associate Professor Gaye Jenkins; Lecturers Brooke Hanks and Cori Woytek.

DESCRIPTION OF THE PROGRAM
The Interdisciplinary Studies/Liberal Arts Major requires students to complete the requirements of the Elementary Education Licensure Program, including 30 credits of coursework. These requirements are described under the Education Program description in this Catalog. The Major consists of 92 credits of interdisciplinary courses and 30 credits of teacher education coursework. The 92 credits of interdisciplinary coursework includes the University’s general education requirements (nine credits of essential skills, and 26 credits of liberal arts).

Interdisciplinary Studies/Liberal Arts Major:

Comprehensive Program

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 105</td>
<td>Introduction to Art</td>
<td>3 cr</td>
</tr>
<tr>
<td>COM 202</td>
<td>Academic Writing and Inquiry</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Macroeconomics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Microeconomics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENG 102</td>
<td>Academic Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENG 205</td>
<td>Introduction to Creative Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENG 220</td>
<td>Grammar and the English Language</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENG 250</td>
<td>Critical Approaches to Literature</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENG 370</td>
<td>Myth and Culture</td>
<td>3 cr</td>
</tr>
<tr>
<td>ESS 353</td>
<td>Coordinated School Health Programs</td>
<td>1 cr</td>
</tr>
<tr>
<td>GEOG 110</td>
<td>World Regional Geography</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOG 120</td>
<td>Introduction to Human Geography</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOG 250</td>
<td>Geography of North America</td>
<td>3 cr</td>
</tr>
<tr>
<td>HIST 101</td>
<td>World History to 1500</td>
<td>3 cr</td>
</tr>
<tr>
<td>HIST 102</td>
<td>World History Since 1500</td>
<td>3 cr</td>
</tr>
<tr>
<td>HIST 126</td>
<td>U.S. History to 1865</td>
<td>3 cr</td>
</tr>
<tr>
<td>HIST 127</td>
<td>U.S. History Since 1865</td>
<td>3 cr</td>
</tr>
<tr>
<td>HIST 327</td>
<td>Colorado History</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 140</td>
<td>College Algebra</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 209</td>
<td>Mathematics for Elementary School Teachers I</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 210</td>
<td>Mathematics for Elementary School Teachers II</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUS 100</td>
<td>Fundamentals of Music</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLS 117</td>
<td>Introduction to Political Ideas</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLS 180</td>
<td>Introduction to American Politics</td>
<td>3 cr</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>POLS 282</td>
<td>Issues in State and Local Government</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLS 360</td>
<td>American Foreign Policy</td>
<td>3 cr</td>
</tr>
<tr>
<td>SCI 110</td>
<td>Habitable Planet (with laboratory)</td>
<td>4 cr</td>
</tr>
<tr>
<td>SCI 111</td>
<td>Nature of Science</td>
<td>1 cr</td>
</tr>
<tr>
<td>SCI 120</td>
<td>Living Planet (with laboratory)</td>
<td>4 cr</td>
</tr>
<tr>
<td>SCI 210</td>
<td>Dynamic Planet (with laboratory)</td>
<td>4 cr</td>
</tr>
<tr>
<td>SPAN 101</td>
<td>Elementary Spanish I</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Capstone Course Requirement:**

The Capstone Course Requirement in the Interdisciplinary Studies/Liberal Arts Major is fulfilled by the appropriate student teaching experience.
Latin America is a complex and diverse region that resulted from the encounter of indigenous societies, European colonizers, and African peoples. Latin America today is one of the most dynamic regions in the world in terms of economic growth, political interaction with the U.S., and the preservation of natural and cultural resources. The minor in Latin American Studies provides students an opportunity to study this field from a variety of disciplinary angles. By employing the tools of various disciplines, including art and art history, history, Spanish, geography and others, students can begin the process of understanding these fascinating peoples and nations. The increasing interdependence of the Americas demands that students gain as much exposure as possible to the issues and forces related to the constantly changing relationships between the United States and Latin America.

Faculty
Phil Crossley, Heather Orr, Heather Thiessen-Reily, Lynn Sikkink

Description of the Program
Latin American Studies Minor:
The Latin American Studies minor consists of 21 credits: 15 credits of core courses (including 6 Spanish language credits beyond SPAN 101 and 102) and 6 credits of electives:

- ART 421 Art of Mesoamerica and the Andean Region of South America .......... 3 cr
- GEOG 351 Geography of Latin America and the Caribbean .......................... 3 cr
- HIST 260 History of Latin America ............................................................. 3 cr
- SPAN 254* Intermediate Spanish I ................................................................. 3 cr
- SPAN 255* Intermediate Spanish II ............................................................... 3 cr
- LAS 400 Latin American Studies Senior Portfolio ......................................... 0 cr

Two of the following**:
- ANTH 320 Cultural Ecology ........................................................................ 3 cr
- ECON 303 International Economics and Globalization ................................. 3 cr
- HIST 360 Mexico ......................................................................................... 3 cr
- HIST 364 Women in Latin American History .............................................. 3 cr
- HIST 365 Latin American Revolutions ......................................................... 3 cr
- POLS 255 Introduction to Comparative Politics ............................................ 3 cr
- SPAN 341 Latin American Civilization and Culture ....................................... 3 cr

* Requests for substitute languages spoken in Latin America (e.g., Portuguese) may be submitted to the designated coordinator of the Latin American Studies minor for substitution consideration.

**Students may petition to have other courses that have at least 40% Latin American content count toward the minor. The student is required to submit written evidence of the Latin American content of such courses, including the instructor’s signature, to the Coordinator for approval.
LATIN AMERICAN STUDIES COURSES

LAS 400  Latin American Studies Senior Portfolio 0 cr
A culminating experience to the minor in Latin American Studies in which students develop a portfolio of their best work from courses taken in the minor, and write a reflective essay indicating how those projects represent their learning in the program. The portfolio and essay will be assessed by the LAS Council members, and the Coordinator's signature is required as evidence of completion of the requirement. A grade of Satisfactory/Unsatisfactory will be reported to the Registrar once the portfolio has been evaluated by the Coordinator. Prerequisite: senior standing and prior completion of all, or co-enrollment in any remaining LAS requirements.
Western State Colorado University provides three programs of study in Mathematics: the Standard Mathematics Major, the Comprehensive Mathematics Major with a Computer Information Science Emphasis, and the Comprehensive Mathematics Major with Secondary Licensure Emphasis. Each major offers students a strong, competitive program to prepare them for career fields in mathematics or computer science or for entry into graduate school. Students majoring in Mathematics have opportunities to develop abstract reasoning skills and problem-solving skills.

The advancement of thinking skills is one of the primary reasons mathematicians and computer scientists are in demand in education, business, and high-tech firms. Western graduates are currently employed in a variety of fields including actuarial science, computer programming, education, system analysis, software engineering, and mathematical research for business and engineering firms.

**FACULTY**
Professors Andrew G. Keck, Heidi L. Keck, and Daniel L. Schuster;
Associate Professors Robert A. Cohen and Jeremy Muskat;
Assistant Professor Kimberly J. Fix;
Lecturers Edith Cranor-Buck, Caleb Holloway, and Zachary Treisman.

**DESCRIPTION OF THE PROGRAMS**
Each Mathematics Major requires the 38-credit Mathematics Core.

**Mathematics Core**
- CIS 190  Computer Science I ................................................................. 3 cr
- MATH 151  Calculus I ................................................................................. 4 cr
- MATH 213  Probability and Statistics ....................................................... 3 cr
- MATH 220  Introduction to Advanced Mathematics ............................... 3 cr
- MATH 251  Calculus II .............................................................................. 4 cr
- MATH 252  Calculus III ............................................................................ 4 cr
- MATH 300  Introduction to Mathematical Modeling ................................. 3 cr
- MATH 360  Linear Algebra ...................................................................... 3 cr
- MATH 370  History of Mathematics ........................................................... 3 cr
- MATH 451  Analysis I .............................................................................. 3 cr
- MATH 471  Abstract Algebra I ................................................................. 3 cr
- MATH 495  Senior Seminar ...................................................................... 2 cr

**Mathematics Major: Standard Program**
A minimum of 41 credits is required, including the 38-credit Mathematics Core and the following:

One of the following:
- CIS 191  Computer Science II ................................................................. 3 cr
- MATH 314  Applied Probability ................................................................. 3 cr
- MATH 330  Topics of Geometry ................................................................ 3 cr
- MATH 354  Differential Equations ............................................................ 3 cr
- MATH 456  Introduction to Complex Analysis .......................................... 3 cr

**Mathematics Major: Comprehensive Programs**

**COMPUTER INFORMATION SCIENCE EMPHASIS**
A minimum of 53 credits is required, including the 38-credit Mathematics Core and the following:

CIS 191  Computer Science II ................................................................. 3 cr
CIS 280  Data Structures ................................................................. 3 cr
CIS 375  Numerical Methods ................................................................. 3 cr
CIS 430  Computer Graphics ................................................................. 3 cr
MATH 354  Differential Equations................................................................. 3 cr

Recommended Supporting Courses:

PHYS 200  General Physics I (with laboratory) ............................................. 4 cr
PHYS 201  General Physics II (with laboratory) ............................................. 4 cr

**SECONDARY LICENSURE EMPHASIS**

This emphasis qualifies students for the State of Colorado License to teach Mathematics in junior high, middle school or high school. Students interested in pursuing this comprehensive program should consult with the Teacher Education Program advisor in addition to the advisor in their major as soon as possible. A minimum of 53 credits is required including the 38-credit Mathematics Core and the courses listed below. In addition, the student must fulfill the requirements of the Secondary Licensure Program (see description under Education).

MATH 266  Secondary Mathematics from an Advanced Perspective .......... 3 cr
MATH 330  Topics in Geometry ................................................................. 3 cr
MATH 366  Methods of Teaching Secondary Mathematics ................................... 3 cr

One of the following sequences:

CHEM 111  General Chemistry I ................................................................. 3 cr
CHEM 113  General Chemistry II ................................................................. 3 cr

or

PHYS 170  Principles of Physics I (with laboratory) ............................................. 4 cr
PHYS 171  Principles of Physics II (with laboratory) ............................................. 4 cr

or

PHYS 200  General Physics I (with laboratory) ............................................. 4 cr
PHYS 201  General Physics II (with laboratory) ............................................. 4 cr

**Mathematics Minor**

The Mathematics Minor requires a minimum of 18 credits:

MATH 151  Calculus I ................................................................................. 4 cr
MATH 251  Calculus II ................................................................................. 4 cr
Mathematics elective (300-level or above) ........................................................................... 3 cr

At least seven credits from the following:

MATH 200  Discrete Mathematics ................................................................. 3 cr
MATH 213  Probability and Statistics................................................................. 3 cr
MATH 220  Introduction to Advanced Mathematics ................................................................. 3 cr
MATH 252  Calculus III ................................................................................. 4 cr
MATH 275 Scientific Programming Modeling and Simulation ................................................................. 3 cr

or any upper-division Mathematics course ........................................................................... 3 cr

**Capstone Course Requirement.** The following course fulfills the capstone course requirement: MATH 495 Senior Seminar.
**Mathematics Courses**

**MATH 098  Beginning Algebra**  
3 credits  
An introduction to algebra with a review of basic arithmetic. Includes decimals, fraction, percentage, ratio, proportion, signed numbers, algebraic expressions, factoring, exponents and radicals, linear equations, and graphs. MATH 098 is offered through Extended Studies and a fee is assessed. Credit does not count toward graduation. Graded Satisfactory/Unsatisfactory only.

**MATH 099  Intermediate Algebra**  
3 credits  
A review of the arithmetic of fractions and decimals, percentage problems, signed numbers, arithmetic, and topics of basic algebra, including simplifying algebraic expressions, solving and graphing linear equations, basic factoring, working with algebraic fractions, and solving rational and quadratic equations. This course is designed for students who need a review of the basic algebra skills necessary to complete the required mathematics courses MATH 131 or MATH 140. MATH 099 is offered through Extended Studies and a fee is assessed. Credit does not count toward graduation. Graded Satisfactory/ Unsatisfactory only. Prerequisite: ACT math score of 16 or above; SAT math score of 400 or above, MATH 098; or Accuplacer Elementary Algebra test score of 60 or above.

**MATH 105  Mathematics for the Liberal Arts**  
3 credits  
An investigation of a number mathematical concepts, which may include ratios and proportions, descriptive statistics, sets and logic, geometry, right-angle trigonometry, counting, and probability. A variety of teaching methods are employed such as cooperative groups, writing about mathematics, and technology (calculators and computers). Prerequisite: ACT math score of 19 or above; SAT math score of 460 or above; MATH 098; MATH 099; or Accuplacer Elementary Algebra test score of 85 or above. GT-MA1

**MATH 131  Mathematics for the Social Sciences**  
3 credits  
A course for the student majoring in the social sciences. Topics may include the study of linear functions, linear regression, systems of linear equations and matrix inverses, linear optimization, financial calculations, sets and counting, basic and conditional probability, the binomial and normal probability distributions, and descriptive statistics. Prerequisite: ACT math score of 19 or above; SAT math score of 460 or above; MATH 098; MATH 099; or Accuplacer Elementary Algebra test score of 85 or above. GT-MA1

**MATH 140  College Algebra**  
3 credits  
An integration of the essential algebraic manipulations, solving equations and inequalities, polynomial functions, exponential and logarithmic functions, and techniques of graphing. Prerequisite: ACT math score of 19 or above; SAT math score of 460 or above; MATH 099; or Accuplacer Elementary Algebra test score of 85 or above. GT-MA1

**MATH 141  Precalculus**  
4 credits  
Preparation for calculus by the study of functions of one variable over the real numbers. These are introduced in general and then applied to the usual elementary functions, namely polynomial and rational functions, exponential and logarithmic functions, and trigonometric functions. Inverse functions, polar coordinates and trigonometric identities are included. Prerequisite: ACT math score of 23 or above; SAT math score of 530 or above; MATH 140 with a minimum grade of “C-”; or Accuplacer university-level mathematics test with a score of 65 or above.
MATH 151  Calculus I  4 credits
A study of differential calculus, including limits, continuous functions, Intermediate
Value Theorem, tangents, linear approximation, inverse functions, implicit
differentiation, extreme values and the Mean Value Theorem, and of integral calculus
including anti-derivatives, definite integrals, and the Fundamental Theorem of
Calculus. Prerequisite: ACT math score of 27 or above; SAT math score of 610 or
above; MATH 141 with a minimum grade of “C-”; or Accuplacer university-level
mathematics test with a score of 95 or above. GT-MA1

MATH 197  Special Topics  1-6 credits

MATH 200  Discrete Mathematics  3 credits
Designed to provide some of the mathematical background necessary for advanced
work in computer science. Topics include logic, set theory, Boolean algebra, switching
theory, counting and enumeration, number theory, mathematical induction, linear
modeling, basic matrix algebra, and the graphical and simplex methods of linear
programming. Applications of the topics covered are emphasized. Prerequisite: MATH
141 with a minimum grade of “C-.”

MATH 209  Mathematics for Elementary School Teachers I  3 credits
First of two courses designed for prospective elementary teachers. Emphasizes the
real number system, arithmetic operations, and algebra. Explorations focus on
representing, analyzing, generalizing, formalizing, and communicating patterns and
structures. Content is presented using problem solving and exploration. Prerequisite:
ACT math score of 23 or above; SAT math score of 530 or above; MATH 140 with a
minimum grade of “C-.”

MATH 210  Mathematics for Elementary School Teachers II  3 credits
Second of two courses designed for prospective elementary teachers. Emphasizes
probability, data analysis, and geometry. Explorations focus on representations of data
and two-and three-dimensional shapes, their properties, measurements, constructions,
and transformations. Prerequisite: MATH 209 with a minimum grade of “C-.”

MATH 213  Probability and Statistics  3 credits
An introduction to descriptive statistics, probability concepts, and inferential statistics.
The topics for the course include presentation of data, counting principles, probability
rules, and discrete and continuous probability distributions. Prerequisite: MATH 141
with a minimum grade of “C-,” or Accuplacer university-level mathematics test score of
85 or above; or instructor permission. GT-MA1

MATH 220  Introduction to Advanced Mathematics  3 credits
Students develop and use elementary logic and set theory to construct deductive proofs
with relations, functions, and some algebraic structures. Topics include indexing,
equivalence relation theory, and cardinality. Prerequisite: MATH 151 with a minimum
grade of “C-.”

MATH 232  Applied Calculus for the Managerial and Social Sciences  3 credits
An introduction to differential and integral calculus for students majoring in business,
accounting or the social sciences. The calculus is presented using a variety of real-world
business and economic applications, stressing marginality, elasticity, and accumulation.
Offered upon sufficient demand. Prerequisite: MATH 131 or MATH 140 with a mini-
MATH 251  Calculus II  
4 credits
Topics include techniques of integration, area computations, improper integrals, infinite series and various convergence tests, power series, Taylor's Formula, polar coordinates, and parametric curves. Prerequisite: MATH 151 with a minimum grade of “C-.”

MATH 252  Calculus III  
4 credits
Topics include calculus of functions of several variables, differentiation and elementary integration, vectors in the plane and space. Prerequisite: MATH 251 with a minimum grade of “C-.”

MATH 266  Secondary Mathematics from an Advanced Perspective  
3 credits
A course designed to help Secondary Licensure Emphasis majors understand the core mathematical content of high school mathematics courses before calculus. These concepts are treated from an advanced standpoint, emphasizing connections and extensions. Topics include number systems, polynomial and transcendental functions, analytic geometry, theory of equations, and measurement. Prerequisite: MATH 151 with a minimum grade of “C-.”

MATH 275  Scientific Programming, Modeling and Simulation  
3 credits
Designed to develop programming skills appropriate for scientific and industrial applications. Topics may include numerical solution of differential equations, singular value decomposition, and fourier analysis. Emphasis is placed on problem modeling, algorithm development, and data visualization. Prerequisites: CIS 190 and MATH 151 with minimum grades of “C-.”

MATH 297  Special Topics  
1-6 credits

MATH 300  Introduction to Mathematical Modeling  
3 credits
Designed to teach the basic principles of mathematical modeling and applied mathematics. Techniques from calculus, statistics, and probability are utilized to model real-world problems. Analytic and numeric tools are used to implement the models, obtain predictions and investigate underlying mechanisms. Topics include dimensional analysis, curve fitting, simulations, differential and difference equations. Prerequisites: MATH 251 and MATH 213 with minimum grades of “C-.”

MATH 314  Applied Probability  
3 credits
A study of the basic principles of probability theory and their applications. Topics include combinational analysis, conditional probabilities, discrete and continuous random variables, and measures of centrality and variance. Emphasis is placed on applications using probability distributions (including binomial, geometric, Poisson, uniform, exponential, and normal distributions) to assess and manage risk in the fields of finance, insurance, medicine, and quality control. Prerequisite: MATH 251 with minimum grade of “C-.”

MATH 330  Topics in Geometry  
3 credits
An introduction to modern geometries. Topics include synthetic, analytic, vector, and transformational approaches to geometry. Classification of geometries, axiomatics, and the application of geometry may also be included. Prerequisite: MATH 220 with a minimum grade of “C-.”
MATH 354 Differential Equations 3 credits
A study of the theory and methods for solving ordinary differential equations. Prerequisite: MATH 251 with a minimum grade of “C-.”

MATH 360 Linear Algebra 3 credits
An introduction to systems of linear equations, matrix operations, vector spaces, properties of determinants, eigenvalues, and orthogonality and least-squares. Prerequisite: MATH 220 with a minimum grade of “C-.”

MATH 366 Methods of Teaching Secondary Mathematics 3 credits
Secondary Licensure Emphasis majors learn to use the latest teaching techniques and technologies to prepare valid mathematics tests, to be able to effectively evaluate their students, to know the latest developments in secondary mathematics curriculum, and to become familiar with professional mathematics teaching organizations and their journals. Prerequisites: MATH 220 and MATH 266 with minimum grades of “C-.”

MATH 370 History of Mathematics 3 credits
Acquaints the student with the historical development of mathematics. Includes an introduction to the proper methods and accepted forms of written, graphical, and oral communication in mathematics. Prerequisites: MATH 220 and MATH 251 with minimum grades of “C-.”

MATH 375 Numerical Methods 3 credits
A study of techniques of computation for power-series calculation of functions; roots of equations; nonlinear simultaneous equations; matrices, determinants, and linear simultaneous equations; numerical integration; and differential equations. Prerequisites: MATH 251 and either CIS 275 or CIS 310 with minimum grades of “C-.”

MATH 390 Introduction to Peer Tutoring in Mathematics 1 credit
Strategies for tutoring mathematics at the university level, with a focus on presenting mathematical concepts and procedures, reducing anxiety, and improving study skills. May be repeated for up to four credits. Graded Satisfactory/Unsatisfactory only. Prerequisite: MATH 151 with a minimum grade of “B-” and instructor permission.

MATH 391 Seminar in Mathematics 1 credit
A selected topic from areas of mathematics not usually included in the regular curriculum. Student involvement through presentations is emphasized. May be taken under different topics for a total of two credits.

MATH 392 Independent Study in Mathematics 1-4 credits

MATH 397 Special Topics 1-6 credits

MATH 451 Analysis I 3 credits
An introduction to the theory of calculus. Topics include the usual topology of the reals, sequences, limits, continuity, differentiation, and Riemann integration. Prerequisites: MATH 220 and MATH 252 with minimum grades of “C-.”

MATH 452 Analysis II 2 credits
A continuation of the study of the theory of calculus. Topics include series, sequences and series of functions, pointwise and uniform convergence and the transcendental functions defined as power series. Prerequisite: MATH 451 with a minimum grade of “C-.”
MATH 456  Introduction to Complex Analysis  3 credits
An introduction to the theory and applications of complex variables. Topics include analytic and elementary functions, integrals, series, residues, and conformal mapping. Prerequisites: MATH 220 and MATH 252 with minimum grades of “C-.”

MATH 471  Abstract Algebra I  3 credits
An introduction to the theory of groups and rings. The fundamental group properties and concepts including cyclic groups, subgroups, direct products, symmetric groups, cosets, normal subgroups, and the group homomorphism theorems are discussed. Prerequisite: MATH 220 with a minimum grade of “C-.”

MATH 472  Abstract Algebra II  2 credits
A continuation of the study of abstract algebra. This course develops the ring properties and continues the development of algebra from integral domains to the field concept. Discussion includes the basic theory of factorization and unique factorization domains. Prerequisite: MATH 471 with a minimum grade of “C-.”

MATH 490  Workshop  2 credits
A study of a variety of mathematical topics generally dictated by student interest. The course may be taken for credit three times if the content of the workshop differs.

MATH 495  Senior Seminar  2 credits
A capstone course for the Mathematics Standard Major and for the Secondary Licensure Emphasis. Each student selects an area of interest, researches the selected area, generates a reference list and research paper, and presents the paper to a seminar of faculty and students. Prerequisites: MATH 360 and either MATH 451 or MATH 471.

MATH 497  Special Topics  1-6 credits
**Music (MUS)**

The discipline of music and music making requires the integration of technical skills, creativity, analytical thinking, and understanding. Students electing to study music work with faculty musicians in classes, ensembles, and private lessons to acquire basic musicianship skills, develop performance abilities, learn about music’s role in past and present cultures, and gain the enthusiasm and tools needed for lifelong teaching and learning in the field of music. A degree in music within a liberal arts curriculum provides a broad background, allowing students to enter many careers and to pursue further study and graduate work in many areas. Graduates of Western’s Music Department are now involved in a variety of careers, including the recording industry, concert management, counseling, librarianship, music business, accompanying, coaching, church music, independent teaching, and performance. Many graduates have elected to take the additional music and education courses leading to licensure in Music Education and are pursuing careers in the public schools of Colorado and the nation, often pursuing graduate study in a variety of fields within the education profession.

The Music Department also provides opportunities for all members of the Western community to gain rewarding musical experience as participants in ensembles. Many courses are offered to all students of the University to provide an awareness of music and its importance to all cultures. Free concerts by faculty, students, and guests are performed for the University and the Gunnison community.

Three Comprehensive Program Emphases are available for students who wish to major in music: Music Emphasis, Music Education Emphasis, and Business Emphasis. All programs require study in all areas of music—theory, basic keyboard skills, history and literature, individual and group performance, conducting, and research methods. The Music Education Emphasis includes additional methods and techniques courses designed to qualify students for music-teacher licensure in Colorado. Additional Education courses for the K-12 licensure are administered by the Education Program.

The Music Minor consists of theory and history courses and electives chosen from the offerings of the Music Department.

Western State Colorado University is an accredited institutional member of the National Association of Schools of Music.

**Faculty**

Professors Robert H. Barrett and John M. Wacker;
Associate Professor Heather D. Roberson; Assistant Professor Greg Haynes;
Emeritus Professor Martha W. Violett; Lecturer Kenneth W. Todd.

**Description of the Program**

All Music majors require the 28-credit Musicianship Core, 14 or 21 credits from the Performance Curriculum (depending upon the emphasis), the six credits (or the equivalent) of foreign language (not required for the Music Education Emphasis), and Concert and Convocation Attendance Course (must be taken each semester of residence with a “Satisfactory” grade a minimum of six semesters). A minimum grade of “C” is required in all Music courses counted toward the major. To qualify for graduation all Music majors must meet performance requirements and piano proficiency.
**Musicianship Core**

MUS 128  Theory of Music Laboratory I ................................................................. 1 cr
MUS 129  Theory of Music I .................................................................................... 3 cr
MUS 130  Theory of Music Laboratory II ............................................................... 1 cr
MUS 131  Theory of Music II .................................................................................. 3 cr
MUS 140  Introduction to Music ............................................................................. 3 cr
MUS 253  Theory of Music Laboratory III ............................................................... 1 cr
MUS 254  Theory of Music III ................................................................................ 3 cr
MUS 255  Theory of Music Laboratory IV ............................................................... 1 cr
MUS 256  Theory of Music IV ................................................................................. 3 cr
MUS 312  Introduction to Music Technology ......................................................... 1 cr
MUS 352  History of Music ...................................................................................... 3 cr
MUS 353  History of Music ...................................................................................... 3 cr
MUS 491  Seminar in Research ............................................................................. 2 cr

**Performance Curriculum.** The Performance Curriculum consists of courses in Conducting, Major Performing Organizations, Small Ensembles, and Private Lessons.

**Conducting:**

MUS 250  Beginning Conducting: Choral and Instrumental .................................. 2 cr

**Major Performance Organizations: (courses may be repeated)** The specific major performing organization required is determined by major instrument or voice.

MUS 101  Orchestra ............................................................................................... 1 cr
MUS 102  Band ........................................................................................................ 1 cr
MUS 104  Chorus .................................................................................................... 1 cr
MUS 301  Orchestra ............................................................................................... 1 cr
MUS 302  Band ....................................................................................................... 1 cr
MUS 304  Chorus .................................................................................................... 1 cr

**Small Ensembles: (courses may be repeated)**

MUS 121  Instrumental and Vocal Chamber Music ............................................. 0.5-1 cr
MUS 321  Instrumental and Vocal Chamber Music ............................................. 1 cr
MUS 105  Opera ..................................................................................................... 1 cr
MUS 305  Opera ..................................................................................................... 1 cr

**Private Lessons: (courses may be repeated)**

MUS 180  Piano ....................................................................................................... 1-2 cr
MUS 181  Organ ..................................................................................................... 1-2 cr
MUS 182  Voice ...................................................................................................... 1-2 cr
MUS 183  Violin ....................................................................................................... 1-2 cr
MUS 184  Viola ........................................................................................................ 1-2 cr
MUS 185  Cello ....................................................................................................... 1-2 cr
MUS 186  Contra Bass .......................................................................................... 1-2 cr
MUS 187  Flute ....................................................................................................... 1-2 cr
MUS 188  Oboe ....................................................................................................... 1-2 cr
MUS 189  Clarinet ................................................................................................. 1-2 cr
MUS 190  Bassoon ................................................................................................. 1-2 cr
MUS 191  Saxophone ............................................................................................. 1-2 cr
MUS 192  Trumpet ................................................................................................. 1-2 cr
MUS 193  French Horn ........................................................................................... 1-2 cr
Foreign Language. Six credits of foreign language are required in the Music Emphasis and Business Emphasis. This requirement may be fulfilled by passing the appropriate CLEP test if sufficient skill has been attained.

Concert and Convocation Attendance. All Music majors must take MUS 000 Concert and Convocation Attendance each semester in residence. Six semesters of MUS 000 with a grade of “satisfactory” are required of all Music majors prior to graduation.

Performance Requirements for Majors. In order to qualify for graduation, all Music majors must pass specific levels of performance as judged by a jury of Music faculty. All Music Education majors must also present a senior recital (MUS 400 Senior Recital). Majors in the Music Emphasis and the Business Emphasis may elect MUS 400 Senior Recital/Senior Project, or MUS 499 Internship. Please contact the Music Department for exact requirements.

Piano Proficiency. All students with a Music Major or Minor must pass the piano proficiency examination by the end of the required theory sequence. MUS 173 Piano Class, MUS 174 Piano Class, MUS 275 Piano Class, and MUS 276 Piano Class, may be taken for elective credits to prepare for the exam. Please contact the Music Department for exact requirements.

Music Major: Comprehensive Programs

MUSIC EMPHASIS
A minimum of 58 credits is required, including the 28-credit Musicianship Core, 21 credits from the Performance Curriculum (seven credits in Major Performance Organizations, four credits in Small Ensembles, eight credits in Private Lessons, the two-credit MUS 250 Beginning Conducting: Choral and Instrumental, the one-credit
MUS 312 Introduction to Music Technology; students must be registered for a major performing organization every semester in residence), three credits of Music electives, Concert and Convocation Attendance, six credits of foreign language, Performance Requirement (MUS 400 Senior Recital/Senior Project, or MUS 499 Internship), and Piano Proficiency.

K-12 Music Education Emphasis
This program prepares students for the State of Colorado License in Music Education. A minimum of 64 credits is required, including the 28-credit Musicianship Core, 21 credits from the Performance Curriculum (seven credits in Major Performance Organizations, four credits in Small Ensembles, eight credits in Private Lessons, the two-credit MUS 250 Beginning Conducting: Choral and Instrumental, the one-credit MUS 312 Introduction to Music Technology; students must be registered for a major performing organization every semester in residence), Concert and Convocation Attendance, the Performance Requirement (MUS 400 Senior Recital/ Senior Project), Piano Proficiency, and the following:

- MUS 120 Introduction to Music Education ................................................................. 1 cr
- MUS 213 Woodwind Methods ..................................................................................... 1 cr
- MUS 214 Brass Methods ........................................................................................... 1 cr
- MUS 215 String Methods .......................................................................................... 1 cr
- MUS 216 Percussion Methods ................................................................................. 1 cr
- MUS 217 Voice Methods ......................................................................................... 1 cr
- MUS 290 Introduction to Improvisation .................................................................... 1 cr
- MUS 312 Introduction to Music Technology ............................................................. 1 cr
- MUS 350 Advanced Conducting: Choral and Instrumental ...................................... 2 cr
- MUS 360 Teaching General Music in Elementary Schools ...................................... 2 cr
- MUS 365 Methods and Philosophy of Teaching and Supervising
  Instrumental Music in the Public Schools: K-12 .................................................. 2 cr
  Vocal and General Music in the Public Schools: K-12 ........................................... 2 cr

The student must also fulfill the requirements of the K-12 Music Licensure Program (see description under Education) to qualify for the Colorado License in Music Education. Please contact the Chair of the Department of Music or the Director of the Teacher Education Program for exact required course work in Education.

Business Emphasis
A minimum of 66 credits is required including the 28-credit Musicianship Core, 14 credits in Musical Performance (seven credits from Major Performing Organizations or Small Ensembles and seven credits from Private Lessons), the one-credit MUS 312 Introduction to Music Technology, Performance Requirement (MUS 400 Senior Recital/ Senior Project, or MUS 499 Internship), Piano Proficiency, the six-credit foreign language requirement, Concert and Convocation Attendance, and the following:

- ACC 201 Introduction to Financial Accounting ..................................................... 3 cr
- BUAD 210 Legal Environment of Business ............................................................ 3 cr
- BUAD 270 Principles of Marketing ......................................................................... 3 cr
- BUAD 333 Organizational Behavior ....................................................................... 3 cr
- MUS 312 Introduction to Music Technology .......................................................... 3 cr
One of the following:
CIS 120 Information Management and Analysis .................................................... 3 cr
BUAD 220 Computer Applications in Business .................................................... 3 cr

One of the following:
ECON 201 Macroeconomics .................................................................................... 3 cr
ECON 202 Microeconomics....................................................................................... 3 cr

Music Minor
A minimum of 23 credits is required. The Piano Proficiency is required of Music Minors. A minimum grade of “C” is required in all music courses counted toward the Music Minor.
Required courses:
MUS 128 Theory of Music Laboratory I................................................................... 1 cr
MUS 129 Theory of Music I ....................................................................................... 3 cr
MUS 130 Theory of Music Laboratory II ................................................................... 1 cr
MUS 131 Theory of Music II....................................................................................... 3 cr
MUS 140 Introduction to Music ................................................................................ 3 cr
MUS 352 History of Music.......................................................................................... 3 cr
MUS 353 History of Music.......................................................................................... 3 cr
Private Lessons............................................................................................................. 4 cr
Major Performing Organizations or Small Ensembles ............................................ 2 cr

Capstone Course Requirement. The following course in the Music Major fulfills the Capstone Course Requirement: MUS 491 Seminar in Research.

MUSIC COURSES

MUS 000 Concert and Convocation Attendance 0 credits
Designed to encourage concert and convocation attendance as a means of learning about music literature and style, performance practice, and topics of interest to musicians. Attending 75 per cent of the posted events in each semester (as either listener or performer) qualifies as a “Satisfactory” grade. Graded Satisfactory/Unsatisfactory only.

MUS 100 Fundamentals of Music 3 credits
An introduction to music literacy and theory. Students acquire basic skills of reading, writing, and performing music and gain an understanding of scales, intervals, chords, and transposition. The course is open to students with little or no musical background. GT-AH1

MUS 101 Orchestra 1 credit
Open to all who play orchestral instruments and who wish to experience playing orchestral music. The course includes the study and performance of orchestral literature.

MUS 102 Band 1/2-1 credit
Open to all who play band instruments. The course includes the study and performance of symphonic band literature. Membership is open to Music majors and non-Music majors by audition. Credit is determined by the type of ensemble and amount of rehearsal time.

MUS 104 Chorus 1/2-1 credit
An opportunity for participation in a vocal ensemble. The Western Concert Choir per-
forms choral masterworks from all historical periods of music and also performs major works as part of the Western University-Community Choir. Membership is open to Music majors and non-Music majors by audition. Credit is determined by the type of ensemble and amount of rehearsal time.

**MUS 105   Opera**  
1 credit  
Designed to provide experience in musical-dramatic activities. May be taken two times for credit. Prerequisite: admission by campus-wide audition.

**MUS 120   Introduction to Music Education**  
1 credit  
An introductory course for the music major interested in music education K-12. This course provides students with an overview of the concepts, methods and techniques used in music education. Students learn the historical, philosophical, and practical conventions, of all areas of music education, including elementary music, choir orchestra, and band. Students examine different aspects involved in teaching music in public schools, goals of various music programs, and existing curricula including sample lesson plans. Included is an introduction to the Colorado Model Content Standards for Music and technology used in music education. Prerequisite to the 200 and 300-level music education methods classes.

**MUS 121   Instrumental and Vocal Chamber Music**  
1/2-1 credit  
Designed to give the student-musician rehearsal and performance experience in the area of ensemble and chamber music. Includes the Brass, Woodwind, Percussion, String, and Jazz Ensembles, as well as Chamber Singers, and additional small ensembles. Membership is open to Music majors and non-Music majors by audition. Credit is determined by the type of ensemble and amount of rehearsal time.

**MUS 128   Theory of Music Laboratory I**  
1 credit  
Development of musicianship skills related to MUS 129. Students will study, sight read, and perform (voice and keyboard) rhythms, tonicization patterns in major and minor keys, intervals, scales, and diatonic chords. Students will also learn to take melodic, harmonic, and rhythmic dictation. (Offered spring) Prerequisite: MUS 100 or the equivalent. Corequisite: MUS 129.

**MUS 129   Theory of Music I**  
3 credits  
A study of musical analysis, notation, and composition. This course concentrates on fundamentals such as major and minor scales, meter, rhythm, pitch intervals, key signatures, triads and inversions, simple chord building, harmonic progressions, and voice leading. (Offered spring) Prerequisite: MUS 100 or the equivalent. Corequisite: MUS 128.

**MUS 130   Theory of Music Laboratory II**  
1 credit  
Designed to enhance and build on the musical skills and knowledge learned in MUS 128 and MUS 129 and develop those areas of musicianship through performance (voice and keyboard) and dictation. This course builds on knowledge of diatonic triads with the inclusion of inversions, non-chord tones, and diatonic seventh chords. (Offered fall) Prerequisite: MUS 128 and MUS 129 with minimum grades of “C.” Corequisite: MUS 131.

**MUS 131   Theory of Music II**  
3 credits  
A study of musical analysis, notation, and composition. This course builds on knowledge gained in MUS 128 and MUS 129 and introduces non-chord tones; diatonic
seventh chords, phrase structure and cadences, tonicization and rudimentary counter-
point. (Offered fall) Prerequisites: MUS 128 and MUS 129 with minimum grades of
“C.” Corequisite: MUS 130.

**MUS 140  Introduction to Music**  
3 credits  
A study of the elements of musical structure designed to form a basis for intelligent
listening. Music is selected to illustrate representative styles of music from different
historical periods and world cultures. Required of Music majors and minors during
their freshman year. GT-AH1

**MUS 173  Piano Class**  
1 credit  
Beginning piano.

**MUS 174  Piano Class**  
1 credit  
A continuation of MUS 173.

**MUS 180  Piano**  
1-2 credits  
Private instruction.

**MUS 181  Organ**  
1-2 credits  
Private instruction. Prerequisite: at least four years of private piano study.

**MUS 182  Voice**  
1-2 credits  
Private instruction.

**MUS 183  Violin**  
1-2 credits  
Private instruction.

**MUS 184  Viola**  
1-2 credits  
Private instruction.

**MUS 185  Cello**  
1-2 credits  
Private instruction.

**MUS 186  Contra Bass**  
1-2 credits  
Private instruction.

**MUS 187  Flute**  
1-2 credits  
Private instruction.

**MUS 188  Oboe**  
1-2 credits  
Private instruction.

**MUS 189  Clarinet**  
1-2 credits  
Private instruction.

**MUS 190  Bassoon**  
1-2 credits  
Private instruction.

**MUS 191  Saxophone**  
1-2 credits  
Private instruction.

**MUS 192  Trumpet**  
1-2 credits  
Private instruction.

**MUS 193  French Horn**  
1-2 credits  
Private instruction.
MUS 194  Trombone  1-2 credits
Private instruction.

MUS 195  Baritone  1-2 credits
Private instruction.

MUS 196  Tuba  1-2 credits
Private instruction.

MUS 197  Special Topics  1-6 credits
MUS 198  Percussion  1-2 credits
Private instruction.

MUS 213  Woodwind Methods (with laboratory)  1 credit
Designed to cover basic performing skills and teaching techniques for all woodwind instruments. Emphasis is on application in the elementary, middle, and secondary schools. Offered in alternate years (Spring 2014).

MUS 214  Brass Methods (with laboratory)  1 credit
Designed to cover basic performing skills and teaching techniques for all brass instruments. Emphasis is on application in the elementary, middle, and secondary schools. Offered in alternate years (Fall 2013).

MUS 215  String Methods (with laboratory)  1 credit
Instruction in violin, viola, violoncello and bass for the Music Education student. Emphasis is on application in the elementary, middle, and secondary schools. Offered in alternate years (Fall 2014).

MUS 216  Percussion Methods (with laboratory)  1 credit
An introduction to the basic percussion instruments with special attention given to standard and contemporary performance techniques and sound production. Emphasis is on application in the elementary, middle, and secondary schools. Offered in alternate years (Spring 2015).

MUS 217  Voice Methods (with laboratory)  1 credit
A study of tone production, breathing as applied to singing, attack and release, muscular control, posture, and vocal health. Special exercises adapted to individual needs of pupils and simple English songs are sung in the class. Emphasis is on basic skills and techniques for use with young voices in the elementary, middle, and secondary schools. Offered in alternate years (Spring 2014).

MUS 240  Perspectives in Music: Jazz History/Music in Media/ Women in Music/other selected topics  3 credits
A study of a specific perspective or repertory of music and its relationship to other aspects of musical culture. Historical, sociological, and multicultural influences and implications, are also considered. The course may be taken two times (with different titles) for credit.

MUS 245  History of Rock and Roll  3 credits
An introductory course emphasizing the history and development of Rock and Roll music. The growth and development of major historical periods of rock music and related styles will be explored through the study of historical, social, political and cultural influences. Music is selected to illustrate representative styles of music from different historical periods of Rock music and culture.
MUS 250 Beginning Conducting: Choral and Instrumental  2 credits
A study of the basic techniques of conducting, score reading, beat patterns, rehearsal procedures, and style in the instrumental and vocal media. Emphasis is placed on physical exercises, coordination, and the development of fundamental baton techniques. Students conduct in class and observe rehearsal situations with the University ensembles. Offered in alternate years (Fall 2014). Prerequisites: MUS 130 and MUS 131 with minimum grades of “C.”

MUS 253 Theory of Music Laboratory III  1 credit
Designed to enhance and build on the musical skills and knowledge learned in MUS 130 and MUS 131 and develop those areas of musicianship through performance (voice and keyboard) and dictation. Studies incorporate modulation using diatonic chords, modemixture, chromaticism, and secondary dominants. (Offered Spring) Prerequisites: MUS 130 and MUS 131 with minimum grades of “C.” Corequisite: MUS 254.

MUS 254 Theory of Music III  3 credits
A study of musical analysis, notation, and composition. This course builds on knowledge gained in MUS 130 and MUS 131 and introduces modulation, chromaticism and altered chords, extension of tertian harmony, and binary and ternary forms. (Offered Spring) Prerequisites: MUS 130 and MUS 131 with minimum grades of “C.” Corequisite: MUS 253.

MUS 255 Theory of Music Laboratory IV  1 credit
Designed to enhance and build on the musical skills and knowledge learned in MUS 253 and MUS 254 and develop those areas of musicianship through performance (voice and keyboard) and dictation. This course continues the study of chromaticism including enharmonic modulations, extended chords, and harmonic practices of the late nineteenth and twentieth century. (Offered Fall) Prerequisites: MUS 253 and MUS 254 with minimum grades of “C.” Corequisite: MUS 256.

MUS 256 Theory of Music IV  3 credits
A study of musical analysis, notation, and composition. This course builds on knowledge gained in MUS 253 and MUS 254 and introduces extended chords, quartal harmony, expanded tonality and serialism, additional twentieth-century compositional techniques, and counterpoint. (Offered Fall) Prerequisites: MUS 253 and MUS 254 with minimum grades of “C.” Corequisite: MUS 255.

MUS 275 Piano Class  1 credit
A continuation of MUS 174.

MUS 276 Piano Class  1 credit
A continuation of MUS 275.

MUS 285 Pedagogy for the Applied Instrument or Voice  2 credits
The student becomes acquainted with the methods and materials to be used in the teaching of music students, in both private and class situations.

MUS 290 Introduction to Improvisation  1 credit
An introduction to improvisation for singers and instrumentalists including improvisational experiences in a variety of styles (jazz, classical, and other), integration of music theory with improvisation, and methods of teaching improvisation. Required of majors in the Music Education Emphasis. Offered in alternate years (Spring 2014). Prerequisites: MUS 130 and MUS 131 with a minimum grades of “C”, or instructor permission.
MUS 292  Independent Study  1-3 credits
MUS 297  Special Topics  1-6 credits
MUS 301  Orchestra  1 credit
Open to all who play orchestral instruments and who wish to experience playing orchestral music. The course includes the study and performance of orchestral literature. Prerequisites: junior or senior standing; minimum of one semester of MUS 101; instructor permission.

MUS 302  Band  1/2-1 credit
Open to all who play band instruments. The course includes the study and performance of marching and symphonic band literature. Membership is open to Music majors and non-Music majors by audition. Credit is determined by the type of ensemble and amount of rehearsal time. Prerequisites: junior or senior standing; minimum of one semester of MUS 102; instructor permission.

MUS 304  Chorus  1/2-1 credit
An opportunity for participation in a vocal ensemble. The WSC Concert Choir performs choral masterworks from all historical periods of music and also performs major works as part of the WSC University-Community Choir. Membership is open to Music majors and non-Music majors by audition. Credit is determined by the type of ensemble and amount of rehearsal time. Prerequisites: junior or senior standing; minimum of one semester of MUS 104; instructor permission.

MUS 305  Opera  1 credit
Designed to provide experience in musical-dramatic activities. May be taken two times for credit. Prerequisites: admission by campus-wide audition; junior or senior standing; minimum of one semester of MUS 105; instructor permission.

MUS 306  Piano Ensemble  1 credit
Designed to acquaint the piano student with ensemble repertoire and performance traditions. Prerequisite: four credits of piano private study or equivalent performance background.

MUS 311  Principles and Techniques of Composition  3 credits
A study of the basic principles of composition. Harmonic, contrapuntal, and formal structures of various stylistic periods are employed. Prerequisites: MUS 255 and MUS 256 with minimum grades of “C.”

MUS 312  Introduction to Music Technology  1 credit
Designed to acquaint students with music technology hardware (including MIDI-Musical Instrument Digital Interface) and a variety of software programs to enhance learning, teaching, and performing situations at all ages and levels. Students have the opportunity to work with available equipment. Offered in alternate years (Fall 2013). Prerequisite: MUS 100 or MUS 129 with a minimum grade of “C” or instructor permission.

MUS 320  Scoring  2 credits
A study of techniques of arranging for instrumental and vocal ensembles. Prerequisite: MUS 256 with minimum grade of “C.”

MUS 321  Instrumental and Vocal Chamber Music  1/2-1 credit
Designed to give the student-musician rehearsal and performance experience in the area of ensemble and chamber music. Includes the Brass, Woodwind, Percussion, String, and Jazz Ensembles, as well as Chamber Singers and additional small ensembles.
Membership is open to Music Majors and non-Music Majors by audition. Credit is determined by the type of ensemble and amount of rehearsal time. Prerequisites: junior or senior standing; minimum of one semester of MUS 121; instructor permission.

**MUS 350  Advanced Conducting: Choral and Instrumental  2 credits**
A study of advanced techniques of conducting, score reading, musical style, materials, and repertoire in the instrumental and vocal media. Emphasis is placed on physical exercises and coordination of the mind and hands, as well as musical terms necessary for proper interpretation of musical scores. Students conduct in both class and laboratory situations with University ensembles. Offered in alternate years (Spring 2015). Prerequisites: MUS 250 with minimum grade of “C.”

**MUS 352  History of Music  3 credits**
A study of the development of music from Antiquity through the Renaissance and Baroque periods. Emphasis is placed on acquaintance with the music literature of successive periods. Offered in alternate years (Fall 2013). Prerequisites: Music major or minor status; MUS 140.

**MUS 353  History of Music  3 credits**
A study of the development of music from the Classical and Romantic periods to the present. Emphasis is placed on acquaintance with the music literature of successive periods. Offered in alternate years (Spring 2014). Prerequisites: Music major or minor status; MUS 140.

**MUS 355  Counterpoint  2 credits**
A study of contrapuntal techniques necessary to compose polyphonic music in two, three, four, or more parts. Prerequisites: MUS 255 and MUS 256 with minimum grades of “C.”

**MUS 360  Teaching General Music in Elementary Schools  2 credits**
A study of the teaching of general music in the elementary classroom. Acquaints Music Education majors with methods of teaching the elements of music, working with children’s voices, using instruments, and developing listening skills. Current approaches such as Dalcroze, Orff, Kodaly, and Suzuki are also addressed. Students survey elementary music texts and learn how to develop and plan a music program. Offered in alternate years (Spring 2015). Prerequisites: MUS 120 and MUS 250 with a minimum grade of “C.”

**MUS 365  Methods and Philosophy of Teaching and Supervising Instrumental Music in the Public Schools: K-12  2 credits**
A study of the supervision, organization, and administration of instrumental music in the public schools, K-12, providing background and experience with the philosophical, historical, and practical foundation of instrumental music in the public schools. Emphasis is placed upon contemporary methodology, all aspects of teaching and conducting activities in instrumental music, comprehensive musicianship through performance, and preparation for student teaching. Offered in alternate years (Fall 2014). Prerequisites: MUS 120 and MUS 250 with a minimum grade of “C.”

**MUS 370  Methods and Philosophy of Teaching and Supervising Vocal Music in the Public Schools: K-12  2 credits**
An intensive study of materials and methods for teaching vocal and general music in the elementary and secondary school, plus objectives, organization, administration, curricu-
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 380</td>
<td>Piano</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 180; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 381</td>
<td>Organ</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: at least four years of piano study; junior or senior standing; minimum of one semester of MUS 181; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 382</td>
<td>Voice</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 182; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 383</td>
<td>Violin</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 183; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 384</td>
<td>Viola</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 184; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 385</td>
<td>Cello</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 185; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 386</td>
<td>Contra Bass</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 186; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 387</td>
<td>Flute</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 187; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 388</td>
<td>Oboe</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 188; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 389</td>
<td>Clarinet</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 189; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 390</td>
<td>Bassoon</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 190; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 391</td>
<td>Saxophone</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 191; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 392</td>
<td>Trumpet</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: junior or senior standing; minimum of one semester of MUS 192; instructor permission.</td>
<td></td>
</tr>
<tr>
<td>MUS 393</td>
<td>French Horn</td>
<td>1-2</td>
</tr>
</tbody>
</table>
|             | Prerequisite: junior or senior standing; minimum of one semester of
MUS 193; instructor permission.

MUS 394  Trombone  1-2 credits
Private instruction. Prerequisites: junior or senior standing; minimum of one semester of
MUS 194; instructor permission.

MUS 395  Baritone  1-2 credits
Private instruction. Prerequisites: junior or senior standing; minimum of one semester of
MUS 195; instructor permission.

MUS 396  Tuba  1-2 credits
Private instruction. Prerequisites: junior or senior standing; minimum of one semester of
MUS 196; instructor permission.

MUS 397  Special Topics  1-6 credits
MUS 398  Percussion  1-2 credits
Private instruction. Prerequisites: junior or senior standing; minimum of one semester
of MUS 198; instructor permission.

MUS 400  Senior Recital / Senior Project  0 credits
Students demonstrate competency in an area of performance, research, composition, or
music technology. Senior projects may include a research project, composition, music
technology project, or non-credit internship. Graded Satisfactory/Unsatisfactory only.
Prerequisite: senior standing and consent of faculty advisor.

MUS 424  Band Literature  2 credits
A study and analysis of the literature available to the concert band and the various types
of large wind ensembles.

MUS 426  Literature for the Applied Instrument or Voice  2 credits
An historical study of the standard repertoire for the applied instrument or voice.

MUS 429  Diction for Singers  2 credits
A basic course in Italian, German, and French diction designed for voice
students. Foreign language diction are studied in selected vocal repertoire.

MUS 488  Composition  3 credits
Students write original compositions for solo or ensemble performing media.

MUS 490  Workshop in Music  1-6 credits
A study of topics related to music study suitable for workshop format.
Includes discussion, practice, and demonstration.

MUS 491  Seminar in Research  2 credits
Senior students research and write papers in the area of music appropriate to their
courses of study. Offered in alternate years (spring 2012).

MUS 492  Independent Study  1-4 credits
A special study in areas of student interest. May be taken for a maximum of four
credits.

MUS 497  Special Topics  1-6 credits
MUS 499  Internship in Music  1-12 credits
An internship may be arranged in this course. Credit earned in this course may be
applied to the major or minor with faculty approval. Consult advisor for details.
PHILOSOPHY (PHIL)

The Philosophy Minor provides students with an understanding of the history of philosophy, an exploration of diverse worldviews, and the tools to examine the complex, unexamined assumptions underlying contemporary society. The Philosophy Minor emphasizes development of logical and analytical skills, affording students the intellectual ability to theorize, articulate, and support sophisticated philosophical perspectives.

FACULTY
Associate Professor John C. Hausdoerffer;
Assistant Professor Anthony Miccoli.

DESCRIPTION OF THE PROGRAM

Philosophy Minor
A minimum of 18 credits is required, including the following:

PHIL 101  Introduction to Philosophy ................................................................. 3 cr
PHIL 201  Logic and Epistemology ................................................................. 3 cr
PHIL 335  Ethics ................................................................. 3 cr
One of the following:
PHIL 315  Eastern Philosophy ................................................................. 3 cr
PHIL 345  Philosophy of Religion ................................................................. 3 cr
PHIL 355  Philosophy of Science ................................................................. 3 cr
One of the following:
POLS 309  Political Theory I–Ancient to Early Modern ................................ 3 cr
POLS 310  Political Theory II–Late Modern and Contemporary .................. 3 cr
One of the following:
ENG 371  Literary Theory and Criticism .................................................. 3 cr
ENVS 410  Environmental Ethics ................................................................. 3 cr
PHIL 325  Women and Gender in Philosophy ............................................ 3 cr
PHIL 401  Reality and Representation ......................................................... 3 cr

PHILOSOPHY COURSES

PHIL 101  Introduction to Philosophy 3 credits
An introduction to the central philosophical questions that have historically spanned and conceptually founded Western civilization. The course surveys key thinkers, philosophical movements, and academic fields of the discipline. Questions regarding the meaning of existence, the freedom of the self, the nature of a just society, and the workings of human knowledge expose students to the pursuits of metaphysics, ontology, epistemology, philosophy of science, moral and political philosophy, and ethics. GT-AH3

PHIL 197  Special Topics 1-6 credits

PHIL 201  Logic and Epistemology 3 credits
An introduction to historical and contemporary approaches to epistemology, philosophical methodology, logic, systems of classification, and methods of validation. Emphasis is placed on critical inquiry into the complex relationship among logic, empiricism, and
rationalism, while focusing on the real-world implications of the epistemological assumptions of logic itself. Prerequisite: PHIL 101.

**PHIL 297  Special Topics**  
1-6 credits

**PHIL 315  Eastern Philosophy**  
3 credits

An introduction to the central philosophical questions which have conceptually founded Eastern philosophy. This course surveys primary texts, intellectual movements, and cultural traditions that inform and influence Eastern philosophy while investigating the theoretical spaces that exist between philosophical assumptions of the East and West. Prerequisite: PHIL 101.

**PHIL 325  Women and Gender in Philosophy**  
3 credits

A discussion of the significance of women and gender in the development of philosophy. This course questions how the philosophical canon has appropriated, incorporated, and sometimes erased women’s contributions. Drawing upon a variety of discourses, in and outside of philosophy itself (including feminist and queer theory), students assess how the philosophical endeavor changes in light of previously overlooked and currently influential gender studies work. Students use gender and sexuality as a framework that enriches and interrogates philosophical fields ranging from cultural theory to epistemology. Prerequisite: PHIL 101.

**PHIL 335  Ethics**  
3 credits

An examination of influential moral philosophers and contrasting theories concerning how one “ought” to live, from ancient Greek and Eastern philosophers to contemporary thinkers. Central questions of the course explore the “good life,” critique ideologies that limit ethical options, and imagine how to expand individual choices in cultivating a just society. The course concludes with student applications of ethical theories to current global issues. Prerequisite: PHIL 101.

**PHIL 345  Philosophy of Religion**  
3 credits

An exploration of the significance of faith in our human worldview. Through a comparative approach to major world religions, students investigate the underlying assumptions behind the ways of “knowing” God and participating in the “divine,” and how those assumptions diversely manifest themselves culturally, metaphorically, and psychologically. Prerequisite: PHIL 101.

**PHIL 355  Philosophy of Science**  
3 credits

An exploration of the ongoing relationship between philosophy and science, and an examination of how philosophical movements have informed some of the major shifts in scientific paradigms throughout history. The course concludes with an examination of how scientific revolutions potentially “de-center” humans and reorient the relationship between the self and the world. Prerequisite: PHIL 101.

**PHIL 397  Special Topics**  
1-6 credits

**PHIL 401  Reality and Representation**  
3 credits

The course analyzes, and provides students the opportunity to more deeply investigate, the philosophical foundations of spoken and written representation through a broad survey of theoretical readings in aesthetics, authorship, interpretation, realism, and subjectivity. Examining a diverse range of classic and contemporary thinkers in philosophy and cultural studies, the course explores the ways representation frames the experience of being in the world, and asks such questions as: ‘How do ideas become the
words we speak?; ‘Do the words we speak mean the same when written?’; and ‘What makes the narrative possible?’ The answers to these questions have broad philosophical, political, and cultural implication. Prerequisite: PHIL 201 or PHIL 335 or ENG 371.

PHIL 492  Independent Study  1-6 credits
PHIL 497  Special Topics  1-6 credits
**Physics (PHYS)**

The word *physics* comes from the Greek word for nature, and we think of it today as the study of matter and energy. Physicists are concerned with understanding the way nature operates: the basic constituents of the universe and how they interact. The pursuit of that understanding leads to many practical applications. Physics is a rewarding area to study because it provides the basis for much of today’s technology, and it helps us satisfy our intellectual curiosity. The fundamental character of physics makes it a discipline that is central to the liberal arts.

The Physics curriculum at Western provides opportunities for students to take coursework that supports other scientific and technical disciplines, to complete an academic minor, or to prepare for physics or engineering programs at other institutions.

**Faculty**

Assistant Professors John D. Mason, and M. Suzanne Taylor.

**Description of the Program**

**Physics Minor**

The Physics Minor consists of a minimum of 18 credits, including ten credits chosen from Physics courses numbered 330 or above and the following:

- PHYS 170  Principles of Physics I (with laboratory) ................................................ 4 cr
- PHYS 171  Principles of Physics II (with laboratory) ............................................. 4 cr
- or
- PHYS 200  General Physics I (with laboratory) .................................................... 4 cr
- PHYS 201  General Physics II (with laboratory) .................................................... 4 cr

**Physics Courses**

**PHYS 110  Solar System Astronomy** 3 credits

An overview of the historical development of astronomy and the basic physical principles that are relevant to it. The overall structure of the solar system is studied and its various components examined. Includes limited observational activities. Prerequisite: completion of the general education essential skills mathematics requirement. GT-SC2

**PHYS 120  Meteorology** 3 credits

A summary of the structure of the Earth’s atmosphere, worldwide weather disturbances, weather forecasting, and snow avalanches. This course may not be taken for credit toward the Physics Minor. GT-SC2

**PHYS 125  Energy and the Environment** 3 credits

A practical study of energy generation and its environmental impact, including the physics of energy fundamentals, fossil fuel use, alternative energy uses, and energy conservation. Primarily for non-science majors, this course qualitatively details basic physical principles behind the use of energy, including mechanics, electricity and magnetism, and thermodynamics. This course is designed to provide the student with a physicist’s perspective on energy use and environmental issues. Prerequisite: completion of the general education essential skills mathematics requirement. GT-SC2

**PHYS 140  Introductory Physics (with laboratory)** 4 credits

A semi-quantitative introduction to the fundamental concepts of physical science, parti-
 particulière the laws of physics as they relate to the structure of matter. Laboratory experiences play an important role in the investigations. This course may not be taken for credit toward the Physics Minor. Prerequisite: ACT math score of 19 or above; SAT math score of 460 or above; MATH 099; Accuplacer Elementary Algebra test score of 85 or above. GT-SC1

**PHYS 170 Principles of Physics I (with laboratory)** 4 credits
A quantitative lecture and laboratory introduction to the basic principles of physics. Topics covered include the motions of particles, forces in nature, field concepts, energy, conservation laws, and many-particle systems. A mathematical proficiency at the level of university algebra is recommended. Prerequisites: PHYS 140 or one year of high school physics; and Accuplacer university-level mathematics test score of 95 or above, or MATH 141. GT-SC1

**PHYS 171 Principles of Physics II (with laboratory)** 4 credits
A continuation of PHYS 170 dealing with electromagnetism, light, thermodynamics, and the atomic structure of matter. Prerequisite: PHYS 170. GT-SC1

**PHYS 197 Special Topics** 1-6 credits
**PHYS 200 General Physics I (with laboratory)** 4 credits
A quantitative lecture and laboratory introduction to the basic principles of physics, using the concepts of calculus as a tool. Topics covered include the motions of particles, forces in nature, field concepts, energy, conservation laws, many-particle systems, and thermodynamics. A student may not receive credit for both PHYS 170 and PHYS 200. Prerequisites: PHYS 140 or one year of high school physics; and completion of MATH 151 preferred but may be taken concurrently. GT-SC1

**PHYS 201 General Physics II (with laboratory)** 4 credits
A continuation of PHYS 200 dealing with electromagnetism, light, and the atomic structure of matter. A student cannot receive credit for both PHYS 171 and PHYS 201. Prerequisite: PHYS 200.

**PHYS 297 Special Topics** 1-6 credits
**PHYS 310 Astronomy I** 2 credits
A summary of the historical development of astronomy and the pertinent underlying physical principles, including descriptions of the objects comprising the solar system and their motions. Prerequisite: ACT math score of 19 or above; SAT math score of 460 or above; MATH 099; or Accuplacer Elementary Algebra test score of 85 or above.

**PHYS 311 Astronomy II** 2 credits
A discussion of the techniques used to study and classify stars, energy production in stars, stellar structures, stellar evolution, galaxies, cosmological theories, and current developments in astronomy. Prerequisite: PHYS 310.

**PHYS 330 Mechanics** 3 credits
A treatment of basic mathematical methods including vector analysis, coordinate systems and transformations, particle dynamics, energy, and gravitation. Prerequisites: PHYS 171 or PHYS 201; MATH 251.

**PHYS 350 Electricity and Magnetism I** 3 credits
A study of electrostatic fields and potentials, the electrical properties of matter, magnetic phenomena and the magnetic properties of matter. Prerequisites: PHYS 171 or PHYS 201; MATH 252.
PHYS 351 Electricity and Magnetism II 3 credits
A continuation of PHYS 350 treating direct and alternating currents, electromagnetic induction Maxwell's equations, and electromagnetic radiation. Prerequisite: PHYS 350.

PHYS 397 Special Topics 1-6 credits

PHYS 400 Modern Physics 3 credits
A consideration of the inadequacies of classical physics and some of the fundamental advances in physics since 1890, including the special theory of relativity and elementary particle physics. Prerequisites: PHYS 171 or PHYS 201; corequisite: MATH 252.

PHYS 452 Quantum Theory 3 credits
An introduction to the mathematical formalism of quantum mechanics and its application to various types of natural systems, such as multi-electron atoms, molecules, and solids. Prerequisites: PHYS 171 or PHYS 201; corequisite: MATH 252.

PHYS 460 Theory and Application of Radioisotopes (with laboratory) 3 credits
Familiarizes the student with the structure of nuclei and the properties of naturally occurring radiations. It also provides an introduction to the experimental techniques necessary in the utilization of radioisotopes in various areas of science. Prerequisite: PHYS 171 or PHYS 201.

PHYS 470 Electronics for Scientists (with laboratory) 3 credits
An introductory lecture and laboratory study of electrical circuits and electronic devices that are of particular importance in science. Prerequisites: PHYS 171 or PHYS 201; MATH 141 or Accuplacer university-level mathematics test score of 95 or above; or score 3 or above on AP Calculus.

PHYS 480 Observational Astronomy 4 credits
A presentation of some of the fundamental concepts of astronomy through a series of observational activities and laboratory exercises supported by appropriate lecture presentations. Motions and intrinsic properties of various astronomical objects are investigated, and some of the tools and methods of modern astronomy are studied. Subjects include constellations, time reckoning, nature and analysis of light, optics, telescopes, photography, and properties of planets, satellites, stars, and galaxies. A student may not receive credit for both PHYS 310-311 and 480. This course may not be taken for credit towards the Physics Minor. Prerequisite: ACT math score of 19 or above; SAT math score of 460 or above; MATH 099; Accuplacer Elementary Algebra test score of 85 or above.

PHYS 490 Geophysics I (with laboratory) 4 credits
Through lecture and field experiences, the seismic techniques of geophysical exploration are emphasized. Prerequisites: CIS 190, GEOL 201, and PHYS 200; corequisite: MATH 252.

PHYS 491 Geophysics II (with laboratory) 4 credits
Lecture and field experiences are used to introduce gravity, magnetic, and electrical methods of geophysical exploration. Prerequisites: CIS 190, GEOL 201, MATH 252, and PHYS 201.

PHYS 493 Special Problems in Physics 1-4 credits
An investigation which is tailored to the interests and background of the individual student. It may be of an experimental nature.

PHYS 497 Special Topics 1-6 credits
POLITICS AND GOVERNMENT (POLS)

The Politics and Government curriculum presents different and often conflicting points of view on a variety of important political ideas in the Western political tradition (for example: democracy, freedom, equality, development, and power). Study of how different individuals have looked at these ideas, as well as how such ideas have been practiced in the contexts of real institutions and political controversies, enlarges the mind, develops the tools necessary for effective citizenship, and serves to cultivate critical reasoning. Students are encouraged to find ways to address problems, such as the loss of biodiversity, disparities between neighboring communities and personal responsibility, global gender and social inequalities, foreign policy decision making and international security, and the relationship between private and public life in a democracy. As political scientists we seek to understand the causes of wars, social injustices, economic disparities, and uneven technological growth for the purpose of alleviating suffering and providing sustainable solutions. Students study these questions through an engagement with historical texts as well as case studies and ongoing contemporary debates.

The faculty is committed to teaching students how to effect social change through active citizenship —whether in local, state, national or international communities. By learning from different people and situations in internships and service learning, Western students are prepared for graduate or professional school or to better understand and prepare for careers in business, journalism, government service, or public life. Such internships have ranged from working in local law offices or offices at the state capitol to interning in United States Senate offices in Washington, D.C. The Politics and Government Program offers a standard major, a pre-law emphasis, a secondary licensure emphasis, a standard minor, and a pre-law minor.

FACULTY

Professor William L. Niemi; Assistant Professor Maria B. Struble; Lecturer Jake Wobig

DESCRIPTION OF THE PROGRAMS

Politics and Government Major: Standard Program

A minimum of 36 credits is required including the following:

- POLS 117 Introduction to Political Ideas ................................................................. 3 cr
- POLS 180 Introduction to American Politics .......................................................... 3 cr
- POLS 255 Introduction to Comparative Politics ................................................... 3 cr
- POLS 260 Introduction to World Politics .............................................................. 3 cr
- POLS 309 Political Theory I—Ancient to Early Modern ...................................... 3 cr
- POLS 310 Political Theory II—Late Modern and Contemporary ...................... 3 cr
- Five of the following electives:
  - POLS 250 Politics of the Environment .............................................................. 3 cr
  - POLS 282 Issues in State and Local Government ............................................. 3 cr
  - POLS 300 Constitutional Law I ....................................................................... 3 cr
  - POLS 301 Constitutional Law II ....................................................................... 3 cr
  - POLS 331 Politics of the Presidency ................................................................. 3 cr
  - POLS 355 Politics of Development .................................................................. 3 cr
Politics and Government Major: Comprehensive Programs

PRE-LAW EMPHASIS

A minimum of 57 credits is required including the following:

POLS 117 Introduction to Political Ideas .................................................. 3 cr
POLS 180 Introduction to American Politics ................................................. 3 cr
POLS 255 Introduction to Comparative Politics ........................................... 3 cr
POLS 260 Introduction to World Politics .................................................... 3 cr
POLS 300 Constitutional Law I ................................................................. 3 cr
POLS 301 Constitutional Law II ................................................................. 3 cr
POLS 309 Political Theory I–Ancient to Early Modern ................................ 3 cr
POLS 310 Political Theory II–Late Modern and Contemporary .................... 3 cr

Four of the following:

POLS 250 Politics of the Environment ....................................................... 3 cr
POLS 282 Issues in State and Local Government ........................................ 3 cr
POLS 331 Politics of the Presidency .......................................................... 3 cr
POLS 355 Politics of Development ............................................................ 3 cr
POLS 360 American Foreign Policy ........................................................... 3 cr
POLS 376 American Political Thought I–From Puritans to Slaveholders ....... 3 cr
POLS 476 American Political Thought II–American Capitalism and Democracy ........................................................................... 3 cr

Six of the following courses in at least four disciplines:

ACC 201 Introduction to Financial Accounting ........................................ 3 cr
ACC 350 Income Tax ................................................................................ 3 cr
BUAD 210 Legal Environment of Business .............................................. 3 cr
BUAD 315 Business Law ........................................................................... 3 cr
COM 271 Small Group Communication ................................................ 3 cr
COM 371 Argument and Conflict Management ........................................ 3 cr
COM 372 Issues Management ................................................................... 3 cr
ECON 201 Macroeconomics ..................................................................... 3 cr
ECON 202 Microeconomics ....................................................................... 3 cr
ECON 476 American Economic Development .......................................... 3 cr
ENG 237 Women and Literature ............................................................... 3 cr
ENG 238 Literary Culture of the American West ....................................... 3 cr
ENG 255 Ancient World Literature ............................................................. 3 cr
ENG 331 Literature and Ethnicity ............................................................... 3 cr
### HIST 333  The Revolutionary Era and Early National Period........... 3 cr
### HIST 336  Antebellum, Civil War and Reconstruction, 1830-1877........... 3 cr
### HIST 340  Reform and Reorganization in American Society ............. 3 cr
### HIST 343  Depression and World War II ........................................... 3 cr
### PHIL 101  Introduction to Philosophy............................................... 3 cr
### PSY 368  Abnormal Psychology ............................................................ 3 cr
### SOC 259  Introduction to Criminal Justice........................................ 3 cr
### SOC 349  Law Enforcement .................................................................... 3 cr
### SOC 367  Corrections.............................................................................. 3 cr

One of the following capstone courses:
- **POLS 485**  Studies in Political Theory ............................................ 3 cr
- **POLS 486**  Studies in American Politics ............................................. 3 cr
- **POLS 487**  Studies in International Relations ...................................... 3 cr
- **POLS 488**  Studies in Comparative Politics ........................................ 3 cr

### SECONDARY LICENSURE EMPHASIS
This emphasis qualifies students for State of Colorado Licensure in Social Science Education. Students interested in pursuing this comprehensive program should consult with the Teacher Education Program advisor in addition to the advisor in their major as soon as possible. A minimum of 72 credits is required. In addition, students must fulfill the Secondary Licensure Option described under Education. The following courses are required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>Macroeconomics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Microeconomics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 303</td>
<td>International Economics and Globalization</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 476</td>
<td>American Economic Development</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOG 110</td>
<td>World Regional Geography</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOG 120</td>
<td>Human Geography</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOG 250</td>
<td>Geography of North America</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
<td>3 cr</td>
</tr>
<tr>
<td>HIST 101</td>
<td>World History to 1500</td>
<td>3 cr</td>
</tr>
<tr>
<td>HIST 102</td>
<td>World History Since 1500</td>
<td>3 cr</td>
</tr>
<tr>
<td>HIST 126</td>
<td>U.S. History to 1865</td>
<td>3 cr</td>
</tr>
<tr>
<td>HIST 127</td>
<td>U.S. History Since 1865</td>
<td>3 cr</td>
</tr>
<tr>
<td>HIST 327</td>
<td>Colorado History</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLS 117</td>
<td>Introduction to Political Ideas</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLS 180</td>
<td>Introduction to American Politics</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLS 255</td>
<td>Introduction to Comparative Politics</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLS 282</td>
<td>Issues in State and Local Government</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLS 309</td>
<td>Political Theory I—Ancient to Early Modern</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLS 310</td>
<td>Political Theory II—Late Modern and Contemporary</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLS 376</td>
<td>American Political Thought I-From Puritans to Slaveholders</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLS 476</td>
<td>American Political Thought II-American Capitalism and Democracy</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

One of the following:
- **POLS 260**  Introduction to World Politics .................................... 3 cr
- **POLS 360**  American Foreign Policy ............................................... 3 cr
One of the following:
POLS 300  Constitutional Law I................................................................................ 3 cr
POLS 301  Constitutional Law II............................................................................... 3 cr

One of the following capstone courses:
POLS 485  Studies in Political Theory: ................................................................. 3 cr
POLS 486  Studies in American Politics: ................................................................. 3 cr
POLS 487  Studies in International Relations: ......................................................... 3 cr
POLS 488  Studies in Comparative Politics: .............................................................. 3 cr

Politics and Government Minor
A minimum of 18 credits is required including a three-credit, upper-division Politics and Government elective chosen in consultation with an advisor and the following:
POLS 117  Introduction to Political Ideas............................................................... 3 cr
POLS 180  Introduction to American Politics ......................................................... 3 cr
POLS 255  Introduction to Comparative Politics ..................................................... 3 cr
POLS 260  Introduction to World Politics .............................................................. 3 cr

One of the following:
POLS 309  Political Theory I–Ancient to Early Modern ................................... 3 cr
POLS 310  Political Theory II–Late Modern and Contemporary......................... 3 cr

Politics and Government Pre-Law Minor
A minimum of 21 credits is required including a three-credit elective chosen from the courses listed for the Politics and Government major: Pre-Law Emphasis chosen in consultation with an advisor and the following:
BUAD 210  Legal Environment of Business......................................................... 3 cr
BUAD 315  Business Law ....................................................................................... 3 cr
POLS 117  Introduction to Political Ideas............................................................... 3 cr
POLS 180  Introduction to American Politics ......................................................... 3 cr
POLS 300  Constitutional Law I............................................................................ 3 cr
POLS 301  Constitutional Law II........................................................................... 3 cr

Capstone Course Requirement. The following courses in the Politics and Government Major fulfill the capstone course requirement: POLS 485 Studies in Political Theory; POLS 486 Studies in American Politics; POLS 487 Studies in International Relations POLS 488 Studies in Comparative Politics.

Politics and Government Courses

POLS 117  Introduction to Political Ideas 3 credits
An introduction to political analysis through a study of important political concepts and theories, as well as their historical development. Students study the ideas and practices of the public and philosophical development of concepts such as citizenship, democracy, equality, justice, liberty, or power. GT-SS1

POLS 180  Introduction to American Politics 3 credits
An introduction to institutions and processes of American politics, including themes such as constitutionalism, representation, participation, political development, political economy, civil liberties and rights, public policy, and the ideas and values of American democracy. GT-SS1

POLS 250  Politics of the Environment 3 credits
A survey of key issues of national and international environmental politics. Students are
introduced to the historical foundations and ongoing debates concerning the natural environment. Topics include international environmental treaties, government responses to environmental disasters and crises, environmental justice movements, environmental causes of war and displacement, and environmental agreements and developments in the United States. Prerequisite: POLS 117 recommended.

**POLS 255  Introduction to Comparative Politics**  
3 credits  
An introduction to the challenges and problems encountered in the study of comparative politics. Students examine issues of local and national governance through a comparative lens. By looking at similar political phenomena in several contexts, students explore the question of why some countries have successfully developed their political, economic and social systems while others are lagging behind. Issues examined include women’s rights, poverty, underdevelopment, the environment, and democracy. Prerequisite: recommended POLS 117 or POLS 180.

**POLS 260  Introduction to World Politics**  
3 credits  
An introduction to some of the more important concepts and approaches to understanding world politics. Students examine the politics between different countries and seek to answer questions about the promise and peril of the global future. Questions contemplated include: What are the sources of political conflict and how can they be minimized? Under what conditions will nation states cooperate with each other to accomplish common goals? Should tyranny and human rights violations justify humanitarian intervention? Prerequisite: recommended POLS 117 or POLS 180.

**POLS 282  Issues in State and Local Government**  
3 credits  
Using the foundations of American Federalism, the class examines policy issues at the state and local levels. With a comparative perspective and, at the same time, with particular attention paid to Colorado, some of the themes examined in states and localities include: budgets and economic policy, education, energy, and environmental Policy. Prerequisite: recommended POLS 180.

**POLS 297  Special Topics**  
3 credits  

**POLS 300  Constitutional Law I**  
3 credits  
A study of the historical development of the United States Constitution and Supreme Court through the most important Supreme Court decisions. The course focuses on the areas of jurisdiction of the courts, development of the common law, the separation of powers, federalism, and the interstate commerce power. Prerequisite: POLS 180.

**POLS 301  Constitutional Law II**  
3 credits  
A continuation of POLS 300. An examination of the constitutional protections of individual liberties as defined by the Supreme Court. Students study the historical development of the Supreme Court’s point of view in such areas as freedom of speech, subversion and disloyalty, religious freedom, church-state separation, and equal protection of the law. Prerequisite: POLS 180 recommended.

**POLS 309  Political Theory I–Ancient to Early Modern**  
3 credits  
A survey of the historical development of western political theories from their origins in ancient Greece to the development of early modern political theories such as liberalism and republicanism. Students study thinkers such as Sophocles, Plato, Aristotle, William Shakespeare, Niccolo Machiavelli, John Locke, and Jean-Jacques Rousseau. Prerequisite: POLS 117 recommended.
POLS 310  Political Theory II–Late Modern and Contemporary  3 credits
A survey of the historical development of modern and contemporary political theories since the French Revolution. Issues investigated might include the rise of liberal democracy and its critics, the impact of the industrial revolution on modern politics, and how technological change and environmental limitations have affected contemporary political thought. Students study thinkers such as Mary Wollstonecraft, John Stuart Mill, Karl Marx, Friedrich Nietzsche, Hannah Arendt, and Michel Foucault. Prerequisite: POLS 117 recommended.

POLS 331  The Politics of the Presidency  3 credits
After more than two centuries of change and development, the presidency stands not only as the nation’s preeminent public office but also its most problematic. This course examines the design and creation of the office, the impact various officeholders have made on shaping future expectations, and the problems of contemporary leadership. Prerequisite: POLS 180 recommended.

POLS 355 Politics of Development  3 credits
An historical and case-specific examination of development and underdevelopment debates, including assumptions about poverty, sustainability, liberal democratic regimes and free-market economy. Specific topics include malnutrition, food security, rights of indigenous populations, international aid and donors, disease, democratization processes, human rights, and the environment. Prerequisites: POLS 255 and/or POLS 260 recommended.

POLS 360  American Foreign Policy  3 credits
Not since the Roman Empire has any nation had as much economic, cultural and military power as the United States does today. Yet, as has become all too evident through the problems of terrorism, environmental degradation and the proliferation of weapons of mass destruction, that power is not enough to solve many global issues. This course examines the way in which U.S. foreign policy is made and the variety of ongoing and emerging foreign policy problems the U.S. faces in the context of their evolution. Prerequisites: POLS 255 and POLS 260 recommended.

POLS 376 American Political Thought I-From Puritans to Slaveholders  3 credits
A study of the development of early American political thought including enduring themes such as the Puritans and community, the ideas behind the Declaration of Independence, and the significance of the arguments found in the Federalists Papers or the work of Alexis de Tocqueville. Students also engage political ideas often challenging and reshaping the accepted order from sources such as Jacksonian workingmen and Abolitionism.

POLS 397  Special Topics  3 credits

POLS 476  American Political Thought II–American Capitalism and Democracy  3 credits
A survey of American political thought and practice since the Civil War focusing on how democracy and capitalism have enabled and constrained one another in the course of the development of the American polity. Surveys key thinkers, social movements, and institutional developments such as Reconstruction, Populism, Progressivism, the Labor Movement, the Women’s movement, the New Deal, and the Civil Rights Movement. Prerequisite: instructor permission.
POLS 485  Studies in Political Theory:  3 credits
Senior seminar in political theory with varying topics. This course meets the Capstone requirement. Prerequisite: senior standing or instructor permission.

POLS 486  Studies in American Politics:  3 credits
Senior seminar in American politics with varying topics. This course meets the capstone requirement. Prerequisite: senior standing or instructor permission.

POLS 487  Studies in International Relations:  3 credits
Senior seminar in International Relations with varying topics. This course meets the capstone requirement. Prerequisite: senior standing or instructor permission.

POLS 488  Studies in Comparative Politics:  3 credits
Senior seminar in Comparative politics with varying topics. This course meets the capstone requirement. Prerequisite: senior standing or instructor permission.

POLS 492  Independent Study  1-3 credits

POLS 499  Internship in Politics and Government  1-12 credits
Credit earned in an internship may be applied to the Major or Minor with advisor approval.
Psychology is the scientific study of individual human and animal behavior. A student of psychology can expect to investigate the following topics: learning, motivation, social influences, perception, cognition, neuroscience, human development, personality, and abnormal behavior. The study of psychology also involves learning how psychologists work, including the areas of experimental methods, statistical analysis, and clinical psychology. From the basic courses to the more advanced, students achieve a greater understanding of themselves and others that will serve them well in their relationships and in any careers they may pursue.

In addition to the basic skills in writing, critical thinking, and use of technology expected of all Western students, Psychology majors have the opportunity to be involved in laboratory work. As students advance in their experience and knowledge, they can become involved in individual projects under faculty supervision. There are also internship opportunities available outside the classroom with programs for at-risk children, in domestic victim advocacy, at the local probation departments, and in other social service agencies statewide and nationally.

As many careers in psychology require a graduate degree, the Psychology Major at Western not only contributes to a solid liberal education, but also provides excellent preparation for graduate study. Students interested in careers in applied psychology are encouraged to pursue the Clinical, Counseling and School Psychology Emphasis. The Experimental Psychology Emphasis provides students with a broad background in the biological bases of behavior and offers preparation for graduate studies in experimental psychology or the neurosciences. The General Psychology Emphasis allows Psychology majors the freedom to choose courses that meet individual needs and interests.

Faculty

Professors Susan J. Coykendall and Roger A. Drake; Assistant Professor Scott I. Cohn; Lecturers Kari E. Commerford, William Knapp, and Mae MacIntire.

Description of the Programs

Psychology Major: Standard Programs

General Psychology Emphasis

A minimum of 39 credits is required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 100</td>
<td>General Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 200</td>
<td>Statistics and Data Analysis</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 210</td>
<td>History of Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>Psychology electives</td>
<td>8 or 9 cr</td>
<td></td>
</tr>
<tr>
<td>Two of the following;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 270</td>
<td>Developmental Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 368</td>
<td>Abnormal Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 460</td>
<td>Psychological Testing</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 475</td>
<td>Clinical Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>Two of the following;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 258</td>
<td>Introduction to Personality</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 324</td>
<td>Forensic Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>PSY 361</td>
<td>Industrial and Applied Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 369</td>
<td>Health Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 457</td>
<td>Social Psychology</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

*Two of the following:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 301</td>
<td>Research Methods</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 335</td>
<td>Learning and Behavior</td>
<td>4 cr</td>
</tr>
<tr>
<td>PSY 336</td>
<td>Psychology of Motivation</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 338</td>
<td>Cognitive Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 345</td>
<td>Biological Psychology (with laboratory)</td>
<td>4 cr</td>
</tr>
<tr>
<td>PSY 437</td>
<td>Sensation and Perception</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 480</td>
<td>Behavioral Genetics</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

*One of the following capstone courses:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 498</td>
<td>Capstone Seminar in Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 499</td>
<td>Capstone Internship in Psychology</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Clinical, Counseling, and School Psychology Emphasis**

A minimum of 40 credits is required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 100</td>
<td>General Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 200</td>
<td>Statistics and Data Analysis</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 210</td>
<td>History of Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 270</td>
<td>Developmental Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 301</td>
<td>Research Methods</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 345</td>
<td>Biological Psychology (with laboratory)</td>
<td>4 cr</td>
</tr>
<tr>
<td>PSY 368</td>
<td>Abnormal Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 457</td>
<td>Social Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 460</td>
<td>Psychological Testing</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 475</td>
<td>Clinical Psychology</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

*One of the following:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 335</td>
<td>Learning and Behavior</td>
<td>4 cr</td>
</tr>
<tr>
<td>PSY 336</td>
<td>Psychology of Motivation</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 338</td>
<td>Cognitive Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 437</td>
<td>Sensation and Perception</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 480</td>
<td>Behavioral Genetics</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

*One of the following:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 258</td>
<td>Introduction to Personality</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 324</td>
<td>Forensic Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 361</td>
<td>Industrial and Applied Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 369</td>
<td>Health Psychology</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

*One of the following capstone courses:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 498</td>
<td>Capstone Seminar in Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 499</td>
<td>Capstone Internship in Psychology</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Experimental Emphasis**

A minimum of 40 credits is required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 100</td>
<td>General Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 200</td>
<td>Statistics and Data Analysis</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 210</td>
<td>History of Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 301</td>
<td>Research Methods</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 345</td>
<td>Biological Psychology (with laboratory)</td>
<td>4 cr</td>
</tr>
</tbody>
</table>
Psychology Electives........................................................................................................... 9 cr

Four of the following:
PSY 335 Learning and Behavior ..................................................................................... 4 cr
PSY 336 Psychology of Motivation ................................................................................... 3 cr
PSY 338 Cognitive Psychology ........................................................................................ 3 cr
PSY 437 Sensation and Perception .................................................................................. 3 cr
PSY 480 Behavioral Genetics ......................................................................................... 3 cr

One of the following capstone courses:
PSY 492 Independent Study ............................................................................................ 3 cr
PSY 498 Capstone Seminar in Psychology ..................................................................... 3 cr
PSY 499 Capstone Internship in Psychology ................................................................. 3 cr

Psychology Minor
The Psychology Minor consists of a minimum of 18 credits:

PSY 100 General Psychology ......................................................................................... 3 cr
Psychology electives ........................................................................................................ 15 cr

Capstone Course Requirement. The following courses in the Psychology Major fulfill the capstone course requirement: PSY 498 Capstone Seminar in Psychology, or PSY 499 Capstone Internship in Psychology (with a minimum grade of “C”).

PSYCHOLOGY COURSES

PSY 100 General Psychology 3 credits
An introduction to psychology including research methodology, biological bases of behavior, human development, sensation, perception, intelligence, cognition, language, states of consciousness, learning, memory, motivation, emotion, personality, abnormal behavior and stress and health. GT-SS3

PSY 197 Special Topics 1-6 credits

PSY 200 Statistics and Data Analysis 3 credits
An introduction to statistical procedures often encountered in the analysis of data from behavioral science research. Statistical methods covered include measures of central tendency and variability, correlation, regression, t-tests and analysis of variance. Prerequisites: PSY 100; MATH 131, or MATH 140 with a minimum grade of "C-", or instructor permission.

PSY 210 History of Psychology 3 credits
Introduces psychology majors to the philosophical underpinnings and historical context underlying the development of the discipline. Prerequisite: PSY 100.

PSY 258 Introduction to Personality 3 credits
An examination of the fundamental theories of personality including the psychoanalytic, trait, behavioral, social-learning, humanist and existential perspectives.

PSY 270 Developmental Psychology 3 credits
A critical look at the change and continuity that occurs throughout the life span, emphasizing the interrelationships among physical, cognitive and psychosocial realms of human development. Current research findings are emphasized.

PSY 297 Special Topics 1-6 credits
PSY 301 Research Methods 3 credits
An examination of experimental and non-experimental research methods, the design of research studies, measurement issues, research ethics, research reporting and advanced topics in data analysis using computer statistical software. Students design and conduct their own study and present the results following APA approved format. Prerequisite: PSY 200.

PSY 324 Forensic Psychology 3 credits
An overview of the different tasks performed by forensic psychologists, including assessment, civil commitment, jury selection, eyewitness testimony, behavioral profiling, provision of clinical services to incarcerated individuals, and custody evaluations. Prerequisites: PSY 100 or instructor permission.

PSY 335 Learning and Behavior 4 credits
An exploration of the relationship between behaviors and their consequences through the application of basic behavioral principles. Topics include classical conditioning, instrumental conditioning, stimulus control, aversive control, and the biological constraints on learning. Students conduct their own experiments to apply the behavioral principles discussed throughout the course. Prerequisite: PSY 200 or instructor permission.

PSY 336 Psychology of Motivation 3 credits
A systematic consideration of a theoretical context for the study of motivation. Analysis of several current theories of motivation and explanations of recurrent instrumental and consummatory behaviors. Prerequisite: PSY 200.

PSY 338 Cognitive Psychology 3 credits
A theoretical and empirical investigation into the processes and outcomes of thinking. Topics such as memory and forgetting, problem solving and creativity, cognitive dissonance and consistency, defensive repression, language, optimism, and attribution are studied in relation to current scientific research findings. Prerequisites: PSY 100 and minimum sophomore standing or instructor permission.

PSY 345 Biological Psychology (with laboratory) 4 credits
An investigation of the physiological basis of human behavior. Topics include functional neuroanatomy, neurophysiology and the activity of the nervous system in relation to behaviors such as sexual behavior, drug effects, emotion, and memory. Prerequisite: PSY 200.

PSY 361 Industrial and Applied Psychology 3 credits
A course designed to show how psychology is directly related to the student’s career and the student’s life as a job applicant, employee, manager, and consumer. Topics covered include worker morale, leadership, work climate, communication networks, and productivity.

PSY 368 Abnormal Psychology 3 credits
A systematic study of the etiology, symptoms, assessment, and treatment of major forms of psychopathology. An interdisciplinary approach is employed as a basis for understanding disordered behavior. Prerequisite: PSY 100, PSY 258, or PSY 270.

PSY 369 Health Psychology 3 credits
An overview of the emerging, multidisciplinary field of health psychology, which synthesizes research from clinical psychology, behavioral medicine and alternative
therapies. Psychological aspects of prevention, health promotion and wellness are addressed. Content is both theory and application-based.

**PSY 397  Special Topics**  1-6 credits

**PSY 399  Internship in Psychology**  1-9 credits

An opportunity for psychology majors to obtain field experience through direct, supervised contact with professionals in psychology and related areas. Graded Satisfactory/Unsatisfactory only. Prerequisite: completion of a minimum of 18 credits in psychology, including six credits at Western.

**PSY 437  Sensation and Perception**  3 credits

Considers the relationship between the physical world and our internal perceptions. Attention is given to the visual, auditory, and olfactory systems from both a scientific and philosophical perspective. Students are involved in classroom demonstrations of various perceptual phenomena. Prerequisites: PSY 200, PSY 345.

**PSY 457  Social Psychology**  3 credits

A discussion of theories and research findings concerning the individual in social situations with an emphasis on their applications to current social issues. Included are such topics as interpersonal attraction, persuasion, altruism, morality, aggression, and intra-group relations.

**PSY 460  Psychological Testing**  3 credits

An introduction to the general methodology and theory of psychological testing. Students have the opportunity to take, score, administer and interpret several common assessment instruments. Ethics and limitations of testing are emphasized. Prerequisite: PSY 100, PSY 258, or PSY 270.

**PSY 475  Clinical Psychology**  3 credits

An introduction to the profession of clinical/counseling psychology through the presentation and analysis of different theoretical orientations and their respective techniques. Students have in-class opportunities to practice basic skills. Professional ethics in the delivery of mental health services are addressed. Prerequisites: PSY 100, PSY 258, or PSY 270.

**PSY 480  Behavioral Genetics**  3 credits

A discussion of the mechanisms of genetic inheritance and the quantitative methods used to assess the relative contribution made by both genetic and environmental factors to individual differences in human behavior. Students evaluate evidence for and against genetic, environmental and evolutionary determinants of behavioral characteristics such as intelligence, personality, mate choice, and psychopathology. Prerequisite: PSY 345.

**PSY 491  Topical Seminar in Psychology**  1-3 credits

A seminar involving advanced reading, discussion, and research. Different areas of study are selected as student and faculty interests dictate. A goal of this course is to stimulate critical thinking and analysis.

**PSY 492  Independent Study**  1-4 credits

An opportunity for detailed study and research for advanced students. Topics and course requirements are determined in consultation with the sponsoring faculty member.
PSY 497  Special Topics  1-6 credits

PSY 498  Seminar in Psychology  3 credits
This capstone course is required for all psychology majors, except those who opt to complete the capstone internship. It is intended to provide the opportunity for the synthesis of the ideas and concepts acquired during undergraduate education in psychology. The seminar includes a discussion of controversial issues and ethical considerations in both experimental and applied areas, the completion of a comprehensive literature review and a consideration of the future of the field. Prerequisites: completion of a minimum of 18 credits in psychology including PSY 210.

PSY 499  Capstone Internship in Psychology  3 credits
An opportunity for psychology majors to gain field experience through direct, supervised contact with professionals in psychology and related fields. In addition to on-site responsibilities, students write a comprehensive paper integrating the field experience and psychological theory and later formally present the paper in an open forum. Prerequisites: completion of a minimum of 18 credits in psychology, including six credits at Western.
RECREATION AND OUTDOOR EDUCATION (ROE)

The mission of the Recreation and Outdoor Education major is to prepare students for careers in recreation, outdoor leadership, or outdoor environmental education. This entails providing opportunities and the requisite support for students to cultivate knowledge and practical skills in the following areas: leadership and facilitation, educational techniques, written and oral communication, environmental stewardship, philosophy and ethics, critical and creative thinking, program planning, problem solving, serving people with differing needs, and the ability to manage risk.

High value is placed on experiential learning as well as field-based learning through participating in extended backcountry inter-semester expeditions (generally in January, May, August, and during Spring Break). There is a consecutive two-week backcountry minimum requirement with an industry leader for students pursuing the Outdoor Leadership emphasis. Excellence in this professional preparation is achieved through an interdisciplinary approach, which also incorporates public and private partnerships, experiential education, and our unique proximity to recreation facilities, land management agency offices, and extensive and remote public lands.

In addition to the traditional competencies, as well as critical and creative thinking skills expected of all liberal arts students, those majoring in Recreation and Outdoor Education learn how the overall quality of life can be enhanced by the integration of appropriate leisure and educational activities. As well, students who graduate from the program gain confidence and leadership skills that can be applied in a variety of professional fields. Recreation and Outdoor Education majors pursue careers in many different areas. Options include employment with outdoor and environmental education centers, specialty outdoor training schools, municipal park and recreation departments, social services, land management agencies, military programs, student services in higher education, and commercial guiding operations, among others. Many students pursue graduate degrees, after garnering industry experience, allowing for more professional options.

To participate in and graduate from the program, students must maintain an average GPA of 2.5 or higher for all courses required of the ROE major or emphasis therein. Students whose GPA drops below 2.5 must repeat a course to raise the cumulative GPA prior to taking additional ROE courses, or obtain permission from the Program Coordinator to repeat the course(s) while pursuing further ROE coursework.

FACULTY

Professors Mark A. Gibson and M. Brooke Moran;
Senior Lecturers Matthew H. Ebbott; Paul G. M. Tame.
DESCRIPTION OF THE PROGRAMS

The 18-credit Recreation and Outdoor Education Core is required for all Recreation and Outdoor Education majors:

**Recreation and Outdoor Education Core**

- ROE 182  Introduction to Recreation and Outdoor Education .................. 3 cr
- ROE 283  Leadership and Facilitation ...................................................... 3 cr
- ROE 351  Inquiry into Sustainability .......................................................... 3 cr
- ROE 398  Program Planning (with laboratory) ............................................ 3 cr
- ROE 490  Capstone: Recreation Philosophy and Ethics ............................... 3 cr
- ROE 491  Recreation and Outdoor Education Capstone .............................. 3 cr

**Medical and work/volunteer hour requirements:** All Recreation and Outdoor Education majors must obtain a medical competency prior to graduation. Standard program majors must take ESS 276 Emergency Response or equivalent. Students with an emphasis in Outdoor Environmental Education or Outdoor Leadership must obtain certification as a Wilderness First Responder (WFR) or Wilderness Emergency Medical Technician (WEMT). Additionally, all Recreation and Outdoor Education majors must work or volunteer for a total of 600 hours within their chosen area of specialization within four years prior to graduation. The hours need to be garnered from at least two organizations, with no organization counting for more than 400 hours.

**Recreation and Outdoor Education Major: Standard Program**

The Standard Major consists of 39 credits including the 18-credit Recreation and Outdoor Education Core, First Aid/CPR Competency and the following courses. Students should consult with their advisor for selection of an appropriate minor.

- ROE 240  Alternative Programming ......................................................... 3 cr
- ROE 454  Human Development and Counseling for Outdoor Educators .... 3 cr
- ROE 468  Leadership and Administration of Outdoor Pursuits ................... 3 cr

**Required Supporting Courses:**

- ESS 282  Principles of Sport and Fitness Management .............................. 3 cr
- ESS 450  Risk Management in Physical Activity Settings ........................... 3 cr

*One of the following:*

- ESS 382  Management of Sport and Fitness Facilities ............................... 3 cr
- ROE 466  Facilities Management ............................................................... 3 cr

*One of the following:*

- ROE 333  Recreation and Sport Marketing ............................................... 3 cr
- ROE 364  Entrepreneurship and Commercial Recreation ............................ 3 cr

**Recreation and Outdoor Education Major: Comprehensive Programs**

**OUTDOOR ENVIRONMENTAL EDUCATION EMPHASIS**

A minimum of 59 credits is required, including the 18-credit ROE Core and the courses listed below. Additionally, students must become certified as a Wilderness First Responder (WFR).

- ROE 189  Principles of Outdoor Recreation ............................................. 3 cr
- ROE 230  Interpretation of Natural and Cultural History ........................... 3 cr
- ROE 235  Foundations of Teaching Environmental Education ..................... 3 cr
ROE 320  Leave No Trace Master Educator ............................................................ 3 cr
ROE 391  Experiential Education Theory and Pedagogy ........................................ 3 cr
ROE 454  Human Development and Counseling for Outdoor Educators .......... 3 cr

**Two of the following:**

ROE 293  Outdoor Pursuits Education–Water Based ............................................ 3 cr
ROE 295  Outdoor Pursuits Education–Snow Based ............................................. 3 cr
ROE 296  Outdoor Pursuits Education–Land Based ............................................. 3 cr

**Required supporting courses:**

ENVS 100  Introduction to Environmental Studies .............................................. 3 cr
ENVS 200  Writing in the Environment .................................................................. 3 cr

**One of the following:**

ANTH 320  Cultural Ecology ................................................................................. 3 cr
ENVS 350  U.S. and Western Environmental Politics ........................................... 3 cr
ENVS 360  Global Environmental Politics .......................................................... 3 cr
HIST 350  Environmental History of the Borderlands .......................................... 3 cr

**Eight credits from the following:**

BIOL 151  Diversity and Patterns of Life (with laboratory) ............................... 4 cr
SCI 110  Habitable Planet (with laboratory) .......................................................... 4 cr

*or both:*

BIOL 130  Environmental Biology ........................................................................ 3 cr
BIOL 135  Environmental Biology Laboratory .................................................. 1 cr

*or both:*

GEOL 101  Physical Geology ............................................................................... 3 cr
GEOL 105  Physical Geology Laboratory ............................................................. 1 cr

**OUTDOOR LEADERSHIP EMPHASIS**

A minimum of 55 credits is required, including the 18-credit ROE Core and the following courses. Additionally, students must 1) become a certified Wilderness First Responder (WFR), 2) participate in a back country expedition with an industry leader for a minimum of two consecutive weeks within four years of graduation, and 3) complete at least 100 hours of certification-based or skill-based courses (not including WFR). Requirements one and three above may not fulfill the field experience (ROE 496) requirement.

ROE 189  Principles of Outdoor Recreation .......................................................... 3 cr
ROE 240  Alternative Programming ................................................................. 3 cr
ROE 293  Outdoor Pursuits Education–Water Based ............................................ 3 cr
ROE 295  Outdoor Pursuits Education–Snow Based ............................................. 3 cr
ROE 296  Outdoor Pursuits Education–Land Based ............................................. 3 cr
ROE 320  Leave No Trace Master Educator ............................................................ 3 cr
ROE 391  Experiential Education Theory and Pedagogy ........................................ 3 cr
ROE 454  Human Development and Counseling for Outdoor Educators .......... 3 cr
ROE 468  Leadership and Administration of Outdoor Pursuits .......................... 3 cr
ROE 496  Field Experiences ................................................................................. 1-6 cr

**One of the following:**

BIOL 130  Environmental Biology ........................................................................ 3 cr
ENVS 100  Introduction to Environmental Studies .............................................. 3 cr
Recreation and Outdoor Education

One of the following:
- ROE 230 Interpretation of Natural and Cultural History ........................................ 3 cr
- ROE 235 Foundations of Teaching Environmental Education ...................................... 3 cr

One of the following:
- ROE 333 Recreation and Sport Marketing .............................................................. 3 cr
- ROE 364 Entrepreneurship and Commercial Recreation ........................................... 3 cr

Recreation and Outdoor Education Minor
The Recreation and Outdoor Education Minor requires a minimum of 18-credits. No more than six credits of skills courses (e.g., 293, 295, 296) may count toward the minor:
- ROE 182 Introduction to Recreation and Outdoor Education ..................................... 3 cr
- ROE 283 Leadership and Facilitation ......................................................................... 3 cr
- ROE 351 Inquiry into Sustainability ........................................................................... 3 cr
- Recreation and Outdoor Education electives ......................................................... 9 cr

Capstone Course Requirement: The following courses in the Recreation and Outdoor Education Major fulfill the capstone course requirements: ROE 490 Capstone: Recreation Philosophy and Ethics and ROE 491 Recreation and Outdoor Education Capstone.

RECREATION AND OUTDOOR EDUCATION COURSES

ROE 182 Introduction to Recreation and Outdoor Education 3 credits
An introduction to the history, philosophy, founders, and principles of recreation and outdoor education, the agencies providing programs, and an investigation of professional employment opportunities in recreation.

ROE 189 Principles of Outdoor Recreation 3 credits
An exploration of the characteristics of wilderness and backcountry environments in terms of potential hazards and human capability for adverse impact on resource lands. The course is designed to create an outdoor education foundation and to enhance the knowledge of and appreciation for the natural environment so that safe, responsible and enjoyable outdoor adventures are possible. Leave No Trace Trainer curriculum will be covered and students will be provided the opportunity to earn a certificate. Prerequisite: instructor permission.

ROE 197 Special Topics 1-6 credits

ROE 230 Interpretation of Natural and Cultural History 3 credits
A study of the principles, philosophies, and practices of interpretation, as well as active approaches to describing, relating, displaying, and revealing resources to a variety of audiences, primarily through observation and involvement in a variety of interpretation programs. Prerequisites: BIOL 130, BIOL 150, BIOL 151, or GEOL 101.

ROE 235 Foundations of Teaching Environmental Education 3 credits
A survey of environmental education examples from land management agencies, nature centers, and educational organizations. Students are guided to create their own curriculum employing environmental content. Field trips required.
ROE 240 Alternative Programming
Course participants gain insight into alternative programming for special populations. Students explore case studies, specialized equipment, and profiles of special populations. Guest speakers and site visits will help students understand the intricacies of alternative programming and requisite career qualifications. Field trips required.

ROE 283 Leadership and Facilitation
A study of recreation and outdoor education leadership, including leading activities, managerial leadership, and the art of facilitation. Emphasis is placed upon appropriate theories and techniques for varying populations.

ROE 293 Outdoor Pursuits Education—Water Based (with laboratory)
Water-based outdoor leadership, skill development in areas such as rescue techniques, rafting, and kayaking. Field trips required. Summer offering only. Consult with instructor prior to registration week. Prerequisites: ROE 189; ROE 283; and instructor permission.

ROE 295 Outdoor Pursuits Education—Snow Based (with laboratory)
Snow-based outdoor leadership, skill development in areas such as rescue techniques, mountaineering, backcountry skiing, and winter camping. Field trips required. Spring offering only. Consult with instructor prior to registration week. Prerequisites: ROE 189; ROE 283; and instructor permission.

ROE 296 Outdoor Pursuits Education—Land Based (with laboratory)
Land-based outdoor leadership and skill development in areas such as rescue techniques, mountaineering, rock climbing, backpacking, and caving. Field trips required. Fall and summer offering only. Consult with instructor prior to registration week. Prerequisites: ROE 189; ROE 283; and instructor permission; co-requisite: ROE 320.

ROE 297 Special Topics 1-6 credits

ROE 320 Leave No Trace Master Educator
A comprehensive overview of Leave No Trace skills and ethics. Time in the classroom, as well as in a backcountry setting, allows students to gain understanding of LNT history, theory, wilderness ethics and practical application of the seven principles and teaching techniques. Students may be provided the opportunity to design and teach an awareness workshop. Prerequisites: ROE 189; ROE 283; and instructor permission; co-requisite: ROE 296.

ROE 333 Recreation and Sport Marketing
A survey of recreation and sport marketing topics: buyer behavior, segmentation, positioning, demand analysis, information and research, pricing, promotion, channels, “product” policies, destinations, sponsorship, endorsement, merchandising, and fundraising. Prerequisites: ENG 102 with a minimum grade of “C-” and completion of at least 30 credits; or instructor permission.

ROE 351 Inquiry into Sustainability
An investigation of sustainability and the interconnectedness of environment, economics, and society. Students are provided opportunities to examine their thoughts and practical examples of sustainable businesses, communities, and other systems.
Teaching, applied projects, field trips, and/or participation in conferences may be required. Prerequisites: ENG 102 with a minimum grade of “C-” and completion of at least 30 credits; or instructor permission.

**ROE 364  Entrepreneurship and Commercial Recreation  3 credits**
An analysis of the types of commercial and private enterprises, along with the qualities of the entrepreneur specific to recreation businesses. The student is also exposed to small-business management practices as they relate to commercial recreation. Case study analysis and field investigation methods are emphasized to provide the student the opportunity to learn through active participation. Prerequisites: ENG 102 with a minimum grade of “C-” and completion of at least 30 credits; or instructor permission.

**ROE 391  Experiential Education Theory and Pedagogy  3 credits**
An introduction to the historical, theoretical, and pedagogical foundations of experiential education. Teaching opportunities in the classroom and/or in the outdoors allow students to hone facilitation styles and effectiveness. Course topics include the experiential learning cycle, reflective learning, feedback, edgework, communication techniques, and multiple intelligences. Prerequisites: ENG 102 with a minimum grade of “C-” and completion of at least 30 credits; or instructor permission.

**ROE 397  Special Topics  1-6 credits**

**ROE 398  Program Planning  (with laboratory)  3 credits**
Equips students with a variety of program-planning methodologies and skills. Emphasis is placed on the planning, organization, implementation, and evaluation of recreation programs. Theories are applied in an experiential setting. Prerequisites: ENG 102 with a minimum grade of “C-” and completion of at least 30 credits; or instructor permission.

**ROE 454  Human Development and Counseling for Outdoor Educators  3 credits**
An investigation of human development theories enabling students to better understand their own motives in outdoor pursuits and allow them to more effectively program for, manage, and support a variety of client needs. Prerequisite: ROE 182; ROE 189; ROE 283; and one of the following: ROE 293, ROE 295, or ROE 296; and senior standing; or instructor permission.

**ROE 466  Facilities Management  3 credits**
A study of management, clientele considerations, facilities, outdoor area planning, and operation. Also addressed are personnel, finance, architectural and environmental barriers, plus equipment as related to recreation areas and facilities. Field visits required. Prerequisites: ENG 102 with a minimum grade of “C-” and completion of at least 30 credits; or instructor permission.

**ROE 468  Leadership and Administration of Outdoor Pursuits  3 credits**
A focus on the implementation of outdoor pursuits programs, planning and leadership components, outdoor adventure-based administrative techniques, leadership competencies, therapeutic/adaptive considerations, and risk management. Field trip required. Prerequisites: ROE 182; ROE 283; 351; ROE 398; and one of the following: ROE 293, 295, or 296.

**ROE 490  Capstone: Recreation Philosophy and Ethics  3 credits**
An exploration of recreation philosophy from Plato to Petzoldt and its implications to
professionals in the field. Designed to prepare ROE majors for the ethical challenges and time use dilemmas of the 21st century. Prerequisites: senior standing; corequisite: ROE 491

**ROE 491  Recreation and Outdoor Education Capstone**  3 credits
A small group of graduating seniors pursue a practical project necessitating professional levels of problem solving, research, written and oral prowess, critical thinking, and familiarity with core curriculum. Final projects are of high quality, so they can be used by professionals and decision-makers in the field. Prerequisites: senior standing, corequisite: ROE 490.

**ROE 492  Independent Study**  1-4 credits
A course open to qualified upper-division students who have specialized interests in a particular area of advanced study in recreation. Prerequisite: instructor permission.

**ROE 494  Research**  1-4 credits
Provides students the opportunity to pursue research in the field of recreation. Prerequisite: instructor permission.

**ROE 496  Field Experiences**  1-6 credits
Provides students with directed field experiences in teaching, coaching, and laboratory settings. Guidelines for the field experiences are provided and agreed upon prior to registering for the course. Graded Satisfactory/Unsatisfactory only. Prerequisite: instructor permission.

**ROE 497  Special Topics**  1-6 credits

**ROE 499  Internship in Recreation and Outdoor Education**  6-9 credits
A course providing full-time concentration on a specific practical experience at an approved agency. It allows for comprehensive involvement in an agency program with faculty and on-site supervision. Prerequisites: senior standing and instructor permission.
SCIENCE (SCI)

The courses designated with the SCI prefix do not constitute a program or curriculum within themselves. Instead they are courses which support or complement programs across all of the science disciplines.

SCIENCE COURSES

SCI 110  Habitable Planet (with laboratory)  4 credits
An introduction to earth science and ecology. Topics include earth history, the fossil record, biogeochemical cycles, climate, energy flow, biodiversity, evolution, population growth and regulation. This course is designed for students seeking licensure as elementary teachers (grades K-6).

SCI 111  Nature of Science  1 credit
An introduction to science as it relates to the individual, society, and the elementary school classroom. The process of science is examined, as well as the connection between science as it is done and science in textbooks. This course is designed for students seeking licensure as elementary teachers (grades K-6). Prerequisite or corequisite: SCI 110.

SCI 120  Living Planet (with laboratory)  4 credits
An introduction to human biology, chemistry and biochemistry. Topics explored include anatomy, physiology, nutrition, cell biology, genetics, inorganic chemistry, biochemistry, development, and the application of biological and biochemical principles to understanding disease. This course is designed for students seeking licensure as elementary teachers (grades K-6).

SCI 197  Special Topics  1-6 credits

SCI 202  Scientific Writing  3 credits
An introduction to the effective oral, written, and graphical communication in the sciences. Students address these skills by exploring current issues in science. Prerequisites: ENG 102 and minimum sophomore standing with a major in anthropology, biology, or chemistry.

SCI 210  Dynamic Planet (with laboratory)  4 credits
A foundation in physics, earth science, and space science. Topics explored include motion, force, energy, weather, plate tectonics, earthquakes, volcanoes, and the solar system. This course is designed for students seeking licensure as elementary teachers (grades K-6). Prerequisite: SCI 110 or SCI 120 and completion of the general education essential skills mathematics requirement.

SCI 297  Special Topics  1-6 credits

SCI 390  Science Teaching Practicum  1-2 credits
An opportunity for students in the sciences to participate in laboratory design, instruction and execution, and in field experiences. Specifically designed for recipients of awards, such as undergraduate assistantships and teaching assistantships, or for students pursuing degrees in science with an education emphasis. May be taken for a maximum of six credits. Graded Satisfactory/Unsatisfactory only.

SCI 397  Special Topics  1-6 credits

SCI 497  Special Topics  1-6 credits

SCI 499  Internship in Science  1-5 credits
An opportunity for students to gain experience through direct involvement with professionals in various fields of science.
**Sociology (SOC)**

While all social sciences are interested in understanding human behavior, sociology is distinguished by its focus on understanding patterns of human behavior and emphasizing the social forces that shape and influence these patterns. Often, this perspective is surprising and can challenge assumptions of how the world works. The subject matter of sociology is broad—anything about social life one is interested in can be (and likely has been) studied by sociologists. Ultimately, students of sociology develop an appreciation for ways in which social structures and culture shape the world they live in and thus shape their own lives.

This breadth of social life is reflected in the sociology curriculum. After taking SOC 101 Introduction to Sociology, which is a prerequisite for other sociology courses, students are free to pursue other areas of interest. Courses on social institutions (such as religion, medicine, and the criminal justice system), social processes (such as the relationship between the self and society, social movements, and deviance), and social stratification (such as race, class and gender) represent the rich diversity of social life that sociologists are interested in understanding. These offerings are complimented by grounding in social theory and methodology. As a social science, sociological knowledge is based on empirical observation and analysis that is informed by and informs social theory.

The standard major provides a mix of seven core courses and six elective choices. Students with an interest in criminal justice can pursue a concentration in that area taking an additional list of core courses in the criminal justice emphasis. Students who wish to pursue the minor take the introductory course and then choose five elective courses. SOC 101 Introduction to Sociology and SOC 168 Social Problems also fulfill Area I General Education requirements. Sociology majors are encouraged to take MATH 140 College Algebra, to fulfill the general education mathematics competency requirement.

In addition to classroom instruction, The Sociology Club and the International Honors Society in Sociology, Alpha Kappa Delta, are active on campus with social and intellectual activities. While sociology provides a useful perspective for any kind of employment, graduates typically find employment in social services, law enforcement, teaching, and research.

**Faculty**

Professors Daniel M. Cress and Greg P. Haase.
Lecturers Matt Aronson, Jess Butler and Cindy Whitney

**Description of the Programs**

**Sociology Major: Standard Program**

A minimum of 39 credits is required including:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 202</td>
<td>Sociological Theory</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 225</td>
<td>Self and Society</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 310</td>
<td>Qualitative Research Methods</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 380</td>
<td>Race, Class and Gender</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 498</td>
<td>The Capstone Experience</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

*One of the following:
PSY 200 Statistical Analysis and Experimental Methodology I ........................... 3 cr*
SOC 211 Quantitative Research Methods......................................................... 3 cr

Six of the following:
SOC 150 Environmental Sociology................................................................. 3 cr
SOC 168 Social Problems.................................................................................. 3 cr
SOC 259 Introduction to Criminal Justice......................................................... 3 cr
SOC 303 Contemporary Theory ...................................................................... 3 cr
SOC 320 The Family ......................................................................................... 3 cr
SOC 321 Religion ............................................................................................... 3 cr
SOC 322 Medical Sociology ............................................................................. 3 cr
SOC 323 Cultural Studies .................................................................................. 3 cr
SOC 340 Social Movements ............................................................................ 3 cr
SOC 349 Law Enforcement .............................................................................. 3 cr
SOC 350 Deviance............................................................................................. 3 cr
SOC 351 Juvenile Delinquency......................................................................... 3 cr
SOC 355 Drugs and Society.............................................................................. 3 cr
SOC 367 Corrections ......................................................................................... 3 cr
SOC 397 Special Topics .................................................................................... 3 cr
SOC 399 Internship in Sociology .................................................................. 1-6 cr
SOC 492 Independent Study ........................................................ coconut 1-6 cr
ESS 490 Sociology of Sport and Physical Activity ....................................... 3 cr

Criminal Justice Emphasis
A minimum of 42 credits is required including:

POLS 301 Constitutional Law II ....................................................................... 3 cr
SOC 101 Introduction to Sociology ................................................................ 3 cr
SOC 202 Sociological Theory ........................................................................ 3 cr
SOC 225 Self and Society ............................................................................... 3 cr
SOC 259 Introduction to Criminal Justice ....................................................... 3 cr
SOC 310 Qualitative Research Methods ........................................................ 3 cr
SOC 349 Law Enforcement ............................................................................. 3 cr
SOC 367 Corrections ......................................................................................... 3 cr
SOC 380 Race, Class, and Gender ................................................................ 3 cr
SOC 498 The Capstone Experience ................................................................ 3 cr

One of the following:
PSY 200 Statistical Analysis and Experimental Methodology I .................... 3 cr
SOC 211 Quantitative Research Methods .................................................... 3 cr

One of the following:
PSY 368 Abnormal Psychology..................................................................... 3 cr
SOC 350 Deviance........................................................................................... 3 cr
SOC 351 Juvenile Delinquency....................................................................... 3 cr

At least two of the following:
ESS 490 Sociology of Sport and Physical Activity ....................................... 3 cr
SOC 150 Environmental Sociology................................................................. 3 cr
SOC 168 Social Problems ............................................................................... 3 cr
SOC 303 Contemporary Theory .................................................................. 3 cr
SOC 320 The Family ....................................................................................... 3 cr
SOC 321 Sociology of Religion ..................................................................... 3 cr
SOC 322 Medical Sociology .......................................................................... 3 cr
SOC 323 Cultural Studies ............................................................... 3 cr
SOC 340 Social Movements ............................................................ 3 cr
SOC 355 Drugs and Society ............................................................. 3 cr
SOC 397 Special Topics ................................................................. 3 cr
SOC 399 Internship in Sociology .................................................... 1-6 cr
SOC 492 Independent Study ............................................................ 1-6 cr

**Sociology Minor**

A minimum of eighteen credits is required:

SOC 101 Introduction to Sociology ................................................. 3 cr
Sociology electives ........................................................................... 15 cr

**Capstone Course Requirement.** The following courses in the Sociology Major fulfill the capstone course requirement: SOC 498 The Capstone Experience, or SOC 399 Internship (Criminal Justice Emphasis).

---

**SOCILOGY COURSES**

**SOC 101 Introduction to Sociology** 3 credits

An introduction to the discipline of sociology with special emphasis on the unique perspective this science utilizes to examine the social world. Sociology is distinguished by its focus on understanding patterns of human behavior and emphasizing the social forces that shape and influence these patterns. Primary course focus is on culture, inequality, race and gender, and social institutions. This course serves as a “gateway” course for all Sociology majors and minors, and must be passed with a minimum grade of “C” to be used as a prerequisite. Prerequisite for all 200-, 300-, and 400-level Sociology courses.

**SOC 150 Environmental Sociology** 3 credits

The sociological perspective is utilized to examine a variety of issues addressing the human-environment interface. In particular, this course examines how social organization and culture both shape and are shaped by the natural environment. The course focuses on issues of sustainability, the rights of the natural world, and environmental justice.

**SOC 168 Social Problems** 3 credits

An introduction to the field of sociology through an analysis of social problems in the United States and in the world. Course focus is on topics such as drugs and alcohol abuse, crime and prisons, health and illness, hunger and poverty, resource depletion and pollution, and the effects of globalization.

**SOC 197 Special Topics** 1-6 credits

**SOC 202 Sociological Theory** 3 credits

A formal introduction to classical sociological theories relevant to the discipline. Students learn about the history of the discipline, identify major sociological theorists and their theories, learn how these theories can be applied to various historical and contemporary social issues, and discover the relationship between theory, research, ideology and every-day life. Prerequisite: SOC 101 with a minimum grade of "C."

**SOC 211 Quantitative Research Methods** 3 credits

An introduction for students of the social sciences to the fundamentals of quantitative research analysis. Students design and administer surveys, code data, and analyze results.
Students become familiar with descriptive statistics (frequency distributions, measures of central tendency, and dispersion), inferential statistics (sampling theory, hypothesis testing, normal binomial distributions, confidence intervals, and types of error), as well as techniques for computing correlation. Prerequisites: SOC 101 with a minimum grade of “C”; MATH 105, MATH 131, or MATH 140.

**SOC 225   Self and Society**  
3 credits  
An examination of how the discipline of sociology approaches “micro-level” phenomenon. Emphasis is on the formation of the self, the socialization process, and the importance of language to social interaction. Beginning with the premise that social reality is a social construction which has been created through our interactions with others, the implications of this premise for the version of reality each of us experiences is explored. Prerequisite: SOC 101 with a minimum grade of “C.”

**SOC 259   Introduction to Criminal Justice**  
3 credits  
An introduction to the history and contemporary issues of the criminal justice system (law enforcement, courts, and corrections) in the United States. Topics surveyed include the system’s history, constitutional limitations, philosophical background, and the system’s process. Prerequisite: SOC 101 with a minimum grade of “C.”

**SOC 297   Special Topics**  
1-6 credits

**SOC 303   Contemporary Sociological Theory**  
3 credits  
A formal introduction to sociological theories developed since World War II. Students are able to identify and describe recent sociological theories and apply theory to contemporary social phenomena as well as their individual experiences. Students recognize the relationship between theory, ideology, and daily life. Prerequisite: SOC 101 with a minimum grade of “C.”

**SOC 310   Qualitative Research Methods**  
3 credits  
An examination of qualitative approaches to understanding social life. In particular, the course covers selecting a topic suitable for qualitative investigation, participant observation and in depth interviewing techniques, the ethics and politics associated with doing qualitative research, writing up field notes, formulating topics, reviewing the literature around the topic, the analysis of field notes, and the writing of research reports. Prerequisite: ENG 102 with a grade of “C-” or above; SOC 101 with a minimum grade of “C.”

**SOC 320   The Family**  
3 credits  
An analysis of the family as a social group and institution. Students consider the ways in which the family is influenced by demographic changes and by the changes in other social institutions, such as the economy, education, the state and religion. Prerequisite: SOC 101 with a minimum grade of “C.”

**SOC 321   Sociology of Religion**  
3 credits  
An analysis of religion as a social institution. Classical and contemporary sociological theories and concepts of religion are analyzed, as is the role of religion as an agent of social control and social change. Contemporary trends are also discussed including the relationship between religion, politics and culture. Prerequisite: SOC 101 with a minimum grade of “C.”

**SOC 322   Medical Sociology**  
3 credits  
An examination of the United States Health Care System and comparison of various
components of this system with that of others. The allopathic (Western) medical model is also examined. The course emphasizes the mortality and morbidity trends and patterns which exist in the U.S., the problems facing our health care system (high costs, unequal access), and alternative models of health and disease. Prerequisite: SOC 101 with a minimum grade of “C.”

SOC 323 Cultural Studies 3 credits
A foundation in the sociology of culture as well as extensive analysis of selected regional national and/or global (sub) cultures and their environments. Issues covered include the social organization of culture, institutions and narratives, material and non-material culture, and cultural identity and the self. Prerequisite: SOC 101 with a minimum grade of “C.”

SOC 340 Social Movements 3 credits
An introduction to the study of social movements with two goals in mind. First, is to expose students to the beliefs, practices, and consequences of a number of important historical, and contemporary movements. Second, the course familiarizes students with the theoretical perspectives, conceptual issues, focal questions, and empirical research that animate the study of social movements. This includes such issues as movement emergence, movement participation, mobilization dynamics, movement strategies and tactics, and movement outcomes. Prerequisite: SOC 101 or ENVS 100 with a minimum grade of “C.”

SOC 349 Law Enforcement 3 credits
An examination of issues affecting American law enforcement. Students are exposed to the historical underpinnings of the American policing experience, police operations and applications at the local, state, federal, and international levels, law enforcement sub-culture, police structure and organization, ethics, selection and training, and career opportunities. Prerequisite: SOC 259 with a minimum grade of "C."

SOC 350 Deviance 3 credits
Students examine various forms of nonconformity—criminal and otherwise. To do so, they study the major theoretical perspectives addressing deviance and its control. Students explore how ordinary rituals, agents of social control, and ideology interact to maintain the existing social order. Prerequisite: SOC 101 with a minimum grade of “C.”

SOC 351 Juvenile Delinquency 3 credits
Biological, psychological, and sociological factors in juvenile delinquency are examined, as are modern trends in prevention and treatment. The course also addresses the procedural and substantive aspects of the juvenile justice system. Prerequisite: SOC 101 with a minimum grade of “C.”

SOC 355 Drugs and Society 3 credits
An examination of trends and patterns in American drug use, drug classification schemes, the relationship between drugs and crime, and drug education and prevention strategies. The use of hallucinogenic plants in other cultures is also explored. Prerequisite: SOC 101 with a minimum grade of “C.”

SOC 367 Corrections 3 credits
An in-depth look at corrections in the United States. Topics include history of corrections, jails, prisons, community corrections, offenders and inmates, women in
corrections, juvenile corrections, correctional officers and treatment professionals, an special inmate populations. Prerequisites: SOC 259 with a minimum grade of “C.”

**SOC 380  Race, Class & Gender**  
3 credits  
A description of major theories and concepts associated with social inequality (for example, prejudice and discrimination) and the consequences of the social construction of race/ethnicity, gender/sexuality and class in everyday life. The focus is on the historical and contemporary aspects of inequality in the United States and the links between race/ethnicity, gender/sexuality and class. Forms of resistance to social inequality are also considered including social movements aimed at social change. Prerequisite: SOC 101 with a minimum grade of “C.”

**SOC 397  Special Topics**  
1-6 credits

**SOC 399  Internship in Sociology**  
1-6 credits  
Sociology internships provide Sociology majors of junior and senior status with opportunities to work on sites off campus in the areas of law enforcement and social services. The experience must meet standards set by the University and by the sociology faculty. Up to three hours of internship credit may be counted toward the major. Graded Satisfactory/Unsatisfactory only.

**SOC 492  Independent Study**  
1-6 credits  
Independent studies are available to seniors as a Capstone option. Enrollment is contingent upon developing a proposal with a faculty sponsor and requires a variable credit form. Prerequisite: minimum GPA of 3.50 in Sociology courses or instructor permission.

**SOC 497  Special Topics**  
1-6 credits

**SOC 498  The Capstone Experience**  
3 credits  
Provides senior Sociology majors with a culminating activity in their senior year. The seminar integrates theory, research, and analytic skills and requires written and oral presentations on approved topics. Prerequisite: SOC 101 with a minimum grade of “C.”
SPANISH (SPAN)

Western’s Spanish Program allows its majors to study the language, literature, and culture of Spain and Spanish-speaking countries. Graduates of the Spanish Program are expected to have an understanding of and proficiency in speaking, reading, writing, and listening to Spanish; to be acquainted with the phonology of modern Spanish dialects and to explore the sound system; to be able to read, discuss, critique, and appreciate the literary value of Hispanic literature; and to be familiar with and appreciate Hispanic civilization and culture.

The Standard Major prepares students for positions with the federal government or major corporations concerned with international business. They are also prepared for a variety of other positions, such as court interpreters, hotel managers in resort areas, and teachers.

The Secondary Licensure Emphasis qualifies students for the State of Colorado Licensure in Spanish Education.

FACULTY

Associate Professor Verónica Méndez-Maqueo;
Senior Lecturer Marjie B. Foster.

DESCRIPTION OF THE PROGRAMS

All Majors require the 15-credit Spanish Core to be completed prior to enrollment in upper-division electives.

Spanish Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 254</td>
<td>Intermediate Spanish I</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPAN 255</td>
<td>Intermediate Spanish II</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPAN 270</td>
<td>Spanish Conversation and Composition</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPAN 375</td>
<td>Judicial and Medical Interpreting I</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPAN 385</td>
<td>Introduction to Hispanic Literature</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

A maximum of nine credits earned from independent study and/or foreign travel may be applied to the Major. Students who desire foreign language credit for foreign study and/or exchange programs must have prior approval from the Department of Communication Arts, Languages, and Literature. Spanish credit for foreign study will be granted only to students who participate in formal study abroad programs sponsored by institutions accredited in the United States.

Spanish Major: Standard Program

A minimum of 36 credits is required, including the 15-credit Spanish Core and the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 494</td>
<td>Capstone Experience</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Six of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 340</td>
<td>Spanish Civilization and Culture</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPAN 341</td>
<td>Latin American Civilization and Culture</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPAN 370</td>
<td>Advanced Spanish Conversation and Composition</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPAN 460</td>
<td>Hispanic Literature: Drama</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPAN 460</td>
<td>Hispanic Literature: Poetry</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
SPAN 460 Hispanic Literature: Prose ................................................................. 3 cr
SPAN 475 Judicial and Medical Interpreting II ..................................................... 3 cr

**K-12 LICENSURE EMPHASIS**

A minimum of 36 credits is required including the 15-credit Spanish Core and the following. In addition, students must fulfill the K-12 Licensure requirements described under Education.

SPAN 341 Latin American Civilization and Culture ............................................ 3 cr
SPAN 370 Advanced Spanish Conversation and Composition.......................... 3 cr
SPAN 460 Hispanic Literature: Prose ................................................................. 3 cr
SPAN 475 Judicial and Medical Interpreting II ..................................................... 3 cr
SPAN 494 Capstone Experience........................................................................... 3 cr

*Two of the following:

- SPAN 340 Spanish Civilization and Culture ...................................................... 3 cr
- SPAN 460 Hispanic Literature: Drama .............................................................. 3 cr
- SPAN 460 Hispanic Literature: Poetry ............................................................... 3 cr

**Spanish Minor**

A minimum of 18 credits beyond SPAN 101 Elementary Spanish I, and SPAN 102 Elementary Spanish II, including the 15-credit Spanish Core and:

*One of the following:

- SPAN 340 Spanish Civilization and Culture ...................................................... 3 cr
- SPAN 341 Latin American Civilization and Culture ............................................ 3 cr
- SPAN 370 Advanced Spanish Conversation and Composition....................... 3 cr
- SPAN 460 Hispanic Literature: Prose ................................................................. 3 cr
- SPAN 475 Judicial and Medical Interpreting II ..................................................... 3 cr

**Capstone Course Requirement.** The following course in the Spanish Major fulfills the capstone course requirement: SPAN 494 Capstone Experience.

**SPANISH COURSES**

**SPAN 101 Elementary Spanish I**
An introduction to essentials of the Spanish language: comprehension, speaking, reading, and writing. Reserved for students with less than two years of high school Spanish.

**SPAN 102 Elementary Spanish II**
A continuation of SPAN 101. Prerequisite: SPAN 101 or equivalent.

**SPAN 197 Special Topics**
1-6 credits

**SPAN 254 Intermediate Spanish I**
A continuation of SPAN 102. A grammar review and extensive practice in conversation, reading, and writing. Prerequisite: SPAN 102 or equivalent (two years or more of high school Spanish).

**SPAN 255 Intermediate Spanish II**
A continuation of SPAN 254. Further practice and development of speaking, reading, and writing skills. Prerequisite: SPAN 254 or equivalent.

**SPAN 270 Spanish Conversation and Composition**
A course to develop oral proficiency and writing skills in Spanish. Focuses on structure and vocabulary, emphasizing both speaking and listening, as well as basic writing skills within the Spanish language. Prerequisite: SPAN 255 or equivalent.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 297</td>
<td>Special Topics</td>
<td>1-6</td>
</tr>
<tr>
<td>SPAN 340</td>
<td>Spanish Civilization and Culture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An introduction to the general trends of Spanish civilization and everyday life. Includes Spanish development from prehistoric times to the present. Conducted in Spanish. Prerequisite: SPAN 255 or equivalent.</td>
<td></td>
</tr>
<tr>
<td>SPAN 341</td>
<td>Latin American Civilization and Culture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An introduction to the general trends of Latin American civilization, culture and the national character, as expressed in everyday life in the various countries of Latin America. Includes pre-Columbian history to the present. Conducted in Spanish. Prerequisite: SPAN 255 or equivalent.</td>
<td></td>
</tr>
<tr>
<td>SPAN 366</td>
<td>Methods of Teaching a Foreign Language</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An introduction to past and current methods of teaching a foreign language, as well as to develop an understanding of proficiency and a synthesis of sound language-teaching practices.</td>
<td></td>
</tr>
<tr>
<td>SPAN 370</td>
<td>Advanced Spanish Conversation and Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A course designed to give students the opportunity to develop their oral proficiency through discussion and presentations. In addition, consideration is given to composition, using tasks that reflect the type of academic work generally asked of Spanish majors and minors—analysis and classification, argumentation, definition, exposition, comparison and contrast, and cause and effect. Prerequisite: SPAN 270.</td>
<td></td>
</tr>
<tr>
<td>SPAN 375</td>
<td>Judicial and Medical Interpreting I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A study of specialized Spanish vocabulary in two major areas: medicine and law. Students are exposed to sight, simultaneous and consecutive interpreting modes. Emphasis is placed on reaching 120 words per minute. Prerequisite: SPAN 255.</td>
<td></td>
</tr>
<tr>
<td>SPAN 385</td>
<td>Introduction to Hispanic Literature</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Students read authentic Hispanic literature concentrating on details such as style, point of view, theme, and symbolism rather than simply reading for comprehension. Students read works by authors from Spain and Latin America with emphasis on works from major literary movements and styles. This course is conducted in Spanish. Prerequisite: SPAN 270.</td>
<td></td>
</tr>
<tr>
<td>SPAN 392</td>
<td>Directed Study in Spanish</td>
<td>1-4</td>
</tr>
<tr>
<td></td>
<td>A course of individual research and study about topics in Spanish. Prerequisite: six credits of Spanish beyond SPAN 102.</td>
<td></td>
</tr>
<tr>
<td>SPAN 397</td>
<td>Special Topics</td>
<td>1-6</td>
</tr>
<tr>
<td>SPAN 460</td>
<td>Hispanic Literature:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A course to give students the opportunity to read and analyze works by major Hispanic novelists, dramatists, essayists, poets and short story writers. The content of the course varies. This course may be taken for credit more than once. This course is conducted in Spanish. Prerequisite: SPAN 385.</td>
<td></td>
</tr>
<tr>
<td>SPAN 475</td>
<td>Judicial and Medical Interpreting II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An advanced study of highly specialized Spanish vocabulary in two major areas: medicine and law. Students are presented with various advanced sight, simultaneous and</td>
<td></td>
</tr>
</tbody>
</table>
consecutive interpreting opportunities. Emphasis is placed on reaching 140 words per minute. Prerequisite: SPAN 375.

**SPAN 490  Workshop Abroad**  
1-8 credits  
A series of workshops to study various aspects of contemporary issues in Hispanic cultures abroad. Prerequisite: SPAN 255 or equivalent.

**SPAN 492  Independent Study**  
1-4 credits  
A special study in areas of student interest. May be taken for a maximum of four credits. Prerequisite: 15 credits of Spanish.

**SPAN 494  Capstone Experience**  
3 credits  
A research project written by the Spanish major in an area of Spanish language and culture that is appropriate for the student’s undergraduate experience. This course is offered yearly. Prerequisite: 24 credits in Spanish beyond SPAN 101 and SPAN 102.
Western State Colorado University

Graduate Academic Catalog

2013-2014
GENERAL INFORMATION

Purpose

The purpose of graduate studies at Western State Colorado University is to extend to post-graduate learning the high-quality education consistent with the University’s role and mission. Graduate study at Western builds on the existing mission of encouraging a breadth and depth of knowledge while promoting scholarly and creative learning. The faculty who are responsible for graduate education at Western are themselves scholars whose responsibilities include guiding graduate students to become experts in their fields of study.

Scope

Western State Colorado University offers graduate-level coursework for continuing education and professional development and degree programs at the master’s level as approved by faculty and the Trustees of Western State Colorado University. Such programs are an extension of the College’s undergraduate programs and allow Western to better fulfill its important role as a regional education provider.
ADMISSION POLICIES FOR GRADUATE STUDENTS

Students seeking admission to any of Western’s Master’s programs must formally apply for admission with the Graduate Studies Dean. Formal admission to a graduate degree program is based on multiple sources of evidence and collegial, professional judgment of program faculty about the likelihood of success. The faculty members of each program consider undergraduate grade-point average (recommended 3.0 on a 4.000 scale), graduate grade-point average (minimum 3.000 on a 4.000 scale), prior professional experience, standardized examinations, portfolios, interviews, letters of reference, and other indicators. Specific admission requirements, including application deadlines, vary depending upon the department offering the graduate degree.

Admission for Non-Degree Seeking Students

Any individual holding a baccalaureate degree who does not wish to pursue a master’s degree may be permitted to enroll in selected graduate courses when approved by the respective department chairperson and the Graduate Studies Dean.

A non-degree seeking student holding a bachelor’s degree may be allowed to complete up to nine credit hours of 600-level graduate coursework at Western, to be determined by individual graduate programs, before admission into a graduate program. These credits, graded B- or higher, may be applied to a graduate degree at Western upon approval by the Chair/Director of the program. The registration for graduate level courses does not constitute or imply admission into a graduate program, as the candidate must meet the program admission requirements. Coursework completed more than five years prior to being admitted into the graduate program shall be evaluated by the major department as to current relevance and applicability to the degree requirements.

Admission of International Students

International students seeking admission must submit an application for admission and official undergraduate and graduate college transcripts (translated into English). Applicants must be graduates of undergraduate programs equivalent to similar programs in the United States. Applicants from countries where English is not a national language must have a score of 550 or better on the Test of English as a Foreign Language (TOEFL) or 213 on the computer-based TOEFL. Applicants must demonstrate by bank affidavit (English translation) that a total sum of $26,349 in U.S. currency is available to cover the costs of each year of anticipated study.

Admission of Provisional Students

An applicant who does not meet the requirements for admission as a regular degree student may be considered for admission to a master’s program as a provisional degree student upon the recommendation of the respective department. Individual department representatives may set their own requirements for admitting students provisionally.

Transfer Credits

Departmental representatives shall determine if graduate classes taken from other acre-
dited institutions can be transferred to the respective Western graduate studies programs. Transfer credits must be listed and approved by the major advisor on the degree plan. Credits transferred must meet the following criteria:

- Earned at a regionally-accredited institution
- Numbered at the graduate level
- A grade of B or above (courses with grades such as pass/fail or satisfactory/unsatisfactory are not acceptable)
- The course credit must have been earned within the past 10 years unless a department specifies otherwise.
- The maximum number of transfer credits to be applied to degree requirements is nine credits.

Students must request permission to transfer course work and provide official transcripts and course syllabi before or during their first semester of study.
PROGRAM COSTS AND FINANCIAL AID

Program Costs
The cost of graduate programs vary by program:

Master of Arts in Education
The cost of the first year (licensure year) of the program is $11,330. The cost per credit for the second year is $360.50.

Master of Fine Arts in Creative Writing
The cost per credit for M.F.A. graduate courses is $700. Program cost per year is $18,900, plus $4,200 for the final summer residency.

Financial Aid
Western offers financial assistance designed to help bridge the gap between the expected family financial contribution and the cost of attending the university. For need-based financial assistance, the contribution toward college costs expected from the student is calculated according to a federally mandated system. To receive financial aid, a student must be enrolled for at least half-time in the program or a minimum of 4.5 credits during any semester.

Applying for Aid
To apply for need-based financial aid at Western State Colorado University, the student must do the following:

1. Complete the admission process and be fully admitted to the graduate program.
2. Submit a Free Application for Federal Student Aid (FAFSA) at [http://www.fafsa.ed.gov/] to the federal student aid processor.
3. Submit any additional documentation as requested by Western to verify eligibility. Documentation may include the federal income tax return, proof of child support, federal verification form, etc.

*Note: Western’s financial aid year is fall and spring. Summer financial aid requires an additional form that is available from the Financial Aid Office beginning March 15.

The Financial Aid Offer
Students qualifying for financial aid receive a financial aid package containing information regarding their eligibility for various kinds of loans. The proportion and type of loan aid varies from student to student and from year to year depending upon the student’s eligibility and level of enrollment.

Loans must be repaid. The FAFSA application must be completed to receive consideration for any of the following loans: Federal Direct Unsubsidized Stafford/Ford Loan Program, and Federal Direct Graduate PLUS Program. Detailed information on loans may be found on the Financial Aid web page.
GRADUATE ACADEMIC POLICIES

Academic success, a goal that Western wants all students to achieve, can be measured in many ways. This section identifies and explains the standards that Western has established as measures of academic success and indicates the policies and procedures that apply to the students who fail to meet the standards. The Provost/Vice President for Academic Affairs, in consultation with the Faculty Academic Policies Committee and the Faculty Senate, is responsible for the development and implementation of these academic standards and policies.

Unit of Credit

Western State Colorado University uses the semester hour as the basic unit of credit. The semester credits assigned to a course are based on the specific learning objectives and the expected outcomes. The College’s assigned semester hours are consistent with the Federal definition of a credit hour and the Colorado Commission on Higher Education’s established minimum class times for credit courses. The minimum expectation for one semester credit is one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks of seminars and lecture-based classes. An equivalent amount of work is required in laboratories, internships, practica, on-line, studio work, and other academic work leading to the award of credit hours.”

Course Numbering System

500-599 Level Graduate Courses: Courses at this level are non-degree oriented and typically intended for continuing education and professional development. Course formats include workshops and seminars and are primarily practice-based. 600-699 Level Graduate Courses: Courses at this level are intended for degree-seeking students. They are more than an extension of the baccalaureate education; they are qualitatively different and, at a minimum, students should be required to undertake original scholarly/creative activity, assume greater responsibility for mastering the subject matter, and develop close working relationships with professors. It is assumed that students taking graduate-level courses have acquired the ability to use language and information sources effectively, and engage in analytical thought and creative processes.

Academic Load

During a 16-week semester a student must take a minimum of nine credits to be considered full-time, and a course load of 15 credits may be taken without special approval. During a 10-week summer session a student must take a minimum of six credits to be considered full-time, and a course load of nine credits may be taken without special approval. An additional three credits of student teaching, internship, or other on-the-job credit may be taken. A student may enroll in more credits in either session if the student’s grade-point average is at least 3.500 from most recent course work and a petition is filed with the signatures of the graduate advisor, department chair/director, and the Graduate Studies Dean.

Registration

Course Descriptions

Course descriptions provide a summary of the course content. If there is a prerequisite
that must be met before a student can register for the course, this information is stated in the course description. Prerequisites may include specific courses, class standing, declared major, and other requirements. If there is a corequisite course in which a student must be registered, this information is also stated in the course description.

Add/Drop

After classes have begun in a 16-week semester, students may add an open class without petition until 5 p.m. on the fourth day of the semester. After the fourth day and until the end of the official drop period, students may add a course only with approval by the instructor. The add deadline for any course that meets for less than 16 weeks is two days. The student is responsible for understanding and communicating with the instructor, understanding course policies, and understanding any consequences of adding a course after the first class meeting.

Students may drop a course during the first 15% of the class meetings. This rule applies for both classes that meet for a full semester and classes that meet in sessions shorter than a full semester. (Note the difference between this rule and “withdrawal” explained below.)

Western State Colorado University faculty reserve the right to drop students from class rolls if they miss the first class meeting. Not all instructors require attendance the first class meeting, but many do. Students are strongly encouraged to attend all their first class meetings. If circumstances such as weather or flight arrangements prevent students from attending the first class session, it is the student’s responsibility to contact the instructor of each course to request that their seat in the class be held.

Withdrawal from Individual Courses

After the official add/drop period, a student may only withdraw from a course with approval of the course instructor and the student’s academic advisor. Students who obtain these authorizations will receive a grade of “W” (which has no effect on the student’s grade-point average; refer to sections on Grades and Grade-Point Average that follow). If two-thirds of the scheduled class time in any given course has been completed, the student is not allowed to withdraw, and a grade for the course (which does affect the student’s grade-point average) is recorded. Specific withdrawal deadlines are published in the Course Schedule booklets for each semester. Course instructors may also withdraw a student from a class for reasons such as inadequate academic progress or attendance, academic dishonesty, or disruptive behavior.

Withdrawal from the University

Students who wish to withdraw from the University may do so any time during the semester. Contact the Graduate Studies Dean to initiate an official withdrawal from the University. After the official Add/Drop period, but before the withdrawal deadline, a student wishing to withdraw entirely from the College will be given a grade of “W” for all courses except variable-credit courses. Once two-thirds of the scheduled class time in any given course has been completed, a student wishing to withdraw from the College will be given a “W” or a “WF” grade for each course.

Withdrawal from Variable Credit Courses

After 15 percent of the course has been completed, a student wishing to withdraw from the University during a term when he or she is enrolled in a variable credit course (i.e., internships, practicums, field experiences, independent
Withdrawal in Absentia
If illness, injury, or other circumstances prohibit a student from being on campus to request withdrawal from the University in person, the student may notify the Graduate Studies Dean.

University Graduation Requirements
Master’s degree programs have a minimum requirement of 30 semester credits numbered at 600 and above. Programs may require additional credits, some of which may allow up to six credits (not applied toward the earned undergraduate degree) below the 600 level on the degree plan from the respective department. The maximum number of allowable transfer credits is nine credits.

Residency Requirements
Every candidate for a degree must earn a minimum of 21 credits from Western State Colorado University. This 21 credit minimum must include the final credit earned.

Grades
For the purpose of calculating a student’s grade-point average, numerical values are assigned to letter grades on the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.000</td>
</tr>
<tr>
<td>A-</td>
<td>3.670</td>
</tr>
<tr>
<td>B+</td>
<td>3.330</td>
</tr>
<tr>
<td>B</td>
<td>3.000</td>
</tr>
<tr>
<td>B-</td>
<td>2.670</td>
</tr>
<tr>
<td>C+</td>
<td>2.330</td>
</tr>
<tr>
<td>C</td>
<td>2.000</td>
</tr>
<tr>
<td>C-</td>
<td>1.670</td>
</tr>
<tr>
<td>D+</td>
<td>1.330</td>
</tr>
<tr>
<td>D</td>
<td>1.000</td>
</tr>
<tr>
<td>D-</td>
<td>0.670</td>
</tr>
<tr>
<td>F</td>
<td>0.000</td>
</tr>
</tbody>
</table>

To obtain grade points earned in a course, multiply the number of credits per course by the number of points for the grade earned in the course. A minimum grade of B in each course applied to a degree program is required. A minimum of a 3.000 grade-point average is required for graduation. Credits transferred from another institution are not calculated in the Western grade-point average.

Grade-Point Average
When a student’s course grade is below a B- in any graduate course, the student and the department must be notified, and the student shall be placed on academic probation. In order to be removed from probation, the student must retake the course to replace a grade lower than a B-. In the semester following placement on probation, the student’s grades in each course must be at least a B- for that semester's course work taken or he or she shall be dismissed at the conclusion of that semester. In extenuating circumstances, the student may petition the Academic Policies Committee for an extension of the probationary time period. The dismissal decision is in force unless a temporary extension is approved by the Academic Appeals Committee.
Thesis Plan (Plan I):
Students must earn a minimum of 30 semester credits of graduate work, including four to six thesis credits. Courses must be at or above the 600 level.

Graduate students working toward a master’s degree under Plan I earn four to six thesis credits.

A student faculty committee must be established to guide the student’s research. This committee must consist of the student’s major advisor (who also serves as committee chair), one faculty member from the student’s major department, and one faculty member from outside of the department.

The student’s faculty committee must approve the final draft of the thesis, which must be filed with the Graduate Studies Dean before graduation. The thesis must comply with specifications outlined in Directions for Preparing Master’s Theses, which is obtainable from the Graduate Studies Dean, and the student must have received a preliminary thesis format approval from the Graduate Studies Dean. Graduating students are responsible for observing the deadlines published in the schedule of classes for thesis approval. The record of the thesis defense must be approved by the student’s faculty committee and the Graduate Studies Dean and filed with the Registrar before graduation.

Non-Thesis Plan (Plan II):
Students must earn a minimum of 32 semester credits of graduate work. Courses must be at or above the 600 level to meet this requirement. Graduate work includes a Graduate Capstone, which the student’s advisor will facilitate. Graduate Capstone credits are determined by the specific program requirements. If the Graduate Capstone is not completed at the end of the term in which the student is registered, an In Progress (IP) grade or a Failing (F) grade may be reported.

Time Limit for Degree Completion
There is a maximum of five years for completion of a master’s degree from the student’s initial enrollment. A graduate student who does not complete all degree requirements within the specified period of time may be required to validate past course work. Course validation may be done in one of the following ways: (1) retake the course final examination, (2) take an oral examination over course content, or (3) prepare a paper on the course content. In some cases, students may be required to retake the comprehensive examination (dependent upon the respective department’s requirements).

Active Status
To maintain active status, graduate students must register in at least one graduate course per academic year. Maintaining active status is critical and is required in order to participate in the program as a graduate student. Students who plan to be inactive for any academic year must complete and submit a Leave of Absence form (available from Registration Services). Students may apply for a leave of absence for up to two consecutive years. Students who do not register for a class and do not request a leave of absence must request readmission to reactivate their status. Students who do not register for more than two years and who have not taken a leave of absence during that time, must reapply for admission into their graduate program.
Advising

All graduate students are initially assigned an academic advisor from the department from which they are seeking a degree. The graduate advisor is identified by the department chair. The graduate advisor assists the student in developing a degree plan. The degree plan is filed in the Office of the Registrar.

Degree Plan

Required degree courses, electives, course substitutions, and accepted transfer credits must be approved by the student's advisor, the department chair and/or director, and the Graduate Studies Dean. The degree plan with pertinent signatures must be submitted to the office of the Graduate Studies Dean.

Comprehensive Examinations

When a comprehensive examination is given, the following rules apply:

- Students must be registered when they take the examination.
- The examination is to be given by the student’s faculty committee and consistent with the requirements established by the department for the specific graduate program.
- A majority of the committee must approve the examination.
- The examination may be oral, written, or both.
- A student who fails the comprehensive final examination may retake the examination only once (dependent upon the respective department’s requirements).

Application for Admission to Candidacy

A student who wishes to become a candidate for a master’s degree must file a completed Application for Admission to Candidacy with the Graduate Studies Dean by the appropriate deadline for graduating that semester. A student on probation is not eligible to be awarded a degree until he or she is removed from probation.

Graduation Audit and Participation in Commencement

The Office of the Registrar performs graduate degree audits and certifies graduate requirements, and the Graduate Studies Dean authorizes students on the graduation list. Requests for exceptions and special consideration are reviewed by the Academic Policies Committee, and recommendations are made to the Graduate Studies Dean. In order to participate in commencement a student must be in good standing, must have six or fewer credits left to complete graduation requirements, and must be registered for those credits the following term; or have only a capstone, or internship to complete and be registered for it the next term it is offered.

Academic Integrity

As members of the academic community, students are expected to recognize and uphold standards of intellectual and academic integrity. The College assumes, as a basic and minimum standard of conduct in academic matters, that students will be honest and that they will submit for credit only the products of their own efforts. Both the ideals of scholarship and the need for practices that are fair require that all dishonest work be rejected as a basis for academic credit. They also require that students refrain
from any and all forms of dishonorable conduct in the course of their academic work. Dishonest work may include, but is not limited to, the following infractions:

**Plagiarism.** Presenting another person’s work as one’s own, including paraphrasing or summarizing of the works of another person without acknowledgment and the submitting of another student’s work as one’s own is considered plagiarism. Plagiarism frequently involves a failure to acknowledge in the text, notes, or footnotes the quotation of paragraphs, sentences, or even a few phrases written or spoken by someone else.

**Cheating on Examination.** Giving or receiving unauthorized help before, during, or after an examination is considered cheating. Examples of unauthorized help include the use of notes, texts, or “crib sheets” during an examination (unless specifically approved by the instructor).

**Unauthorized Collaboration.** Submission for academic credit of a work product, or a part thereof, represented as being one’s own, which has been developed in substantial collaboration with assistance from another person or source, is a violation of academic honesty. It is also a violation of academic honesty to knowingly provide such assistance. Collaborative work specifically authorized by an instructor is allowed.

**Falsification.** It is a violation of academic honesty to misrepresent material or fabricate information in an academic exercise or assignment (e.g., false or misleading citation of sources or the falsification of the results of experiments or of computer data).

**Multiple Submissions.** It is a violation of academic honesty to submit substantial portions of the same work for credit more than once without the explicit consent of the instructor(s) to whom the material is submitted for additional credit.

**Consequences of Violations.** Violations of academic integrity may result in the following: a grade of “F” or a “zero for the assignment, an “F” for the course, withdrawal from the course, or suspension or expulsion from the University. Serious violations of academic integrity are reported to the Office of Academic Affairs.

**Academic Due Process for Students**

It is the objective of these procedures to provide for the prompt and fair resolution of the types of problems described herein which students may experience at Western.

**Definitions**

**Complaint.** An informal claim by an affected student that a faculty member or an academic administrator has violated, misinterpreted, or improperly exercised his/her professional duties.

**Complainant.** An affected student who makes a complaint.

**Grievance.** A written allegation by an affected student that a faculty member or an academic administrator has violated, misinterpreted, or improperly exercised his/her professional duties. The grievance should include the possibility of a remedy.

**Grievant.** An affected student who files a grievance.
Respondent(s). The faculty member(s) and/or academic administrator(s) identified by the affected student as causing or contributing to the complaint or grievance.

Grievance Committee. A committee composed of one faculty member selected by the grievant, one faculty member selected by the respondent, and three faculty members selected by the Provost/Vice President for Academic Affairs (or assignees).

Time Limits. When a number of days are specified herein, they shall be understood to exclude Saturdays, Sundays, holidays, University vacation days, and other days when the University is not in session and holding classes.

Academic Administrator. Professional personnel of the University, other than teaching faculty, who are in positions to make academic decisions affecting students, including but not limited to, department chairs, Associate Vice President for Academic Affairs, Vice President for Academic Affairs, and the President.

Informal Complaint Procedure
The complainant shall discuss the problem with the respondent(s). If the problem is not mutually resolved at this time, the complainant shall confer with the immediate supervisor(s) of the respondent(s). (This usually will be the Chair(s) of the Department(s) to which the respondent(s) is assigned.) If satisfactory resolution is still not achieved, the complainant must confer with the Vice President for Academic Affairs.

Formal Grievance Procedure
If the complaint is not suitably resolved, the student has the right to file a grievance with the Vice President for Academic Affairs within six months of the time that the grievant could or should have known of the action which is the basis of the problem. This written allegation shall indicate what has already been done to resolve the complaint. Preservation of relevant documents and of precise records of actions taken is advantageous. The Grievance Committee shall be formed under the supervision of the Vice President for Academic Affairs, and a hearing shall be scheduled within 15 days after that officer receives the written grievance from the grievant. The Grievance Committee shall hear testimony from the grievant, the respondent, and whomever else it deems appropriate. Within 15 days after completion of the hearing(s), the Grievance Committee shall submit its findings to the Vice President for Academic Affairs for implementation as deemed appropriate by that officer. A copy of the finding of the committee and of the implementing decision of the Vice President for Academic Affairs shall be given to the grievant and the respondent. The grievant may withdraw the grievance at any point in the proceedings by doing so in writing to the Vice President for Academic Affairs. The Vice President for Academic Affairs may grant an extension of the time limit for good cause.

If the grievance has not been resolved satisfactorily after the above procedures have been completed, the grievant is advised that he/she may appeal to the President of Western State Colorado University, and ultimately, to the Board of Trustees.
Master of Arts in Education

The Master of Arts degree program in Education is a two-year program. The master's candidate must earn and successfully complete a minimum of 40 semester credits of graduate course work, including a graduate capstone. The candidate will earn a Master of Arts in Education in one of four tracks: Teacher Leadership, Reading Leadership, or Educational Administrator Leadership. As part of the program a candidate earns teacher licensure in one area, as indicated below.

- A candidate intending to pursue the Master of Arts in Education, Teacher Leadership track will complete one of the following licensure programs, Elementary, Secondary, K-12, Secondary English, Special Education Generalist or Culturally and Linguistically Diverse Education, as part of the master's.
- A candidate intending to pursue the Master of Arts in Education, Reading Leadership track will complete one of the following licensure programs, Elementary, Secondary English, Special Education Generalist or Culturally and Linguistically Diverse Education, as part of the master’s.
- A candidate intending to pursue the Master of Arts in Education, Educational Administrator Leadership track will complete the Administrative Licensure Program as part of the master's. Once an applicant has been accepted to the program, a graduate advisor will be assigned to assist the applicant in developing a degree plan, which includes a comprehensive exam and capstone.

**Description of the Programs**

**Teacher Leadership Track**

Teacher leadership is defined as the work of an individual (a teacher-leader) within a school who is regarded as an excellent educator; is well respected by peers; is recognized for his/her leadership capacity; holds a lifelong learning orientation; and has been identified to facilitate, advocate, and advance school reform and improvement of student learning. This work is typically carried out through informal and formal venues and processes; for example, with teachers in their classrooms, and with colleagues and administrators through leadership responsibilities on school and district level task forces, committees, and/or membership in district level professional development projects. In order to earn the M.A. degree, the candidate must successfully complete two years of education course work in conjunction with in-classroom/school practical experience. The candidate that does not yet hold a license must become a licensed teacher at the conclusion of the first year. Already licensed teachers have the option of adding an endorsement. Successful completion of the second year will result in earning the M.A. degree.

The Teacher Leadership Track requires a minimum of 40-43 credits. First-year course work credits range from 24-27 credits: Elementary 27 credits; Secondary and K-12 27 credits; Secondary English 27 credits; Special Education Generalist 27 credits.

**Second-year course work consists of the following 16 credits:**

- EDUC 680 Research and Critical Inquiry for Leaders .................................................. 4 cr
- EDUC 681 Curriculum Program Evaluation .............................................................. 3 cr
- EDUC 682 Leadership in School Sites ...................................................................... 3 cr
- EDUC 693 Capstone ................................................................................................. 3 cr
Three credits from the following:
EDUC 683 School Law................................................................. 3 cr
EDUC 684 Materials and Motivation for Reading................................. 2 cr
EDUC 685 Assessing, Evaluating, and Instructing at-risk & Struggling Reader. 3 cr
EDUC 686 Literacy Coaching and Mentoring........................................ 2 cr
EDUC 687 School-Wide Comprehensive Literacy Program Development...... 2 cr
EDUC 690 School Law for Site Leaders Seminar................................. 1 cr
EDUC 691 Fostering Collaborative School Sites.................................... 1 cr
EDUC 692 Issues and Trends in Leadership Seminar............................ 1 cr

Reading Leadership Track

Reading leadership is defined as the work of an individual (a reading-leader) situated in the classroom or in a school or district level position who knows federal and state policies related to literacy; has advanced knowledge of the development, implementation, and evaluation of scientifically-based reading programs; and can work effectively with other instructional staff to meet the literacy needs of all students. The reading leader provides professional guidance and expertise to classroom teachers, school and/or district literacy curriculum, instruction, and assessment programs; and, develops and conducts in-service programs related to literacy.

In order to earn the M.A. degree, the candidate must successfully complete two years of education course work in conjunction with in-classroom/school practical experience. The candidate who does not yet hold a license must become a licensed teacher at the conclusion of the first year. Already licensed teachers have the option of adding an endorsement. Successful completion of the second year will result in earning the M.A. degree.

The Reading Leadership Track requires 43 credits. First-year course work require 27 credits: Elementary 27 credits; Secondary English 27 credits; Special Education Generalist 27 credits.

Second-year course work consists of the following 16 credits:
EDUC 680 Research and Critical Inquiry for Leaders............................. 4 cr
EDUC 684 Materials and Motivation for Reading.................................. 2 cr
EDUC 685 Assessing, Evaluating, and Instructing At-risk & Struggling Reader 3 cr
EDUC 686 Literacy Coaching and Mentoring....................................... 2 cr
EDUC 687 School-Wide Comprehensive Literacy Program Development...... 2 cr
EDUC 693 Capstone............................................................................. 3 cr

Optional courses required in the Reading Leadership Emphasis to add Colorado endorsements in Reading Teacher and/or Reading Specialist:
Reading Teacher Internship................................................................. 3 cr
Reading Specialist Internship.............................................................. 3 cr

Educational Administrator Leadership

In order to earn the M.A. degree, the candidate must successfully complete two years of principal education course work and at least one concurrent year-long contractual or internship experience in administration. At the conclusion of the first year the candidate must become licensed as a principal. Successful completion of the second year will result in earning the M.A. degree.
The Educational Administrator Leadership Track requires 44 credits:

- EDUC 680 Research and Critical Inquiry for Leaders ............................................. 4 cr
- EDUC 681 Curricular Program Evaluation ............................................................... 3 cr
- EDUC 682 Leadership in School Sites ................................................................. 3 cr
- EDUC 683 School Law .......................................................................................... 3 cr
- EDUC 693 Capstone .............................................................................................. 3 cr

*Three credits from the following:*
- EDUC 690 School Law for Site Leaders Seminar ................................................. 1 cr
- EDUC 691 Fostering Collaborative School Sites .................................................... 1 cr
- EDUC 692 Issues and Trends in Leadership Seminar ............................................ 1 cr

K-12 Online Teacher Leadership Track

Online teacher leadership is defined as the work of an individual (an online teacher-leader) teaching online in a virtual school and/or in a blended setting who knows federal and state policies related to online teaching and learning; has advanced knowledge of the development, implementation, and evaluation of quality online teaching and instructional design; and can work effectively with other online instructional staff to meet the targeted learning needs of all students. The online teacher leader provides professional guidance and expertise to virtual schools on effective curriculum, instruction, and assessment programs.

Second-year course work consists of the following 16 credits:

- EDUC 621 Creating Effective Online Learning Environments ................................ 3 cr
- EDUC 622 Using Data to Plan for Online Learning and Targeted Interventions ...... 3 cr
- EDUC 623 Designing and Delivering Effective Online Instruction ....................... 3 cr
- EDUC 680 Research and Critical Inquiry for Leaders ............................................. 4 cr
- EDUC 693 Capstone .............................................................................................. 3 cr

**Education Courses**

EDUC 597 Special Topics in Education ................................................................. 1-6 credits

EDUC 600 Foundations of Literacy Development ................................................. 3 credits
Provide in-depth understanding of the reading acquisition process and current issues in reading research related to preliterate and emergent readers through observation and analysis of reading and written language development. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 601 Methods and Strategies of Effective Reading Instruction ................. 3 credits
Provide in-depth understanding and application of scientifically-based methods of teaching reading comprehension vocabulary, and fluency. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 602 Literacy Assessment Informed Instruction ............................................. 3 credits
Screen, diagnose, and monitor student progress in reading and writing to inform instruction and build home-school partnerships that promote reading and writing. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 603 Content Area Learning ......................................................................... 3 credits
Apply concepts, methods, and practices related to curriculum, assessment of learning,
Master of Arts in Education

EDUC 604 Learning Environments 3 credits
Recognize needs for a successful classroom environment and apply strategies to support learning. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 605 Curriculum Development and Assessment 3 credits
Study and apply standards-based curriculum and assessment practices. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 606 Reading in the Content Area 3 credits
Analyze, analyze, evaluate, and apply methods for developing effective reading strategies that improve student academic achievement in the content area. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 607 Enhancing Student Learning with Digital Technology 3 credits
Use technology meaningfully to enhance learning in the content area and broaden students’ information literacy. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 608 Methods and Strategies of Effective Writing Instruction 3 credits
Provide in-depth understanding and application of research-based methods of teaching writing as they apply to cognitive processes and socio-cultural context for diverse students. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 609 Secondary Student Teaching 3 credits
Work in a secondary school setting over the course of the year, in collaboration with mentor teachers. This course can be repeated twice for credit. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 610 K-12 Student Teaching 3 credits
Work in a K-12 school setting over the course of the year, in collaboration with mentor teachers. This course can be repeated twice for credit. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 611 Strategies and Techniques for Teaching Students with Support Needs 3 credits
Address critical issues, content, and pedagogy needed by special education professionals. Apply these theories to the daily activities of the teacher. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 612 Behavioral Analysis and Intervention 3 credits
Use critical thinking and problem-solving skills to study and apply current behavioral research and school law regarding the education of students with emotional/behavioral disabilities. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 613 Methods and Strategies of Effective Mathematics Instruction 3 credits
Examine and apply research-based teaching strategies that promote mathematics learning. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 614 Collaborating for Students with Support Needs 3 credits
Use data and collaboration process to develop Individual Educational Plans, and provide support needs and technologies for students with disabilities. Prerequisite: Admission to M.A. degree in Education Program.
EDUC 615 Special Education Student Teaching 3 credits
Work in a K-12 school setting with students with disabilities over the course of the year, in collaboration with mentor teachers. This course can be repeated twice for credit. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 616 Language Acquisition for Linguistically Diverse Students 3 credits
Develop and apply understanding of language acquisition and awareness of the historical, legal, social and educational background surrounding linguistically diverse education. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 617 Cognitive Academic Language Proficiency in the Content Area 3 credits
Differentiate social and cognitive academic language and use research to develop cognitive academic language for English Language Learners. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 618 Linguistically Diverse Student Teaching 3 credits
Work in a K-12 school setting with linguistically diverse students over the course of the year, in collaboration with mentor teachers. This course can be repeated twice for credit. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 619 Elementary Student Teaching 3 credits
Work in an elementary school setting over the course of the year, in collaboration with mentor teachers. This course can be repeated twice for credit. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 620 Engaging Diverse Learners 3 credits
A study and application of research-based instruction to engage diverse learners. Focus is on creating learning experiences to maximize student engagement and achievement, while evaluating and reflecting on teaching practices.

EDUC 621 Creating Effective Online Learning Environments 3 credits
An inquiry into how to best engage diverse learners is an online instructional context. Focus is on methods and strategies for creating and managing learning experiences to maximize student engagement and achievement in the online environment.

EDUC 622 Using Data to Plan for Online Learning and Targeted Interventions 3 credits
A study of best practices in creating, implementing, and using assessments in the online environment. Focus is on analyzing real-time data and findings from assessments to make instructional decisions and to plan targeted interventions to ensure student success.

EDUC 623 Designing and Delivering Effective Online Instruction 3 credits
Online field-based experience in design, delivery, and evaluation of standards-based to an appropriate K-12 student population.

EDUC 680 Research and Critical Inquiry for Leaders 4 credits
Examine, analyze, and synthesize research literature in relation to emerging trends in education. Explore concepts pertaining to quantitative and qualitative research methods and the synergistic relationship between research, theory, and practice. Develop problem posing/solving, information literacy, and critical thinking. Prerequisite: Admission to M.A. degree in Education Program.
EDUC 681 Curricular Program Evaluation  
3 credits  
Investigate curriculum reform, decision making and evaluation strategies as they affect the educational program. Develop problem solving skills through theory and simulation. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 682 Leadership in School Sites  
3 credits  
Examine leadership models and issues discussed in professional literature and relate to own practice in order to increase leadership capacity and advocate for improving education. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 683 School Law  
3 credits  
Examine laws and legal implications of court decisions affecting schools and professional educators. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 684 Materials and Motivation for Reading  
2 credits  
Select and evaluate materials, develop independent readers, involve the community, and establish and manage the literacy environment. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 685 Assessing, Evaluating, and Instructing At-risk and Struggling Readers  
3 credits  
Develop in-depth understanding of scientifically based reading research and instruction for at risk and struggling readers. Provide the tools necessary to diagnose, evaluate and teach struggling readers. Assignments will include the development of intervention programs and the implementation of progress-monitoring reading assessments. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 686 Literacy Coaching and Mentoring  
2 credits  
Examine roles and functions of literacy coaching and mentoring to provide professional development for literacy in the school setting. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 687 School-Wide Comprehensive Literacy Program Development  
2 credits  
Prepare educators for school-wide comprehensive literacy program development and delivery. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 688 Reading Teacher Internship  
3 credits  
Complete supervised practicum(s) or internship(s) as a reading teacher at the appropriate grade level(s) for Colorado Department of Education Reading Teacher graduate endorsement. This course can be repeated twice for credit. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 689 Reading Specialist Internship  
3 credits  
Complete supervised practicum(s) or internship(s) as a reading specialist at the appropriate grade level(s) for Colorado Department of Education Reading Specialist graduate endorsement. This course can be repeated twice for credit. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 690 School Law for Site Leaders Seminar  
1 credit  
Relate knowledge of educational legal issues and trends through study of case law as it relates to the respective school site. Prerequisite: Admission to M.A. degree in Education Program.
EDUC 691  Fostering Collaborative School Sites      1 credit
Examine collaborative processes, models of collaboration, and communication skills that promote effective professional interaction and decision making in educational settings. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 692  Issues and Trends in Leadership Seminar      1 credit
The role of professional literature and experience in the development of leadership capacity that advocates for improvements of education. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 693  Capstone      3 credits
Interpreting, planning, conducting, and reporting research results in the field of education. The student must be enrolled in EDUC 693 when utilizing Western State Colorado University Graduate Faculty support in conducting research. This course can be repeated for credit and is required the final semester of the M.A. degree in Education Program.

EDUC 697  Special Topics in Education      1-6 credits
Prerequisite: Admission to M.A. degree in Education Program.

EDUC 698  Independent Study      1-6 credits
Work individually with a professor to design and complete a self-paced course of study. Prerequisite: Admission to M.A. degree in Education Program.

EDUC 699  Research Problems      1-6 credits
Prerequisite: Admission to M.A. degree in Education Program.
The Master of Environmental Management (MEM) is a professional terminal degree, specifically focused on the content understanding and methods necessary to managing environmental organizations, public lands agencies, and communities towards sustainable solutions. The program emphasizes entrepreneurial and systems-thinking approaches to environmental issues associated with increasing climate disturbances, natural resource demands, and socio-economic insecurity. The MEM offers a “hybrid” learning environment for full-residency students rooted in the learning laboratories of the Gunnison Country, combined with a low-residency option for select environmental professionals from all over the world.

Program Goals:

- Improving student understanding of environmental systems and services, of the human impact on those systems, and of the array of sustainable and resilient solutions to those impacts.
- Developing students’ capacities for interdisciplinary critical thinking, entrepreneurial innovation, and collaborative environmental problem-solving with diverse stakeholders.
- Enhancing career opportunities in environmentally related disciplines.

Student Outcomes
Students will be able to:

- Understand the complex interactions among human, climate, and ecological systems.
- Access and evaluate information about environmental issues.
- Critically assess the fundamental elements of environmental problems.
- Develop and apply diverse management and adaptation strategies to solve environmental problems.
- Effectively communicate the complexity of environmental problems as well as appropriate solutions to diverse audiences.
- Collaborate with and build partnerships among diverse stakeholders in order to complete major environmental projects.

Program Prerequisites

- BA or BS degree required before attending first Summer in MEM Program.
- Minimum Prerequisites must be completed by end of first MEM Fall term:
  - One college-level statistics course
  - Two college-level natural or environmental science courses (Biol, Geol, ENVS, Phys, Chem, Sci), at least one course with lab or field component
  - Two college-level social science courses
- Integrative Land Management Recommended Prerequisites
  - One upper-level Ecology course
  - One GIS course
- Sustainable and Resilient Communities Recommended Prerequisites
  - One course in Economics (Micro or Macro preferred)
  - Financial Accounting
Master of Environmental Management

A minimum of 46 credits is required for the MEM degree. The 20-credit Core, plus one 3 credit elective in the first year, earns a Graduate Certificate in Environmental Management. Students who earn the MEM do not also earn a Graduate Certificate after the first year.

All MEM students must complete the 20-credit Core.

Core Courses:

- ENVS 601 Introduction to Environmental Management ........................................ 5 cr
- ENVS 605: Applied Environmental Science ............................................................ 3 cr
- ENVS 608: Environmental Politics and Policy .......................................................... 3 cr
- ENVS 611: Integrative Skills for Environmental Management ............................. 3 cr
- ENVS 612: Quantitative Skills for Environmental Management ........................... 3 cr
- ENVS 615: Science of Climate Mitigation and Adaptation .................................... 3 cr

Sustainable & Resilient Communities Emphasis (beyond required Core courses)

One of the following:

- ENVS 630 Triple Bottom Line Strategies .............................................................. 3 cr
- ENVS 636 Environmental Organizational Development ...................................... 3 cr

Nine credits of:

- ENVS 620 Topics in Sustainable and Resilient Communities ............................. 3 cr

Masters Project Requirement:

- ENVS 690 Master’s Project Development ............................................................. 5 cr
- ENVS 694 Master’s Project and Portfolio .............................................................. 9 cr

Students must take 3 cr of ENVS 694 Fall II and 6 cr of ENVS 694 Spring II

Integrative Land Management Emphasis (beyond required Core courses)

One of the following:

- ENVS 640 Climate Adaptation for Integrative Land Management ..................... 3 cr
- ENVS 646 Public Lands Management .................................................................... 3 cr

Nine credits of:

- ENVS 625 Topics in Integrative Land Management ............................................. 3 cr
Masters Project Requirement:

ENVS 690 Master’s Project Development .................................................. 5 cr
ENVS 694 Master’s Project and Portfolio ..................................................... 9 cr

Students must take 3 cr of ENVS 694 Fall II and 6 cr of ENVS 694 Spring II.

ENVIRONMENTAL MANAGEMENT COURSES

ENVS 601 Introduction to Environmental Management 5 credits
An introduction to the MEM program, to bioregional and resilient approaches to environmental management, and to the environmental stakeholders, problems, solutions, and learning laboratories of the Gunnison Valley. Requires two-week residency in Gunnison during culmination of course. Prerequisites: Admission to the MEM Program.

ENVS 605 Science of Environmental Management 3 credits
Provides a rigorous and hands-on overview of the principles and methods of environmental science. Students gain practical experience with a range of laboratory, field, and analytical approaches, with a focus on current environmental research in the Gunnison Basin. Topics include water quality, riparian condition, rangeland monitoring, forest health, threatened and endangered species, air quality, conservation, and ecological restoration. Students develop skills in scientific literature searches, writing monitoring protocols, ensuring quality data collection, statistical analysis, interpretation of results, written and oral communication, and peer review. Prerequisites: ENVS 601.

ENVS 608 Environmental Politics and Policy 3 credits
Analysis of the key interactions between environmental policy and management, focusing on environmental decision-making within an array of policy contexts. Emphasis is on important federal policies such as the Clean Water Act and NEPA, with additional attention to relevant state and local policies. Prerequisites: ENVS 601.

ENVS 611 Integrative Skills in Environmental Management 3 credits
Course focuses on developing and managing environmental projects and organizations. Students develop a thorough understanding of integrative assessment, adaptive management, and triple bottom line strategies. Students apply these approaches to the development of professional skills such as organizational development, conflict management, and environmental communication. Prerequisites: ENVS 601.

ENVS 612 Quantitative Skills in Environmental Management 3 credits
An overview of a range of quantitative analytical methods and statistical approaches essential to environmental management careers in both Integrative Land Management and Sustainable and Resilient Communities. Topics covered include descriptive and inferential statistics, geographic information systems, cost-benefit analysis, and graphic presentation of results. Course empowers students to organize, analyze, and graphically present environmental data. Prerequisites: ENVS 601 and an undergraduate-level course in statistics.

ENVS 615 Science of Climate Mitigation and Adaptation 3 credits
An investigation of the science of climate change, with an emphasis on mitigation and adaptation strategies for careers in environmental management. Students will develop an understanding of the principles of atmospheric and earth sciences that form the scientific basis of climate change and survey the large body of evidence of anthropogenic warming. Topics include greenhouse gas emissions, climate forcings and
feedbacks, observed and projected climate changes, effects on ecological and human systems, and the opportunities and challenges of a diverse suite of strategies for climate change mitigation and adaptation at the local, regional, and planetary scale. Prerequisites: ENVS 605; two undergraduate courses in natural or environmental sciences, one of which must be upper-level with lab/field component.

**ENVS 616 Environmental Organization Development and Management 3 credits**
An introduction to developing and managing environmental organizations, including managing change within and beyond organizations to maximize the effectiveness of environmental solutions. Course discusses competitively advantageous strategies and practices organizations adopt to write successful grants, grow revenues, cut costs, and redesign projects and processes. Management examples will include sustainable innovation, creativity, and entrepreneurship in private, government, and nonprofit sectors from around the world. Students learn leadership skills that foster a culture of innovation, creativity, and entrepreneurship within an organization, utilizing principles from a variety of thinking methods including systems, design, and group thinking. Prerequisites: ENVS 605; ENVS 608; ENVS 611; ENVS 612.

**ENVS 618 Public Lands Management 3 credits**
An exploration of the current and traditional approaches to public land and resource management. A regional focus on the Western U.S. is integrated with comparative examples from other regions and countries to enhance and broaden student perspectives. Course examines the history and future management implications of public lands agencies and policies, such as the National Parks, National Forests, Bureau of Land Management, NEPA and multi-use mandates. Special focus will be given to the management skills necessary in leading public lands agencies on the regional level. Prerequisites: ENVS 605; ENVS 608; ENVS 611; ENVS 612.

**ENVS 620 Studies in Sustainable and Resilient Communities 3 credits**
An examination of selected topics covering the content understanding, analytical skills, and management approaches vital to cultivating sustainable and resilient communities. Topics include subjects such as Climate Change Mitigation and Adaptation, Sustainable Food Systems, Sustainable Energy Futures, Sustainable Economic Development, Movements in Community Resilience, and Frameworks in Sustainability. This course is repeatable, since students are required to take this course three times, as long as the topic changes. Prerequisites: ENVS 616.

**ENVS 625 Studies in Integrative Land Management 3 credits**
An examination of selected topics covering the content understanding, analytical skills, and management approaches vital to integrative land management. Topics include subjects such as Watershed Coalition Development; Forest Ecology and Management; Rangeland Ecology and Management; Wildlife Ecology and Management; The History and Future of Energy on Public Lands; Public/Private Conservation Partnerships; Managing the Urban/Wildland Interface; and Conservation Advocacy. This course is repeatable, since students are required to take this course three times, but cannot repeat the same topic. Prerequisites: ENVS 618.

**ENVS 690 MEM Project Development 5 credits**
An introduction to the Master's Project. Course examines environmental project design strategies, successful environmental solutions, and organizations/community stakeholder groups seeking environmental management assistance from MEM students in the
Master’s Project. Students design, plan, and coordinate second year Master’s Project with faculty mentors and community stakeholders. Requires two-weeks residency in Gunnison during culmination of course. Prerequisites: MEM Core.

**ENVS 694 Master's Project and Portfolio**  
3-6 credits

Students design and apply a specific research and environmental management project to an active environmental organization, green business, land agency, or community stakeholder group. Requires students to develop a lens and goal for environmental management; identify a project that enables the student to manifest his/her environmental management goal; research global best practices for similar projects; complete the project over 10 months; write up, present, and defend the results for the faculty mentor and MEM community; and complete an environmental career portfolio. Course spans Fall (3 credits) and Spring (6 credits) of the second year, and requires 9 total hours. This is a repeatable course for variable credit. Prerequisites: ENVS 690.
Master of Fine Arts in Creative Writing

The Master of Fine Arts in Creative Writing at Western uses a low-residency format that requires students to engage in studies in two ways:

1) on-campus intensive seminars and workshops for two weeks during three consecutive summers, and

2) a plan of non-residency study requiring four academic semesters, during each of which students work one-to-one with writing faculty mentors and members of their peer cohort of students. The M.F.A. offers students three concentration:
   - Popular Genre Fiction/Nonfiction
   - Poetry with an Emphasis in Versecraft, and
   - Screenwriting for Feature Film and Television.

The M.F.A program insists on a high degree of commitment and excellence from candidates, all of whom must maintain a 3.000 course average to complete the program. A minimum grade of B- in each course applied to a degree program is required. Summer residency courses within concentrations are front-loaded – that is, these courses require students to prepare for the intensive residency experience by completing pre-assigned reading lists as well as preparing advanced assignments to maximize the time for discussion and qualitative analysis during the course of studies on campus.

In the first and second summer residencies, candidates will also complete one credit each summer of CRWR 600 learning or updating online tools mastery, attending faculty and student readings, and meeting with non-residency mentors. Third-summer candidates will earn one credit attending and participating in critiques and readings for cohorts attending their first and second summers. Students also attend and participate in a summer creative writing conference hosted on campus during each residency.

Students can expect to spend a minimum of 25-30 hours per week to complete writing assignments, for which mentors will provide weekly feedback using online tools. Students will also participate weekly in threaded synchronous and asynchronous online voice and discussion boards during each term with other students and mentors. Students will earn 12 credits each semester for this work (six credits for each mentored course topic).

Faculty

Professors Christine Jespersen and Mark Todd;
Assistant Professor Jack F. Lucido;
Visiting Professors Barbara Chepaitis, Russell Davis, and David Rothman.

Description of the Programs

Popular Genre Fiction/Nonfiction
The concentration in Popular Genre Fiction/Nonfiction includes instruction in writing for such forms as science fiction/fantasy, the mystery, romance, narrative nonfiction, and other forms of mainstream commercial fiction. Study includes short and long written forms, as well as exploration of forms for alternative media such as public performance, audio, and internet media.
Students may also elect to study two of these concentrations by increasing the duration of their program to six semesters and a fourth summer residency.

The Popular Genre Fiction/Nonfiction Concentration requires the following 60 credits:

CRWR 600  Summer Orientation ................................................................. 1 cr
CRWR 601  Patterns and Paradigms for Popular Genre Writing ................. 2 cr
CRWR 602  Fiction Workshop and Translation ............................................ 2 cr
CRWR 604  Pre- and Post-Publication Promotion ....................................... 2 cr
CRWR 608  Craft and Practice I ................................................................. 6 cr
CRWR 609  Genres I – Speculative Fiction, Mystery, and YA ...................... 6 cr
CRWR 612  Narrative Nonfiction .............................................................. 6 cr
CRWR 618  Genres II – Women’s Fiction, Romance, and The Western ......... 6 cr
CRWR 619  Craft and Practice II ............................................................... 6 cr

*CRWR 646  Narrative Poetry ................................................................. 6 cr
*CRWR 665  Screenwriting Genre ............................................................ 6 cr
CRWR 621  Making Connections in the Market ......................................... 6 cr
CRWR 622  Thesis Preparation ................................................................. 6 cr
CRWR 694  Capstone ............................................................................... 3 cr

During the second fall term, choose one of the following two:

CRWR 622  Thesis Preparation ................................................................. 6 cr
CRWR 694  Capstone ............................................................................... 3 cr

Popular Genre Fiction/Nonfiction as a Second Area of Emphasis

Students pursuing this concentration as a second area of emphasis must earn 30 credits within the concentration as follows:

CRWR 600  Summer Orientation ................................................................. 1 cr
CRWR 608  Craft and Practice I ................................................................. 6 cr
CRWR 609  Genres I – Speculative Fiction, Mystery, and YA ...................... 6 cr
CRWR 694  Capstone ............................................................................... 3 cr
Supporting courses in consultation with advisor ...................................... 12 cr

One of the following:

CRWR 601  Patterns and Paradigms for Popular Genre Writing ................. 2 cr
CRWR 602  Fiction Workshop and Translation ............................................ 2 cr
CRWR 604  Pre-and Post-Publication Promotion ....................................... 2 cr

Poetry with a Focus on Versecraft

The concentration in Poetry with a Focus on Versecraft requires that students achieve demonstrable mastery of a wide range of poetic forms and techniques along with acquiring historical and analytical knowledge about them. Students who complete the program will also be required to demonstrate their readiness to participate fully in the literary world through public speaking and relevant prose (book reviews, metrical analysis, historical investigation, etc.). This concentration requires passing a comprehensive exam on versecraft and poetics as well as sufficient reading competency in a foreign language, aided by a dictionary, to translate foreign-language poetry into English.

The Poetry with a Focus in Versecraft Concentration requires the following 60 credits:

CRWR 600  Summer Orientation ................................................................. 1 cr
CRWR 631  Scansion Immersion ................................................................. 2 cr
CRWR 632  Public Performance ................................................................. 2 cr
CRWR 633  Poetry and Music................................................................. 2 cr
CRWR 636  Metrical Traditions and Versification I................................. 6 cr
CRWR 638  History of English Language/Studies in Translation............ 6 cr
CRWR 641  Metrical Traditions and Versification II................................. 6 cr
CRWR 643  Historical Foundations of English Prosody.......................... 6 cr

*CRWR 646  Verse Narrative.................................................................. 6 cr
*CRWR 647  Verse Satire/Verse Drama................................................... 6 cr

During second fall term, choose one of the following two:

During second fall term, choose one of the following two:

*CRWR 608  Craft and Practice I............................................................... 6 cr
*CRWR 665  Screenwriting Genre.............................................................. 6 cr
CRWR 651  Advanced Studies in Forms and Genres................................. 6 cr
CRWR 653  Poetry Book Reviewing/Poetry, Literacy, Pedagogy................ 6 cr
CRWR 694  Capstone................................................................................. 3 cr

Poetry as a Second Area of Emphasis
Students pursuing this concentration as a second area of emphasis must earn
30 credits within the concentration as follows:

CRWR 600  Summer Orientation............................................................... 1 cr
CRWR 636  Metrical Traditions and Versification I................................. 6 cr
CRWR 646  Narrative Poetry, or CRWR 647 Dramatic Poetry/Verse Satire.... 6 cr
CRWR 694  Capstone................................................................................. 3 cr

Supporting courses in consultation with advisor........................................ 12 cr

One of the following:

CRWR 631  Scansion Immersion............................................................... 2 cr
CRWR 632  Public Performance................................................................. 2 cr
CRWR 633  Poetry and Music................................................................. 2 cr

Students may count CRWR 646 if taken already to fulfill the out-of-concentration course required by the primary area of emphasis.

Screenwriting for Feature Film and Television
The concentration in Screenwriting for Feature Film and Television includes instruction in the history and analysis of classical and contemporary screenwriting texts and the resulting films. The program further includes instruction in writing the visual narrative, three- and four-act structure, character development, thematic development, conflict, genre, story arc, and dialogue. The program emphasizes not only the feature-length screenplay but also television writing as well as screenwriting contests, festivals, and opportunities for marketing the M.F.A. students' work. A Master's Thesis Project in the form of a 100-page feature-length screenplay must be completed as a part of the degree requirements.

The Screenwriting Concentration requires the following 60 credits:

CRWR 600  Summer Orientation............................................................... 1 cr
CRWR 661  Film History and Analysis; the Visual Narrative.................... 2 cr
CRWR 662  Story, Conflict, Character, and Genre in Screenwriting.......... 2 cr
CRWR 663  Screenwriting Competition, Representation, the “Option”........ 2 cr
CRWR 665  Screenwriting Genre.............................................................. 6 cr
CRWR 668  Television Drama and Situation Comedy................................... 6 cr
Master of Fine Arts in Creative Writing

CRWR 671 Writing the First Feature-Length Screenplay ........................................ 6 cr
CRWR 675 Writing the TV Pilot ............................................................................... 6 cr
CRWR 678 Adaptation ............................................................................................ 6 cr

In the second fall term, choose one of the following two:

*CRWR 608 Craft and Practice I ........................................................................... 6 cr
*CRWR 646 Narrative Poetry .................................................................................. 6 cr
CRWR 690 Screenwriting Master’s Capstone Project I ........................................ 6 cr
CRWR 691 Screenwriting Master’s Capstone Project II ........................................ 6 cr
CRWR 694 Capstone ............................................................................................... 3 cr

Screenwriting as a Second Area of Emphasis

Students pursuing this concentration as a second area of emphasis must earn
30 credits within the concentration as follows:

CRWR 600 Summer Orientation ................................................................................ 1 cr
CRWR 661 Film History and Analysis; the Visual Narrative.................................... 2 cr
CRWR 662 Story, Conflict, Character, and Genre in Screenwriting ....................... 2 cr
CRWR 663 Screenwriting Competition, Representation, the “Option” ................. 2 cr
CRWR 665 Screenwriting Genre ............................................................................. 6 cr
CRWR 668 Television Drama and Situation Comedy ............................................ 6 cr
CRWR 694 Capstone ............................................................................................... 3 cr
Supporting courses in consultation with advisor ................................................... 12 cr

One of the following:

CRWR 661 Film History and Analysis; the Visual Narrative.................................... 2 cr
CRWR 662 Story, Conflict, Character, and Genre in Screenwriting ....................... 2 cr
CRWR 663 Screenwriting Competition, Representation, the “Option” ................. 2 cr

Students may count CRWR 665 if taken already to fulfill the out-of-concentration course required by the primary area of emphasis.

Creative Writing Courses

CRWR 600 Summer Orientation .............................................................................. 1 credit
Focus on learning mastery of online tools, attending faculty and student readings, and
meeting with non-residency mentors during first summer; focus on attending
presentations and participating in workshop sessions during second summer; and focus
on presenting student thesis as well as attending and participating in other readings
during third summer. Must be repeated three times for credit. Prerequisite: Admission
to the program.

CRWR 601 Patterns and Paradigms for Popular Genre Writing ............................. 2 credits
Focus on student exploration of texts that set patterns for various forms of genre
writing, and use those patterns as the basis for their own writing. Reading includes
contemporary texts, folktales and myths that establish the archetypal basis for narrative
patterns in plot, setting and character development. Also lays the groundwork for
students to articulate and work efficiently within their own writing process, and for
students to establish effective writing practices for long-term use. Prerequisite: Admission
to the program.

CRWR 602 Fiction Workshop and Translation ....................................................... 2 credits
Focus on workshopping student’s writing projects, with a focus on developing material
for the thesis. Prerequisite: Admission to the program.
CRWR 604  Pre- and Post-Publication Promotion  2 credits
Focus on the practical aspects of dealing with current market demands for writers, with a focus on self-promotion both before and after publication. Work includes public reading of theses, pitches, and interviews; discussion and practice in using the internet and social networking media for promoting writing; and an exploration of opportunities available from writers grants and fellowships. Session also includes a ‘mentoring’ component, where graduating students hold mentoring sessions with new students. Prerequisite: Admission to the program.

CRWR 608  Craft and Practice I  6 credits
Focus on skill-building in fundamental areas of narrative fiction. Students develop skills of observation and reflection in order to access material for their writing; strengthen research skills for their areas of interest; articulate their writing process and explore ways to make it more efficient and effective; practice craft-building exercises in a variety of areas. Participants encouraged to use class material as the basis for their future thesis work. Prerequisite: Admission to the program.

CRWR 609  Genres I - Speculative Fiction, Mystery, and YA  6 credits
Focus on providing students with experience writing in the speculative fiction genres, exploring the traditions and current trends in the market. Prerequisite: Admission to the program.

CRWR 612  Narrative Nonfiction  6 credits
Focus on introducing students to both long and short form of writing in narrative nonfiction, with writing practice in a variety of sub-categories. Students also build skills in utilizing nonfiction as it applies to their interest in fiction writing. Prerequisite: Admission to the program.

CRWR 618  Genres II - Women's Fiction, Romance, and The Western  6 credits
Focus on providing students with experience writing in the forms of the mystery, women's fiction, romance and the Western, exploring traditions and current trends in the market. Prerequisite: Admission to the Program.

CRWR 619  Craft and Practice II  6 credits
A continuation and refinement of the narrative skill-building begun in CRWR 608, Craft and Practice I. Students will be given exercises aimed at developing their thesis concepts into full-length works, examining the following: the structure of plot and subplot in their individual works, how to connect minor character motives to major character arcs, and inclusion of narrative elements and patterns to flesh out their current and future work. This will include practices designed to support the continuation of a literary life beyond the classroom environment, such as expansion of their ‘ideas’ file, moves to overcome potential blocks, finding your public stance as a writer, and more. Prerequisite: Admission to the program.

CRWR 621  Making Connections in the Market  6 credits
Focus on a guided exploration of taking work into the world of making connections with editors, agents, and other writers through attending writing conventions, joining on-line groups, and more, preparing students to make the most of these channels for publication. Prerequisite: Admission to the program.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRWR 622</td>
<td>Genre Thesis Preparation</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Focus on guiding students through the process of preparing and completing a working draft of the capstone thesis in a genre of the student’s choice. Completed working draft to be submitted to the assigned thesis advisor no later than the course’s end. Prerequisite: Admission to the program.</td>
<td></td>
</tr>
<tr>
<td>CRWR 631</td>
<td>Scansion Immersion</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Focus on an intensive review of prosody – how to make meter and rhythm work in the poetic line as well as how to discern that structure in the works of others. Prerequisite: Admission to the program.</td>
<td></td>
</tr>
<tr>
<td>CRWR 632</td>
<td>Public Performance</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Focus on the quintessence of public speaking, particularly as it applies to the performance of poetry, delivery of lectures, and participation in panels, understanding of the craft of using their voices and their physical presence to deliver creative, critical and pedagogical work orally to the public, and how to participate in conversations with the greatest possible skill and grace. Prerequisite: Admission to the program.</td>
<td></td>
</tr>
<tr>
<td>CRWR 633</td>
<td>Poetry and Music</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Focus on exploring some of the complex relations between these two arts, from theoretical discussion to the practical aspects of writing everything from song lyrics to choral odes to opera libretti. Prerequisite: Admission to the program.</td>
<td></td>
</tr>
<tr>
<td>CRWR 636</td>
<td>Metrical Traditions &amp; Versification I</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Focus on tracing the development of the metrical tradition in English poetry from the beginning to the present. Students read poems in all the major forms (Anglo-Saxon Strong Stress Meter, the ballad, classical imitations, blank verse, the sonnet, iambic tetrameter, etc.) along with historical and theoretical commentary. Students also model such forms and scan their own work and that of others. Students will also trace the development of theories of versification and prosody in English. Students read a wide range of works, many of them by poets, in which they describe their craft and that of others, and they compare theories of and approaches to metrical poetry. In this course students are expected to produce a wide range of short essays on various traditions of versification, along with at least one substantial research paper. Prerequisite: Admission to the program.</td>
<td></td>
</tr>
<tr>
<td>CRWR 638</td>
<td>History of the English Language/Poetry Translation</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Focus on a two-pronged study, first of the historical development and evolution of English, and second, work to understand translating poetry, studying and comparing translations, reading theories of translation and attempting translations. Prerequisites: Proof of second-year, or its equivalent, of reading competency in a foreign language, and admission to the program.</td>
<td></td>
</tr>
<tr>
<td>CRWR 641</td>
<td>Metrical Traditions &amp; Versification II</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Focus on emphasizing advanced topics in metrical composition, e.g. stanza forms, longer forms and sequences, narrative forms, nonce forms (including free verse forms). Students not only practice the forms, but read and scan them along with delving into the history, criticism and theory. The course also selects several major traditions in verse theory and explores them in depth, e.g., linguistic theories of verse; structuralist theories; relations between verse and music; attempt to imitate classical forms in modern languages; etc. Prerequisite: Admission to the program.</td>
<td></td>
</tr>
</tbody>
</table>
CRWR 643  Historical Foundations of English Prosody  
6 credits
Focus on an exploration of the theory and practice of rhythm and rhyme, including all variations, their sources and their traditions in consideration of aesthetic, linguistic, and anthropological theories. Prerequisite: Admission to the program.

CRWR 646  Narrative Poetry  
6 credits
Focus on examination, analysis, study, and writing in the narrative genres and modes of poetry, from the ballad to the epic and novel in verse. Prerequisite: Admission to the program.

CRWR 647  Dramatic Poetry and Satiric Verse  
6 credits
Focus on examination, analysis, discussion, and writing in all the modes of comic verse, including all the modes of satire (Menippean, Horatian, parodic), to verse-based comic approaches such as light verse, doggerel, children’s verse, and more. Additionally, an exploration of dramatic techniques of verse from ancient Greece through the Renaissance, and to modern writers such as T. S. Eliot and up to the present. Prerequisite: Admission to the program.

CRWR 651  Advanced Studies in Forms and Genres  
6 credits
Focus on a study of significant forms, group of forms, or poetic genres, based on student and faculty mentor interest, with students reading a wide range of examples along with criticism and theory, and also composing their own work in these forms and genres. Topics include the following: The Sonnet and Sonnet Sequences, French and Italian Forms (ballade, villanelle, sestina, rondeau, terza rima, etc.), Classical Forms (Latin and Greek), The Ode, Blank Verse, Elegy and Pastoral , Non-European Forms (haiku, ghazal, tanka, Welsh forms, etc.), Free Verse Forms (Whitmanian versicles, syllabics, loose iambics, nonce forms, etc.). Prerequisite: Admission to the program.

CRWR 661  Film History and Analysis; the Visual Narrative  
2 credits
Focus on examination, analysis, and discussion of classic and contemporary films from a screenwriting, story, and character development perspective as well as analyses of theme and motif. Students engage in writing activities and exercises to develop a visual narrative style. All such writing goes towards creating material to fuel the mentoring process in upcoming semesters. The main theme here is: when possible show the story element; don’t have a character say it. Finally the prevailing three- and four-act screenplay structures will be explored. Prerequisite: Admission to the program.

CRWR 662  Story, Conflict, Character, and Genre in Screenwriting  
2 credits
Focus on workshop of short screenplays and projects along with exploration of story arc, elements of conflict, character development and arc, with an emphasis on film genre choices and styles. Includes proposals for upcoming mentoring semesters feature-length screenplays, plus an opportunity to practice pitches. Prerequisite: Admission to the program.

CRWR 663  Screenwriting Competition, Representation, the “Option”  
2 credits
Focus on mock or actual “pitch” sessions of the thesis screenplay. Screenwriting
contests researched and entered. Writers Guild guidelines and application explored.
Agents, options to produce, and independent film potential also explored. Prerequisite:
Admission to the program.

**CRWR 665 Screenwriting Genre** 6 credits
Focus on challenging students to write filmic stories in three distinct genre categories,
forcing a growth and flexibility to create meaning across a spectrum of setting, time, and
circumstance. Dialogue is permitted but is de-emphasized in favor of a more visual
narrative. Prerequisite: Admission to the program.

**CRWR 668 Television Drama and Situation Comedy** 6 credits
Focus on a thorough proposal for both the drama and sitcom, researched and written.
The result will be a complete “pitch” portfolio including a “spec” episode teleplay
completed for (both or either) a television drama (and/or) a situation comedy. Prerequisite: Admission to the program.

**CRWR 671 Writing the First Feature-Length Screenplay** 6 credits
Focus on a thorough review of the existing works in the style and genre of the proposed
piece, and a thorough treatment is written. Students generate character biographies and a
complete story outline. The production is “pitched” to fellow students along with the
mentor. A first draft is written and critiqued. Prerequisite: Admission to the program.

**CRWR 675 Writing the TV Pilot** 6 credits
Focus on choosing and writing an original TV pilot for either a 1-hour drama series, or a
half-hour sitcom. In addition to the pilot script, this course requires the students to pitch
the idea, come up with marketing materials – i.e. treatment for the series, outline of the
pilot, a series “bible,” and loglines for at least 4-5 future episodes. Prerequisite:
Admission to the program.

**CRWR 678 Adaptation** 6 credits
Focus on taking preexisting source material (books, newspaper articles, videogames,
graphic novels etc.) and learning how to begin adapting such into a screenplay. Students
will examine various forms of adaptation, write a research paper, and write the first act
of their own feature adaptation piece. Prerequisite: Admission to the program.

**CRWR 684 Teaching Assistantship and Pedagogy** 1-3 credits
Focus on an opportunity to teach under a mentor-teacher in the classroom, including a
guided discussion on pedagogy theory and practice with weekly questions on points of
interest, suggested readings, and the opportunity for teaching writers to discuss
challenges and insights from their own teaching practice. May be repeated for up to 6
credits. Prerequisite: Admission to the Program.

**CRWR 690 Screenwriting Master's Capstone Project I** 6 credits
Focus on a feature-length screenplay, intended for Hollywood or independent
production, proposed including a thorough review of the existing works, treatment,
character biographies, and generation of a complete story outline. A first draft of
approximately 120 pages written and critiqued. Prerequisite: Admission to the program.

**CRWR 691 Screenwriting Master's Capstone Project II** 6 credits
Focus on completion of the screenplay. Several drafts written and developed with the
mentor. Following industry preferences, the screenplay should target approximately 100
pages. Prerequisite: Admission to the program.
CRWR 692  Independent Study  1-6 credits
Focus on working with a faculty mentor to research, develop, and structure a student’s particular areas of interest into a written work. May be repeated for up to 12 credits. Prerequisite: Admission to the program.

CRWR 694  Capstone  3 credits
Focus on working with a faculty mentor and responding to mentor readings and workshop suggestions in order to complete one long work suitable for thesis binding. For the Genres concentration, this shall be the final preparation of a work of fiction or narrative nonfiction suitable for seeking publication; or for the Poetry concentration, this shall be the final preparation to submit 35 pages of original poetry and a prose portfolio including at least one review of a poetry book and one historical essay, or else one review and one work of translation, totaling 10-15 pages, and an analytical project, for a total of 60 – 80 pages; or for the screenwriting concentration, this shall be the final preparation of a feature-length screenplay (the defined Master's Thesis Project) revised and polished, and readied for a public reading of an excerpt performed or else a self-produced sequence from, or trailer for, the screenplay. Prerequisite: Admission to the program.

CRWR 697  Special Topics  6 credits
Focus on studies of a particular topic of interest to students in the MFA program to be announced each time the course is offered. Prerequisite: Admission to the program.
Certificate in Publishing

Through our 13-month course of study, writers become savvy about the publishing industry.

The Certificate in Publishing program offers students the opportunity to learn about the publishing industry through hands-on experience. Students enrolled will produce, from start to finish, a volume of Manifest West, the literary anthology series of Western Press Books. Students have weekly editorial board meetings to review and discuss submissions, then make the final selections and copyedit and proofread the anthology. Throughout the program, students work with experts in the publishing industry to gain insight into this ever-evolving field.

During this process, students also learn how to critically edit their own writing, and they regularly workshop writing from peers to prepare it for submission to magazines and presses. Graduates of the Certificate in Publishing Program are prepared to enter the publishing field as agents, editors, or start their own small presses.

FACULTY

Certificate Program Director Larry Meredith;
Certificate Faculty Russel Davis and Sonva Unrein

The Program
Come to Western’s campus in Gunnison, high in the Colorado Rockies, for two weeks during two consecutive summers in late July. Study the publishing industry, workshop your writing, and learn how to present work to editors and agents. Participate during the fall and spring terms in an online editorial board to plan and prepare a book for publication through Western’s press. Learn about publishing house operations, including acquisitions, editorial, design, marketing and sales, as well as record-keeping and fulfillment.

Admission Requirements
The applicant wishing to enroll in the Certificate of Publishing Program must complete the following:

• An application for admission to certificate study.
• A $50 non-refundable processing fee.
• An 800 to 1,000 word personal statement describing writing experience and interest in publishing.
• A writing sample of 15-20 pages prose (double-spaced); or 5-7 poems; or a combination of 2-3 poems and 7-10 pages of prose.
• An official transcript of a baccalaureate degree, with a recommended minimum 3.0 GPA for writing-related courses. The baccalaureate-granting institution must send the transcript directly to the Western State Colorado University Office of Extended Studies Graduate Office.

Send personal statement, writing sample and transcript to:
Certificate in Publishing
Western State Colorado University
Extended Studies Graduate Office
600 N. Adams
Taylor Hall 303
Gunnison, CO 81231
FAX: (970) 943-7068
Program Costs
Tuition costs $350 per credit, or a total of $6,300.00 for the entire 13-month program. Additional costs include class texts as well as two-week summer residency expenses such as transportation to and from Gunnison, on-site accommodations, and meals.

Program Requirements
The Certificate in Publishing is a set of courses totaling 18 credits designed to demystify the practices and expectations of the publishing industry, and to give participating students the chance to engage in the process of creating a book for publication as a part of the institution’s Western Press Books. Students take four 3-credit practicum courses over 13 months, including two residential summer intensive terms and two non-resident academic terms. In addition, students take six 1-credit courses online to learn theoretical concepts; the content of these six credits is closely correlated to practicum courses. Students may also take an elective internship as part of the certificate programming.

The Certificate in Publishing requires a minimum of 18 credits.

Students take the following courses in the indicated sequence:

First Summer Residency:
- CRWR 520  Summer Intensive I ................................................................. 3 cr

Fall Non-Residency:
- CRWR 521  Editorial Practicum I ................................................................. 3 cr
- CRWR 522  Editorial Skills ................................................................. 1 cr
- CRWR 523  Acquisitions ................................................................. 1 cr
- CRWR 524  Business Models for Press Houses ..................................... 1 cr

Spring Non-Residency:
- CRWR 525  Editorial Practicum II .............................................................. 3 cr
- CRWR 526  Design and Layout ............................................................ 1 cr
- CRWR 527  Marketing and Sales ............................................................. 1 cr
- CRWR 528  Back Office and Fulfillment ............................................... 1 cr

Second Summer Residency:
- CRWR 530  Summer Intensive II .............................................................. 3 cr

The Curriculum
The course of studies includes summer face-to-face classes, a series of integrated self-paced modules, and synchronous discussions in an online environment. See the list of specific courses here:

CRWR 520  Summer Intensive I 3 credits
Focuses on writing workshops that teach students how to research, edit, and hone their work, and submit it for publication. Familiarizes students with aesthetics of different literary magazines, and the aesthetic of the book the course prepares for production. Teaches introductory skills and orientation for online work for the subsequent year of study. Graded Satisfactory/Unsatisfactory only. Prerequisite: Acceptance into the publishing program.
CRWR 521  Editorial Practicum I  3 credits
Involves students in an acquisitions editorial staff that reads and evaluates submissions for publication in the book project for the year. Students review submissions ahead of time and e-mail comments to acquisitions editor on whether work should be considered by entire board, then participate in online discussions every other week. Students also meet online three times to discuss materials from learning modules, and how that information relates to book project and their duties as editors and publishers. Graded Satisfactory/Unsatisfactory only. Prerequisite: CRWR 520. Co-requisites: CRWR 522, CRWR 523, CRWR 524.

CRWR 522  Editorial Skills  1 credit
Focuses on these topics: identifying potential authors and conducting author outreach; market analysis; working with agents and book packagers; negotiating the author contract; and working in editorial review groups – who participates and why. Graded Satisfactory/Unsatisfactory only. Prerequisite: CRWR 520. Co-requisites: CRWR 521, CRWR 523, CRWR 524.

CRWR 523  Acquisitions  1 credit
Teaches these topics: what an editor does (and does not do); what "house style" is and how books conform; steps from developmental edit to copyedit to proofread; and appropriate interaction with authors. Graded Satisfactory/Unsatisfactory only. Prerequisite: CRWR 520. Co-requisites: CRWR 521, CRWR 522, CRWR 524.

CRWR 524  Business Models for Press Houses  1 credit
Familiarizes students with traditional publishing house models such as nonprofit, for-profit, academic press, and trade press, as well as the emerging online electronic delivery models of publishing. Graded Satisfactory/Unsatisfactory only. Prerequisite: CRWR 520. Co-requisites: CRWR 521, CRWR 522, CRWR 523.

CRWR 525  Editorial Practicum II  3 credits
Involves students in an acquisitions editorial staff that will select, proof, and ready submissions for publication of the book project for the year. Students participate in online discussions every week, meeting as an editorial board to select submissions for publication in the book project. Students finalize selections, proof work, and ready book for publication. The class also meets online three times to discuss materials from learning modules, and how that information relates to book project and their duties as editors and publishers. Graded Satisfactory/Unsatisfactory only. Prerequisite: CRWR 521. Co-requisites: CRWR 526, CRWR 527, CRWR 528.

CRWR 526  Design and Layout  1 credit
Provides students with an understanding of such design and layout consideration as typography, use of graphics, cover design, interior book layout, creation of an index, interaction with printers, as well as alternative considerations for electronic and e-reader delivery. Graded Satisfactory/Unsatisfactory only. Prerequisite: CRWR 521. Co-requisites: CRWR 525, CRWR 527, CRWR 528.

CRWR 527  Marketing and Sales  1 credit
Familiarizes student with the topics of 1) the role of the author in marketing and selling a book; 2) the marketing done prior to book publication and what happens after release; 3) effective public relations; 4) sales model-direct, bookstores/retail, hybrid distribution; and electronic promotion, marketing, and delivery; 5) selling books in-house by team, by distribution, and by commissioned reps; 6) tracking and evaluating sales. Graded
Satisfactory/Unsatisfactory only. Prerequisite: CRWR 521. Co-requisites: CRWR 525, CRWR 526, CRWR 528.

**CRWR 528 Back Office and Fulfillment** 1 credit
Covers accounting and inventory issues, customer service, warehousing and shipping of physical book inventory, as well as electronic delivery systems. Graded Satisfactory/Unsatisfactory only. Prerequisite: CRWR 521. Co-requisites: CRWR 525, CRWR 526, CRWR 527.

**CRWR 530 Summer Intensive II** 3 credits
Focuses on final preparation of the product as well as formulating and launching a marketing plan for distribution. Graded Satisfactory/Unsatisfactory only. Prerequisite: CRWR 525.

**CRWR 597 Special Topics** 1-3 credits
Studies of a particular topic of interest to students of the Publishing Certificate program to be announced each time the course is offered. Graded Satisfactory/Unsatisfactory only. Prerequisite: instructor permission.

**CRWR 599 Internship in Publishing** 1-6 credits
Provides an opportunity to work as an intern for a publishing house or press outside the university. Graded Satisfactory/Unsatisfactory only. Prerequisite: instructor permission.
PERSONNEL (As of August 1, 2013)

Faculty

Kevin D. Alexander (2000) Professor of Biology. B.A., University of Texas at Austin; Ph.D., University of North Texas.


Robin A. Bingham (1997) Professor of Biology. B.A., University of Vermont; M.A., Ph.D., University of Colorado.


Christina Buchanan (2004) Assistant Professor of Exercise and Sport Science. B.A., Mount Holyoke College; M.S., Ph.D., Colorado State University.


Scott I. Cohn (2007) Assistant Professor of Psychology. B.S., Lafayette College; M.A., Ph.D., American University.

James C. Coogan (2002) Rady Chair in Petroleum Geology. B.S., College of William and Mary; Ph.D., University of Wyoming.

Susan J. Coykendall (1997) Professor of Psychology. B.A., Kalamazoo College; M.A., Ph.D., Ohio State University.

Daniel M. Cress (2001) Professor of Sociology. B.S., Augsburg College; M.A., Ph.D., University of Arizona.

Philip L. Crossley (2000) Professor of Geography. B.A., Trinity Western University; M.A., Ph.D., University of Texas at Austin.

Lance Dalleck (2013) Assistant Professor Exercise and Sport Science. B.A., Western State College of Colorado; M.S., Colorado State University; Ph.D., University of New Mexico-Albuquerque.

Cynthia L. Drexel (1982) Professor of Business Administration; Faculty Athletic Representative. B.A., M.A., Western State College of Colorado; Ph.D., Brigham Young University.

Michaëla C. Driver (2008) Professor of Business Administration. B.S., M.A., Ph.D., University of Alabama.

Jeffrey Dykes (2013) Assistant Professor of Business Administration; Assistant Director of Professional Resource & Land Management. B.A., Western State Colorado University; J.D., University of Denver.

Robert P. Fillmore (1997) Professor of Geology. B.A., Western State College of Colorado; M.S., Northern Arizona University; Ph.D., University of Kansas.

Kimberly J. Fix (2009) Assistant Professor of Mathematics. B.A., Winona State University; Ph.D., University of Iowa.

Peter H. Gauss (1990) Professor of Biology. B.S., St. Joseph’s University; Ph.D., Johns Hopkins University.

Mark A. Gibson (2000) Professor of Recreation and Outdoor Education. B.A., Eastern Washington University; M.S., Colorado State University; Ed.D., University of Northern Colorado.

Christopher W. Greene (2010) Assistant Professor of Business Administration. B.S., University of Wyoming; J.D., University of Colorado School of Law.

Greg P. Haase (1988) Professor of Sociology; Chair, Department of Behavioral and Social Sciences. B.A., M.A., Louisiana State University; Ph.D., Colorado State University.


John C. Hausdoerffer (2005) Professor of Environmental Studies and Philosophy; Director, Environmental Studies Program. B.A., Western State College of Colorado; M.A., St. John’s College; Ph.D., Washington State University.

Greg Haynes (2013) Assistant Professor of Music. B.A., M.M., University of Georgia; Ph.D., University of Kansas.


Shan M. Hays (2005) Assistant Professor of Biology. B.A., University of Colorado; Ph.D., University of Oregon.


Gaye Jenkins (2012) Associate Professor of Teacher Education. B.Ed., University of Sussex, England; M.Ed., Lesley University; Ed.D., California Coast University.

Christine Jespersen (1998) Professor of English. B.A., University of Colorado; M.A., Ph.D., Rutgers University.

Andrew G. Keck (1997) Professor of Mathematics and Computer Information Science. Chair, Department of Mathematics and Computer Information Science. B.A., DePauw University; M.Phil., University of Utah; Ph.D., University of Montana.

Heidi L. Keck (1997) Professor of Mathematics. B.S., Bemidji State University; M.S., University of Utah; Ph.D., University of Montana.

Kathleen M. Kinkema (1998) Professor of Exercise and Sport Science; Chair, Department of Recreation and Exercise and Sport Science. B.A., Grand Valley State University; M.S., Ph.D., University of North Carolina—Greensboro.


John F. Lucido (2007) Associate Professor of Communication; B.A. Humboldt State University; M.F.A., University of North Carolina–Greensboro.

Alina M. Luna (2005) Professor of English; Chair, Department of Communication Arts, Languages, and Literature. B.A., Russell Sage College; Ph.D., State University of New York at Albany.

Patrick A.M. Magee (1996) Thornton Chair in Biology. B.S. Colorado State University; M.S., Ph.D., University of Missouri.

David W. Marchetti (2007) Associate Professor of Geology. B.A., State University of New York; M.S., Ph.D., University of Utah.

John D. Mason (2011) Assistant Professor of Physics. B.A., Colby College; M.S., PhD., University of California–Santa Cruz.

Verónica Méndez-Maqueo (2006) Associate Professor of Spanish. B.A., Universidad Nacional Autonoma de Mexico; M.A., Universitat Autonoma de Barcelona; Ph.D., Universidad Nacional Autonoma de Mexico.

Anthony Miccoli (2006) Assistant Professor of Communication and Philosophy. B.A., Pace University; Ph.D., State University of New York at Albany.

M. Brooke Moran (2003) Professor of Recreation and Outdoor Education. B.S., University of New Hampshire; M.A., Harvard University; Ph.D., University of New Hampshire.

Jason E. Mullins (2006) Associate Professor of Chemistry. B.S. Clemson University; Ph.D., University of Montana.


Jeremy Muskat (2009) Associate Professor of Mathematics. B.A., Western State College of Colorado; M.A., University of Vermont; Ph.D., Colorado State University. Kevin A. Nelson (1999) Professor of Business Administration; Chair, Department of Business, Accounting and Economics. B.A., Brigham Young University; M.A., Ph.D., Michigan State University.

Monica D. Newman (1990) Professor of Accounting; Department of Business, Accounting and Economics. B.A., Western Washington University; M.T., Baylor University; Ph.D., University of Texas at Austin; C.P.A.

Scott G. Newman (1989) Professor of Accounting. B.A., DePauw University; M.B.A., Indiana University; Ph.D., University of Texas at Austin; C.P.A.

William L. Niemi (1997) Professor of Politics and Government; Associate Vice President for Academic Affairs. B.A., University of California–Santa Cruz; M.A., University of California–Santa Barbara; Ph.D., University of California–Los Angeles.

Heather S. Orr (1997) Professor of Art; Chair, Department of Art. B.A., M.A., University of Victoria; Ph.D., University of Texas at Austin.

Dale L. Orth (2001) Professor of Chemistry; Chair, Department of Natural and Environmental Studies. B.A., The Colorado College; Ph.D., University of Wisconsin–Madison.

Cassandra L. Osborne (2007) Associate Professor of Biology. B.S., Allegheny College; Ph.D., Dartmouth College.
Ashwin J. Patel (2006) Associate Professor of Exercise and Sport Science. B.A., University of Guelph; M.S., University of Tennessee; Ph.D., University of Tennessee–Knoxville.

John C. Peterson (2005) Professor of Computer Information Science. B.S., University of Denver; M.S., University of Colorado; Ph.D., University of Utah.

David J. Plante (1999) Professor of Economics. B.A., Boston University; Ph.D., University of Utah.

Heather D. Roberson (2008) Associate Professor of Music. B.M., Illinois Wesleyan University; M.A., University of Iowa; D.M.A., University of Kansas.

Anne W. Ryter (1996) Professor of Chemistry. B.S., Beloit College; Ph.D., University of Colorado.


Daniel L. Schuster (1988) Professor of Computer Information Science and Mathematics. B.A., University of Colorado; B.S., M.S., Eastern Washington University; Ph.D., University of Texas at Austin.


Jeffrey Sellen (2010) Assistant Professor of Environmental Studies; Director of the Colorado Water Workshop. B.A., Wartburg College; M.A., University of Nebraska–Omaha; Ph.D., Washington State University.

Scott Sells (2013) Assistant Professor of Business Administration; Moncrief Chair & Director of Professional Land Resource Management. B.S., University of Rhode Island; M.B.A., J.D., University of Denver.


Mark Stiger (1989) Moncrief Chair in Anthropology; Professor of Anthropology. B.A., M.A., University of Colorado; Ph.D., University of New Mexico.

Allen L. Stork (1985) Professor of Geology; Chair, Department of Natural and Environmental Sciences. B.A., Pomona College; Ph.D., University of California–Santa Cruz.

Maria Boikova Struble (2008) Assistant Professor of Politics and Government. B.A., Louisiana State University; M.A., Arizona State University.

Suzanne Taylor (2013) Assistant Professor of Physics. B.S., Linfield College; M.S., Ph.D., University of New Mexico-Albuquerque.

Heather Thiessen-Reily (1996) Professor of History; Director, Honors Program. B.A., University of Saskatchewan; M.A., Flinders University of South Australia; Ph.D., Tulane University.


Duane L. Vandenbusche (1962) Professor of History. B.S., Northern Michigan University; M.A., Ed.D., Oklahoma State University.

John M. Wacker (2005) Professor of Music; Chair, Department of Music. B.M.Ed., University of Northern Colorado; J.D., University of Wyoming; M.M., Indiana University of Pennsylvania; D.M.A., University of North Texas.

R. Greg Waggoner (1985) Associate Professor of Exercise and Sport Science; Director of Intercollegiate Athletics. B.A., M.A., Western State College of Colorado; Ed.D., University of Northern Colorado.


Timothy F. Wawrzyniec (2010) Moncrief Chair in Petroleum Geology; Assistant Professor of Geology, B.S., University of New Mexico; M.S., University of Minnesota–Twin Cities; Ph.D., University of New Mexico.

James M. Woytek (2011) Assistant Professor of Teacher Education. B.A., Mesa State College; M.A., Villanova University.

NOTE: Dates indicate first year of employment at Western State Colorado University.
Administration


Noor Al-Hemyari (2011) Senior Systems Administrator. B.S., Baghdad University, Baghdad, Iraq.

Jaskaran S. Bains (2010) Head Football Coach. B.S., California State University–Fresno; M.S., Chadron State College.


Jeremy Clevenger (2012) Head Women’s Soccer Coach. B.S., San Francisco State University; M.S., University of Central Missouri.


Thomas A. Fleming (2012) Interim Assistant Volleyball Coach. B.A., Western State College of Colorado; M.A., Ashford University; M.S., Chadron State University.


Scott Little (2012) Technical Director of Theater. B.S., University of Wyoming; M.F.A., University of South Dakota.

Yuriy Litvinski (2010) Interim Assistant Track Coach; Assistant Escalante Fitness Center Program Coordinator. B.A., University of Northern Iowa; M.S., University of Central Missouri.

Chris Luekenga (2010) Interim Associate Vice President of Student Affairs. B.A., Anderson College; M.A., Trinity Theological Seminary.


Desolee Pennartz (2008) Interim Executive Assistant to the Vice President for Finance and Administration.


Bradley Smith (2012) Head Women’s Swimming and Diving Coach. B.S., University of Vermont.


Maria-Claudia Tomaný (2013) Associate Vice President for Academic Affairs; Professor of English. B.A., University of Bergen, Norway; M.A., Ph.D., University of Munich, Germany


Jessica Vogan (2012) MountaineerCard/Special Programs Administrator. B.A., Western State Colorado University; B.S., University of Arizona-Tucson; M.S., Walden University.

R. Greg Waggoner (1985) Director of Intercollegiate Athletics; Associate Professor of Exercise and Sport Science. B.A., M.A., Western State College of Colorado; Ed.D., University of Northern Colorado.


Emeritus Faculty and Staff


Eugene P. Anderson (1961-1987) Professor of Physical Education. B.A., Yankton College; Ed.M., University of South Dakota.

Nella B. Anderson (1998-2013) Professor of Teacher Education. B.S., Texas Tech University; M.Ed., University of Texas at Austin; Ph.D., University of Houston.

Martyn L. Apley (1978-1998) Professor of Zoology. B.S., Kansas State University; M.S., Ph.D., Syracuse University.


Bruce L. Bartleson (1965-1998) Professor of Geology. B.S., Beloit College; M.S., University of Illinois; Ph.D., University of Colorado.

Edward Bartsch (1965-1996) Professor of Psychology. A.A., Reedley College; B.A., Fresno State College; M.A., Ph.D., Claremont Graduate School & University Center.


Owen E. Blacklock (1968-1999) Assistant Professor of Psychology. B.A., University of Arkansas; M.A., University of Denver.

Kenneth W. Blair (1986-2005) Professor of Business Administration. B.S., M.S., Colorado State University; Ph.D., Arizona State University.

Bernard R. Bouchard (1968-1987) Professor of Education. B.S., United States Merchant Marine Academy; B.S., University of Bridgeport; M.S., Ph.D., University of Utah.

Max E. Bramble (1969-1988) Professor of History. B.A., University of Colorado; M.A., Western State College of Colorado; Ph.D., Michigan State University.


Lorena A. Casebier (1950-1976) Director of Reading Skills Clinic; Associate Professor of Education. B.S., Wisconsin State University-La Crosse; M.A., University of Minnesota.


Roger A. Drake (1969-2013) Professor of Psychology. B.A., Western Washington University; M.A., University of Iowa; Ph.D., University of Tennessee.

Steven J. Dunn (1988-2003) Professor of Political Science & General Education. B.A., San Francisco State University; B.S.E., University of Arkansas; M.A., M.P.A., Ph.D., Northern Arizona University.


Elmer G. Garcia (1970-1997) Professor of Spanish. B.S., M.A., Northern Arizona University; Ph.D., University of Colorado.


Olive R. Gifford (1964-1979) Circulation and Reserve Librarian; Assistant Professor of Library Science. B.M., Youngstown University; B.S., Kent State University; M.A., University of Denver.

Curtis J. Gravis (1983-2007) Professor of Biology. B.S., Utah State University; Ph.D., Tulane University.

F. James Hahn (1969-2008) Professor of Business Administration. B.S., University of Colorado; J.D., University of Wisconsin, School of Law.

Sherryl Hall-Peterson (1985-2009) Vice President for Student Affairs and Dean of Students. B.A., Oklahoma City University; M.A., Western State College of Colorado.

Virginia L. Harris (1972-2000) Associate Professor of Kinesiology and Recreation. B.S., M.S., Winona State College.

E. Martin Hatcher (1949-1993) Professor of Communication Arts. A.B., M.A., Ph.D., University of Denver.

Frederick S. Haverly (1977-1998) Associate Professor of Business and Accounting. B.S., M.B.A., Syracuse University; M.S., State University Teachers College, New York; C.P.A.


Jeanne A. Hull (1976-1996) Professor of Education. B.S., Edgewood College; M.S., Indiana University; Ed.D., Ball State University.


Karen E. Jensen (1978-2004) Assistant Professor of Kinesiology. B.A., University of Northern Colorado; M.S., Indiana State University.

Lee Johnson (1968-2004) Professor of Art. B.F.A., Minneapolis School of Art; M.A., University of New Mexico; Skowhegan School of Painting & Sculpture.


Ralph I. Johnson (1970-1997) Professor of English. B.A., University of Illinois; M.S., Kansas State University; Ph.D., University of Denver.

Theodore C. Johnson (1957-2002) Professor of Communication. B.S., Northern Illinois University; M.A., Ph.D., State University of Iowa.

Kenneth J. Keiser (1969-1989) Associate Professor of Business. B.S., Colorado State University; B.S., Air Force Institute of Technology; M.S., University of Wyoming.


William King (1995-2012) Professor of English. B.S., Memphis State University, M.A., University of Washington; Ph.D., University of North Carolina.

Phil C. Klingsmith (1980-2001) Professor of Business Administration. B.A., University of Colorado; M.A., Western State College of Colorado; J.D., California Western School of Law.
Jerry J. Kowal (1974-2007) Professor of Art. B.S.Ed., Chicago State University; M.Ed., DePaul University; Ph.D., Ohio State University.


E. Keith Longpre (1965-1999) Professor of Botany. B.S., M.S., University of Michigan; Ph.D., Michigan State University.


T. Thomas McKelvie (1956-1987) Business Manager; Director of Auxiliary Services. B.S., University of Utah; M.A., Western State College of Colorado.


Charles L. Miller (1960-1990) Professor of English; Dean of General Education. B.J., M.A., University of Missouri; Ph.D., University of Iowa.


Terry L. Mullen (1982-2007) Professor of Biology. A.A., Skagit Valley College; B.A., M.S., Central Washington State University; Ph.D., Oregon State University.


Dale F. Nielsen (1968-2002) Associate Professor of Psychology. B.A., Pacific Lutheran University; M.S., University of Montana.

Arthur J. Norris (1966-1986) Professor of Business. B.S., Drexel University; M.S., New York University; Ph.D., University of Nebraska.

William E. Noxon (1972-1985) Professor of Physical Education; Head Football Coach. B.S., Colorado State University; M.A., University of Northern Colorado.

Fred R. Peck (1968-1988) Associate Professor of Sociology & Anthropology. B.A., University of New Mexico; M.A., University of Arizona.

Harry L. Peterson (1996-2002) President. B.A., San Diego State University; M.S.W., University of California-Berkeley; Post-Graduate Diploma, Harvard Medical School/Massachusetts General Hospital; Ph.D., University of Wisconsin-Madison.

F. G. Piquette (1961-1991) Vice President for Business Affairs; Assistant Professor of Business. B.A., M.A., Western State College of Colorado.

Thomas L. Prather (1965-1999) Professor of Geology. B.A., Carleton College; M.S., Ph.D., University of Colorado.


V. Pail Reid, Jr. (1970-1998) Professor of Education. B.S., M.S., Kansas State Teachers College; Ed.D., University of Wyoming.
Richard E. Richards (1965-1982) Professor of Biology. A.B., Colorado College; M.A., University of New Mexico; D.A., University of Northern Colorado.
John B. Sowell (1991-2012) Professor of Biology. B.S., University of California–Davis; Ph.D., University of Idaho.
Patricia A. Sterling (1974-2001) Professor of English. B.A., College of St. Catherine; M.A., Ohio State University; Ph.D., University of Colorado.
James M. Stewart (1988-2013) Professor of History. B.A., University of Northern Colorado; M.A., Ph.D., University of Colorado.
Frank A. Venturo (1974-2011) Professor of Communication. B.A., Western State College of Colorado; M.A., Ph.D., University of Colorado.
Martha W. Violett (1972-2010) Professor of Music; Chair, Department of Music. B.M.E., Illinois Wesleyan University; M.A., M.F.A., D.M.A., University of Iowa.
Terri L. Wenzlaff (1996-2012) Professor of Teacher Education. B.A., Dakota State University; M.A., Ed.D., University of South Dakota.
Elva Lea Wise (1959-1984) Professor of Business. B.S., Wichita State University; M.B.E., Ph.D., University of Colorado; C.P.S.
Jessica R. Young (1996-2012) Associate Professor of Biology. B.A., University of California-San Diego; Ph.D., Purdue University.
INDEX

A
Academic Advising · 20
Academic Alert · 31
Academic Amnesty · 32
Academic Calendar · 8
Academic Credit · 24
Academic Dean’s List · 31
Academic Dismissal · 32
Academic Due Process · 36
Academic Integrity · 35
Academic Leave of Absence · 28
Academic Load · 25
Academic Policies · 24
Academic Probation · 31
Academic Programs · 6, 42-226
Academic Resource Center · 20
Academic Standing · 30
Academic Suspension · 31
Accessibility for Individuals with Disabilities · i
Accounting Courses · 45
Accounting Faculty · 43
Accounting Major · 43
Accounting Minor · 44
Accreditation · 2
Add/Drop · 26
Admissions Policies · 9
Advising · 24
Affirmative Action · i
Anthropology Courses · 49
Anthropology Faculty · 48
Anthropology Major · 48
Anthropology Minor · 48
Application for and Awarding of the Degree · 35
Art Courses · 57
Art Education Licensure Emphasis · 52
Art Faculty · 51
Art History and Theory Emphasis · 53
Art Major · 52
Art Minor · 56
Assessment of Academic Programs and Services · 7
Athletic Programs · 22
Auditing Courses · 27
B
Bachelor of Fine Arts Degree in Art · 53
Biochemistry Emphasis · 88
Biology Courses · 68
Biology Faculty · 65
Biology Major · 66
Biology Minor · 68
Business Administration and ENVS
  Coordinated Double Major · 77, 133
Business Administration Courses · 81
Business Administration Faculty · 76
Business Administration Major · 77
Business Administration Minor · 80
Business Emphasis; Music · 187

C
Calendar, Academic · 8
Career-Related Services · 19
Catalog, Operative · 33
Cell Biology/Pre-Medicine Emphasis · 66
Cheating · 35
Chemistry Courses · 89
Chemistry Faculty · 87
Chemistry Major · 88
Chemistry Minor · 89
Class Attendance · 26
Classification, Student · 24
Clinical, Counseling, and School
  Psychology Emphasis · 211
Club Sports · 22
Co-curricular Programs · 18
Commencement · 35
Communication Emphasis · 94
Communication Arts
  Courses · 96
Communication Arts Faculty · 94
Communication Arts Major · 94
Communication Arts Minor · 96
Complaint Procedure, Informal · 35
Computer Information Science
  Courses · 103
Computer Information Science
  Faculty · 102
Computer Information Science
  Major · 102
Computer Information Science
  Minor · 103
Computing Services Available · 20
Course Numbering System · 24
Creative Writing Emphasis · 123
Criminal Justice Emphasis · 225

D
Daycare · 23
Dean’s List · 31
Deferral Policy, Admission · 11
Degree Programs · 6
Deposit, Housing · 14
Design, Art Graphic Design
  Emphasis, BFA · 56
Disability Services · 20

E
Economics Courses · 109
Economics Faculty · 108
Economics Major · 108
Economics Minor · 109
Education Courses · 118
Education Faculty · 113
Education Program · 113
Educational Services · 19
Elementary Licensure · 114
Emeritus Faculty · 280
English Courses · 125
English Faculty · 122
English Major · 122
English Minor · 123
Entrepreneurship Emphasis · 78
Environmental Biology and Ecology
  Emphasis · 67
Environmental Studies and Business
   Administration Coordinated Double Major · 77, 133
Environmental Studies Council · 131
Environmental Studies Courses · 134
Environmental Studies Faculty · 131
Environmental Studies Major · 131
Environmental Studies Minor · 133
Essential Skills Requirement · 38
Exercise & Sport Science Courses · 140
Exercise & Sport Science Emphasis · 137
Exercise & Sport Science Faculty · 131
Exercise & Sport Science Major · 131
Exercise & Sport Science Minor · 140
Exercise & Sport Science Minor, Sport Psychology Concentration · 140
Exercise Science Emphasis · 138
Experimental Psychology Emphasis · 211
Exploratory Program · 20
Extended Studies · 21

F
Fees, Mandatory · 14
Film Studies Emphasis · 95
Financial Analysis Emphasis · 44
Financial Assistance · 17
First Writing Course, Essential Skills Requirement · 38
Formal Grievance Procedure · 37
Foundation, Western State Colorado University · 4
Four Year Graduation Plan · 33
French Courses · 148
French Faculty · 148
French Minor · 148

G
General Biology Emphasis · 67
General Chemistry Emphasis · 88
General Education · 38
General Psychology Emphasis · 210
Geoarchaeology Emphasis · 153
Geography Courses · 150
Geography Faculty · 150
Geography Minor · 150
Geology Courses · 155
Geology Emphasis · 152
Geology Faculty · 152
Geology Major · 152
Geology Minor · 155
Governance · 2
Grade Point Average · 29
Grades · 29
Graduation Plan, Four-Year · 33
Graduation Requirement Audit · 34
Graduation Requirements · 33
Graduation with Honors · 34
Graphic Design Emphasis · 52
Grants · 17
Grievance Procedure · 37

H
Headwaters Conference · 18
Headwaters Courses · 160
Headwaters Regional Studies · 160
Health Center · 22
History Courses · 163
History Faculty · 161
History Major · 161
History Minor · 162
History of Western · 3
Honorary Organizations · 18
Honors Council · 168
Honors Courses · 168
Honors, Graduation with · 34
Honors Program · 167

I
Index · 284
Individualized Contract Emphasis, Environmental Studies · 133
Informal Complaint Procedure · 36
Institutional Mission · 2
Insurance, Student Injury · 15
Index

Intercollegiate Athletics · 22
Interdisciplinary Studies/Liberal Arts
   Major · 173
Interdisciplinary Studies/Liberal Arts
   Faculty · 173
Internships · 27
Intramural Program · 22

Music Faculty · 184
Music Major · 186
Music Minor · 188

National Student Exchange Program · 21
Newspaper, Student · 18

Ombudsperson · 22
Outdoor Environmental Education
   Emphasis · 217
Outdoor Leadership Emphasis · 218

Payment of Charges · 15
Peak Productions · 19
Petroleum Geology Emphasis · 154
Philosophy Courses · 197
Philosophy Faculty · 197
Philosophy Minor · 197
Physics Courses · 200
Physics Faculty · 200
Physics Minor · 200
Plagiarism · 34
Politics and Government Courses · 206
Politics and Government Faculty · 203
Politics and Government Major · 203
Politics and Government Minor · 206
Politics and Government Pre-Law
   Minor · 206
Pre-Allied Health Emphasis · 68
Pre-Law Emphasis · 204
Professional Emphasis; Accounting · 43
Professional Land and Resource
   Management Emphasis · 79
Program Council · 19
Psychology Courses · 212
Psychology Faculty · 210
Psychology Major · 210
Psychology Minor · 212

K
K-12 Art, Exercise and Sport Science
Music, and Spanish Licensure · 116
K-12 Licensure Emphasis in
   Art · 52
   Music · 187
   Physical Education · 139
   Spanish · 231

L
Latin American Business Emphasis · 79
LEAD Office · 18
Learning Skills Assistance · 20
Liberal Arts · 39
Library · 4
Living/Learning Communities · 19
Loan Programs · 17

M
Major and Minor Requirements · 34
Management Emphasis · 77
Marketing Emphasis · 78
Mathematics Course, Essential Skills
   Requirement · 38
Mathematics Courses · 179
Mathematics Faculty · 177
Mathematics Major · 177
Mathematics Minor · 178
Media · 19
Mediation (Ombudsperson) · 22
Mountain Rescue Team · 19
Multicultural Center · 19
Music Courses · 188
Music Education Emphasis, K-12 · 187

Media · 19
Mediation (Ombudsperson) · 22
Mountain Rescue Team · 19
Multicultural Center · 19
Music Courses · 188
Music Education Emphasis, K-12 · 187

LEAD Office · 18
Learning Skills Assistance · 20
Liberal Arts · 39
Library · 4
Living/Learning Communities · 19
Loan Programs · 17

Mathematics Course, Essential Skills
   Requirement · 38
Mathematics Courses · 179
Mathematics Faculty · 177
Mathematics Major · 177
Mathematics Minor · 178
Media · 19
Mediation (Ombudsperson) · 22
Mountain Rescue Team · 19
Multicultural Center · 19
Music Courses · 188
Music Education Emphasis, K-12 · 187

N
National Student Exchange Program · 21
Newspaper, Student · 18

O
Ombudsperson · 22
Outdoor Environmental Education
   Emphasis · 217
Outdoor Leadership Emphasis · 218

P
Payment of Charges · 15
Peak Productions · 19
Petroleum Geology Emphasis · 154
Philosophy Courses · 197
Philosophy Faculty · 197
Philosophy Minor · 197
Physics Courses · 200
Physics Faculty · 200
Physics Minor · 200
Plagiarism · 34
Politics and Government Courses · 206
Politics and Government Faculty · 203
Politics and Government Major · 203
Politics and Government Minor · 206
Politics and Government Pre-Law
   Minor · 206
Pre-Allied Health Emphasis · 68
Pre-Law Emphasis · 204
Professional Emphasis; Accounting · 43
Professional Land and Resource
   Management Emphasis · 79
Program Council · 19
Psychology Courses · 212
Psychology Faculty · 210
Psychology Major · 210
Psychology Minor · 212

Media · 19
Mediation (Ombudsperson) · 22
Mountain Rescue Team · 19
Multicultural Center · 19
Music Courses · 188
Music Education Emphasis, K-12 · 187

N
National Student Exchange Program · 21
Newspaper, Student · 18

O
Ombudsperson · 22
Outdoor Environmental Education
   Emphasis · 217
Outdoor Leadership Emphasis · 218

P
Payment of Charges · 15
Peak Productions · 19
Petroleum Geology Emphasis · 154
Philosophy Courses · 197
Philosophy Faculty · 197
Philosophy Minor · 197
Physics Courses · 200
Physics Faculty · 200
Physics Minor · 200
Plagiarism · 34
Politics and Government Courses · 206
Politics and Government Faculty · 203
Politics and Government Major · 203
Politics and Government Minor · 206
Politics and Government Pre-Law
   Minor · 206
Pre-Allied Health Emphasis · 68
Pre-Law Emphasis · 204
Professional Emphasis; Accounting · 43
Professional Land and Resource
   Management Emphasis · 79
Program Council · 19
Psychology Courses · 212
Psychology Faculty · 210
Psychology Major · 210
Psychology Minor · 212
R
Radio Station · 18
Recreation and Outdoor Education Courses · 219
Recreation and Outdoor Education Faculty · 216
Recreation and Outdoor Education Major · 217
Recreation and Outdoor Education Minor · 219
Recreational and Athletic Programs · 21
Refund of Charges · 16
Registration · 24
Repetition of Courses · 28
Residence Life Requirement · 15
Residency Classification · 16
Resident Credit Requirement · 32
Resort Management Emphasis · 80
Room and Board Costs · 14

S
Scholarships · 17
Science · 223
Science Courses · 223
Second Writing Course, Essential Skills Requirement · 37
Secondary and K-12 Licensure · 115
Secondary Licensure Emphasis in Biology · 68
Chemistry · 88
Earth-Space Science · 154
Economics · 108
English · 123
History · 161
Mathematics · 178
Politics and Government · 205
Sociology Courses · 226
Sociology Faculty · 224
Sociology Major · 225
Sociology Minor · 226
Spanish Faculty · 230
Spanish Courses · 231
Spanish Major · 230
Spanish Minor · 231
Sport and Fitness Management Emphasis · 138
Sport Psychology Concentration · 140
Sports Clubs · 21
Student Injury and Sickness Insurance · 15
Student Bill of Rights · 7
Student Classification · 23
Student Employment Programs · 17
Student Government Association · 19
Student Handbook · 22
Studio Art Emphasis · 51

T
Telecommunications Services Available · 20
Testing Services · 21
Theatre and Performance Studies Emphasis · 95
Three-Dimensional Art Ceramics Emphasis, BFA · 55
Three-Dimensional Art Jewelry Emphasis, BFA · 56
Three-Dimensional Art Sculpture Emphasis, BFA · 56
Transfer Credit · 11
Turning Point · 20
Tuition · 14
Two-Dimensional Art Painting Emphasis, BFA · 54
Two-Dimensional Art Photography Emphasis, BFA · 55
Two-Dimensional Art Printmaking Emphasis, BFA · 55

U
Non-degree Admission · 10
Unit of Credit · 23

V
Variable Credit Courses · 26
Index

W

Water Emphasis · 132
Western State Colorado University
  Foundation · 4
Westerners in Transition (WIT) · 22
Wilderness Pursuits · 22
Wildlife Biology Concentration · 67
Withdrawal from Courses · 27
Withdrawal from University · 27