

An Education of Value... In a Place of Discovery

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 College of Colorado. The information presented is based on commonly accepted practices at Western State College of Colorado, but the College 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 College of Colorado
Gunnison, CO 81231
(970) 943-2119
1-800-876-5309

Main Switchboard (970) 943-7000 www.western.edu • discover@western.edu

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WESTERN STATE COLLEGE AT A GLANCE...

Location: Gunnison, Colorado (population 5,500; County population 15,000)

Established: As a State Normal School in 1901, doors opened in 1911.

Type: State-supported, coeducational.

Mission: General baccalaureate institution with moderately selective admission standards. The College offers academic programs in the traditional arts and sciences, teacher education, and professional programs.

Enrollment: Approximately 2,300 students represent most of the fifty states and several foreign countries. 96% of the students come from outside the Gunnison area. 9% are ethnic minorities and 41% are women (fall 2004 statistics).

Housing: College-owned and operated residence halls and apartments accommodate 1,173 students.

Campus: 130 developed acres, 251 adjoining undeveloped acres, 1,100 acres on W-Mountain, and 40 buildings.

Faculty: Of the 116 full-time and part-time faculty (headcount), 83% are full-time and 70% the highest degree in their field (preliminary 2005-06 statistics).

Calendar: 2 semesters and a 10-week summer session.

Accreditation: Higher Learning Commission of the North Central Association National Association of Schools of Music Teacher Education Accreditation Council

Degrees: B.A. and B.F.A.

Library: Collection totals: 442,045 volumes; 390 serial titles; 1,283,238 microform units; 3,400 films on video and DVD. Library is open 89 hours per week.

Placement: Career planning and job placement services are provided by the Student Services Center.

Athletics: Intercollegiate: NCAA Division II, Rocky Mountain Athletic Conference. Recreational: Club Sports, and Intramurals.

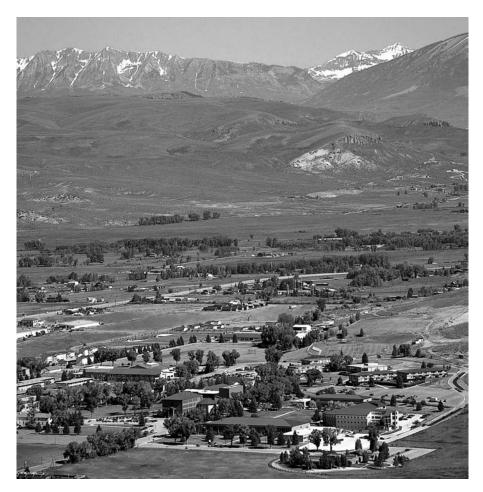
Annual Cost: Undergraduate tuition, fees, books, on-campus room and board: Resident students - approximately \$10,581

Non-resident students - approximately \$19,197

Financial

Assistance: Scholarships (\$100 - \$4,000), grants, loans, and student employment are available.

To contact us: Visit our Web Site: http://www.western.edu
Or call toll-free: 1-800-876-5309



Western State College of Colorado is an affirmative action, equal opportunity institution and employer. We encourage applications for admission or employment and participation in other College programs and activities by all individuals.

The College 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, Learning Assistance Center, Western State College of Colorado, Gunnison, CO 81231, (970) 943-7056.

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PRESIDENT'S MESSAGE

To our students:

I am pleased to have this opportunity to address all Western State College of Colorado students and those who are considering enrolling at our college. Western is a proud institution with a history of service dating back more than a century. All of us are delighted to welcome you to another academic year and wish you success. The College's faculty and staff will make every effort to help you be successful and will encourage you to achieve at your highest level. The information in this catalog will help in that effort.

This publication describes the College's courses and academic degree programs and, in addition, spells out the requirements that you must complete to earn your college degree. It is important that you understand these requirements.

Our students represent every state in the nation, several foreign countries, and every region in Colorado. This geographic diversity contributes to a dynamic learning environment and provides opportunities for you to develop lasting friendships with people from throughout the world.

While you will face many challenges during your time at Western, you should remember that help is available from your professors, staff members and other students.

Western's faculty members are dedicated to undergraduate education and are committed to helping you meet the challenges that lie ahead. These men and women have earned their graduate degrees from many of the finest universities in the country and have come to Western because of their belief in the importance of undergraduate education.

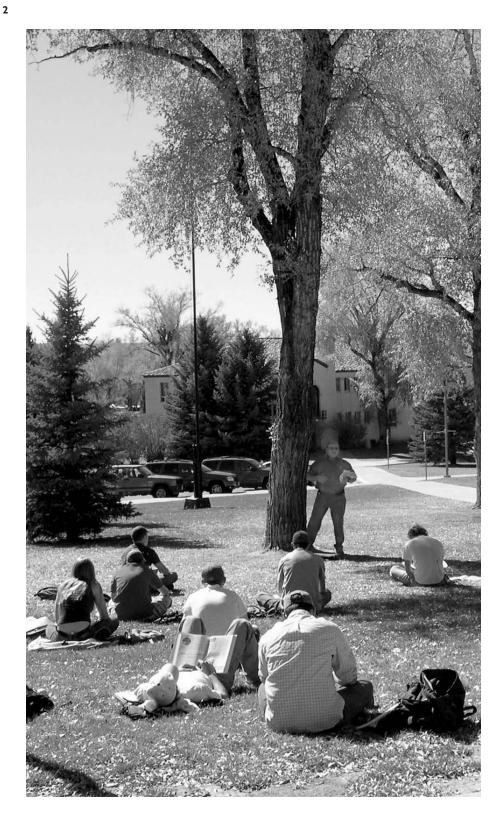
Western is dedicated to standards of learning and excellence that will stretch you intellectually and creatively. You will be challenged to establish a new and broader sense of community. You will be introduced to an array of recreational opportunities in the Gunnison Valley that are both challenging and stimulating.

When you meet those challenges you are realizing your potential. That is what college is all about.

Welcome to another great year at Western.

Sincerely,

Jay W. Helman



GENERAL INFORMATION

Institutional Mission

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

> North Central Association 30 North LaSalle Street, Suite 2400 Chicago, IL 60602-2504 (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:

> Accounting: Colorado State Board of Accountancy 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** 1380 Lawrence Street, Suite 1200 Denver, CO 80204-2059 (303) 866-2723

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

History of the College

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

The College 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 life ever since.

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

During the postwar 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 College so much that new freshmen often slept in the halls of their dorms for the first few days until a dorm room became available. During the 1980s, Western began to focus exclusively on undergraduate education in three core areas: the liberal arts, teacher education, and professional programs.

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 Business Institute and the 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 an opportunity to study in a wide range of fields such as business, computer information science, communications, the social and behavioral sciences, professional recreation, the arts, the sciences and teacher education.

Western's excellence has also been felt in other arenas. Western hosts the only nationally certified college Mountain Rescue Team, and a Wilderness Pursuits program offers students ample opportunities to explore themselves and the mountains, rivers, and forests which surround the College. The College'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-college athletic programs. Western's teams are consistently ranked among the top in the NCAA Division II. Western's skiers compete in NCAA Division I.

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.

Leslie J. Savage Library

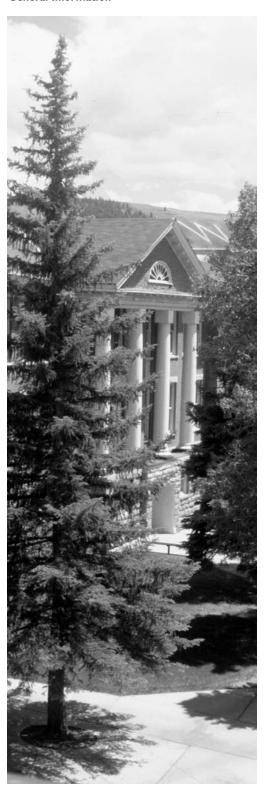
The staff of the Leslie J. Savage Library provides information, resources and services designed to advance the intellectual and personal development of members of the College community. When classes are in session, the Library's services are available 7 days a week.

Students find the majority of information they seek for course assignments in the Library collection. In addition to over 209,900 volumes and 3,700 films on video and DVD, the collection includes 427 journals, magazines, and newspapers. Special collections include federal and state government documents and books in the Western Colorado History Collection.

The Library makes extensive use of computers to facilitate identifying and locating desired materials. The Library on-line catalog is connected to the campus network. Using Western's catalog, the search for information can be extended to libraries and data bases throughout the United States. Several indexes to articles in journals and newspapers, as well as full-text electronic iournals are accessed over the Internet.

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 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 **College Foundation**

The Western State College Foundation, Inc., is a private nonprofit corporation founded in 1975 to advance the mission and goals of Western State College of Colorado. The Foundation is the primary depository of private gifts from alumni, friends, corporations, and foundations. Since 1998, Western State College Foundation has received nearly \$20 million in gifts and commitments from donors investing in Western's people and mission. Each year, the Foundation gives more than \$1.5 million to the College, 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

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 gifts made over a period of years through pledges. 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 WSC Foundation at (970) 641-2237, tburggraf@western.edu, or mail inquiries to the Western State College Foundation, Inc., 909 Escalante Drive, P.O. Box 1264, Gunnison, CO 81230.

List of Degree Programs

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

- Accounting
- Anthropology
- Art
- Biology
- · Business Administration
- Chemistry
- Communication and Theatre
- Computer Information Science
- Economics
- English
- · Environmental Studies
- Exercise and Sport Science
- Geology
- History
- Interdisciplinary Studies / Liberal Arts
- Mathematics
- Music
- Political Science
- Psychology
- Recreation
- Sociology
- Spanish

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

Art

Teacher Licensure is available in:

- Elementary Education
- K-12 Education
- Linguistically Diverse Education
- Secondary Education
- Special 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 associate of science degree programs in no more than sixty credit hours or their baccalaureate programs in no more than one hundred twenty credit hours unless there are additional degree requirements recognized by the Commission (Colorado Commission on Higher Education);
- a student can sign a two-year or four-year graduation agreement that formalizes a plan for that student to obtain a degree in two or 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;

- **General Information**
 - 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;
 - 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 when entering the institution 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.

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. The five areas for academic assessment at Western are: 1) general education, 2) annual discipline assessment, 3) program reviews, 4) senior level knowledge of basic skills and major discipline content, and 5) alumni knowledge of basic skills and major discipline content.



ACADEMIC CALENDAR FOR 2005-2006

Summer Session 2005

May 23	Classes begin for 1st 5-week and 10-week classes
May 30	Memorial Day - No classes
June 23	End of 1st 5-week classes
June 27	Classes begin for 2nd 5-week classes
July 4	Independence Day - No classes
July 28	End of Summer Session
July 29-Aug. 21	No classes

Eall Comester 2005

Fall Semester 2	2005
Aug. 19	New Student Academic Convocation (3:30 p.m.)
Aug. 22	Classes begin
Sept. 5	Labor Day - No classes
Sept. 16-17	Homecoming
Oct. 14	Mid-Fall break
Oct. 17	Second 8-week classes begin this week
Oct. 21-22	Family Weekend
Nov. 23-25	Thanksgiving break
Dec. 12-15	Final Exams
Dec. 15	Last day of classes
Dec. 17	Fall Commencement (10:00 a.m.)
Dec. 16-Jan. 6	No classes

Spring Semester 2006

Jan. 9	Classes begin
Jan. 16	Martin Luther King holiday - No classes
Feb. 20	President's Day - No classes
March 6	Second 8-week classes begin
March 20-24	Spring break
May 1	Classes held Monday of finals week
May 2-5	Final Exams
May 5	Last day of classes
May 6	Spring Commencement (10:00 a.m.)
May 7-21	No classes

See the College webpage 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 College of Colorado and will not be returned.

Applicants must complete the appropriate admission application form. A nonrefundable admission fee of \$30 must accompany the application form.

Criteria for Admission of First-Time Freshmen

Candidates for admission should be graduates from accredited high schools. All freshmen applicants must have their high school submit official transcripts directly to the Western State College of Colorado Admissions Office. Applicants from nonaccredited high schools and home-schooled students are considered on a case-by-case basis. Applicants who 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 units of English, (b) three units of math, including Algebra I & II, (c) two units of natural science, and (d) two units of social science. Units in modern language and computer science are strongly encouraged.

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 class. They will also have scored 20 or higher on the ACT or 950 or higher on the SAT. Western does not require the writing portion of either the ACT or the SAT.

First-time freshmen applicants are required to submit either the American College Test (ACT) or the Scholastic Achievement Test (SAT) scores. When registering for the test, an applicant should request that the Student Profile Reports be sent to Western State College of Colorado (Profile codes: ACT-0536, SAT-4946).

GED Applicants. Those 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.

Criteria for Admission of Transfer Students

Official transcripts should be sent directly to the Western State College of Colorado Admissions Office by all prior colleges or universities attended. Transfer applicants must have a combined grade-point average of at least 2.0 from all prior colleges or universities to be considered for admission. Transfer applicants must have completed at least the same level of coursework required of freshmen applicants.

Only academic courses for which students have earned a letter grade of "C-" or better will be considered for transfer credit. Consideration will be given to applicants who demonstrate that the work completed at other institutions is of such quality that normal progress toward graduation is being made.

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 American College Test (ACT) or the Scholastic Achievement Test (SAT).

Grades earned at other institutions are not included in the calculation of grade-point average at Western State College.

Admission of International Students

International students seeking admission must submit an application for admission, official high school and/or college transcripts (translated into English), along with the \$30 non-refundable application fee in American currency.

Applicants must be graduates of high-school 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 \$19,000 in U.S. currency is available to cover the costs of each year of anticipated study.

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 college 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 official transcripts be sent to Western State College of Colorado 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 average at Western.

Students Seeking a Second Undergraduate Degree

Students seeking a second 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.

Unclassified Admission

An applicant not wishing to pursue a degree at Western may be admitted as an unclassified student by completing the "Unclassified Application Form," submitting a \$30 application fee, and submitting a written statement of their educational intentions.

Western sets policies regarding the unclassified admissions process, criteria for acceptance, limitation of credit, and the courses available to unclassified 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 an unclassified 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.

Special High School Student Admission

Qualified high-school juniors and seniors under the age of 21 may take courses at Western through the Post Secondary Enrollment Options program, earning both high-school and college credit. Western sets policies regarding the admissions process and criteria, limitation of credit, and courses available to Post Secondary Enrollment Options students. Contact the Admissions Office for more information.

Transfer Credit, AP Credit, CLEP, Other Credit

Credit for Advanced Placement

The College recognizes that each year a number of outstanding high school seniors hope to accelerate their academic progress by taking one or more subjects which are taught at the college level. Western allows 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 number of credits that Western will accept toward a bachelor's degree is 60 semester credits.

Effective Fall 2003, Colorado policy ensures that students who successfully complete a State Guaranteed General Education Transfer Course will receive transfer credits applied toward graduation requirements in all majors at all public institutions unless a specific statewide articulation agreement exists.

Articulation agreements and transfer guides have been developed with all of the Colorado two-year institutions. Transfer students from Colorado two-year programs who complete the state-wide Core Curriculum will be considered to have satisfied the freshman and sophomore portions of Western's General Education Program, including the competencies. Completion of the Core Curriculum must be noted on the student's transcripts.

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 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 average.

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 number of credits 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 will apply toward satisfying requirements of the General Education Program and requirements of the standard and comprehensive major and minor programs. Courses not equivalent to specific

14 Admission Policies

Western State College of Colorado courses or 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 Admissions Office 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 average.

Credit for Transfer by Correspondence and 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 of credits 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 the standard and comprehensive major and minor programs. Courses not equivalent to specific Western State College of Colorado courses or 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 Admissions Office may be requested by the appropriate department.

Western will not grant credit for "life experience," that is, credit for experience gained from "work-related" activities.

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. The English Composition test is not approved for credit 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 Admissions Office. 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 State College of Colorado 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 responsible for the appeals process is the Admissions Office.

The appeal must be filed in writing to the Admissions Office of Western State College of Colorado 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 College of Colorado during 2005-2006. Because these costs are subject to change as of the printing of this catalog, they are presented here for information only.

Tuition (estimated)

Full-time Students

Estimated Tuition for:	16-Week Semester	Academic Year
Resident Tuition		
Total Tuition	\$2,376	\$4,752
College Opportunity Fund Stipe	nd (\$1,200)	(\$2,400)
Cost to Student	\$1,176	\$2,352
Non-Resident Tuition	\$5,484	\$10,968

Part-time Students

Tuition for part-time students is based on a per-credit charge. The estimated rates for 2005-2006 are \$98 per credit for resident students (after application of the College Opportunity Fund Stipend) and \$457 per credit for non-residents. For tuition purposes, "part-time" is defined as less 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 nonresident rate.

Mandatory Fees (estimated)
Various 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 2005-2006 is \$786. Mandatory student fees are prorated for part-time students.

Room and Board Costs (estimated)

Western provides students several housing options in a variety of residence halls. In most cases, two students share a room, though limited one-student rooms are available. Apartments are also available to returning students. Room and board rates vary, depending upon where the student lives and which meal plan they choose. Below are examples of estimated living expenses for 2005-2006:

Room Costs for:	16-Week Semester	Academic Year
Double-Mears Complex and Ute	\$1,850	\$3,700
Double-Escalante Complex	\$2,126	\$4,252
Two Bedroom, unfurnished-		
Chipeta Apartments	\$2,581	\$5,161

All students residing in College 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: Premier Plans	16-Week Semester	Academic Year
Mountaineer	\$1,552	\$3,104
Crimson	\$1,371	\$2,742
Slate	\$1,371	\$2,742
Discount Plans		
Value Plus (available to returning stude	/	\$1,990
Voluntary Plan	\$ 340	\$ 680

Residence Life Requirement

Living on campus during the freshman year is an integral part of the Western experience. The residence life program at Western provides many opportunities to meet new people, get involved in campus activities, and learn about community living. Making a successful transition to a new academic and living environment is critical during the first year of college. The Residence Life staff at Western provides a unique environment to support academic success.

A housing application, meal application and a housing contract will be mailed shortly after acceptance to Western. All first-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 parents or a legal guardian; 3) the student has completed 24 credits; (4) the student is at least 21 years of age by the first day of classes. 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 June 1st for the Fall semester and November 19th 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 College offers a supplemental health insurance plan that students should seriously consider.

Total health insurance costs for the 2005-2006 academic year are estimated to be \$953. This premium is subject to annual changes of rates and coverage.

Payment of Charges

Tuition and all fees are due and payable during the first three days of each semester. The College encourages payment by mail and accepts payment by Discover Card, MasterCard and Visa.

Each pre-registered student will be mailed a billing statement and specific details about the time and place of payment before the beginning of each semester. Payment is due by the due date even if a billing statement is not received.

Western State College of Colorado will not register a student, release a diploma, provide a transcript, or supply placement or other College services to any student or former student who has an outstanding financial obligation to the College. Loans that are not yet due or for which payments are up-to-date are not considered outstanding financial obligations that restrict College services.

Per state statute, failure to pay a financial obligation to the College 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 College.

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 and is included in each student's individual bill.

The late charge begins at \$50 for students who do not pay by the due date but before disenrollment occurs. After disenrollment occurs, students are required to pay a \$100 re-enrollment charge plus a \$5 per day penalty until payment is made. Accounts not in good standing by the last day of each semester will be assessed an additional \$50 late charge.

Refund of Charges

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

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

for the period between 15% and 25% of the semester 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 College service fees are recommended by the Student Government Association and approved by the Trustees. The College 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 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, applicants must submit petitions with appropriate documentation.

The necessary forms, deadline information, and explanation of the Colorado tuition classification statutes are available from the Registrar's Office.

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. Colorado statutes provide that:

- 1. For tuition classification purposes, 22 is the age of majority.
- 2. To be considered for in-state classification, applicants or the parents of an unemancipated minor must maintain legal domiciliary (as defined by the statutes in Colorado) for the 12 consecutive months preceding the semester for which in-state status is claimed.
- 3. In-state classification becomes effective at the beginning of the first semester after one year of legal residence in Colorado, as defined by Colorado statutes.

Courses with Special Fees

COURSE	TITLE	FEE
ANTH 218	PHYSICAL ANTHROPOLOGY	35.00
ANTH 219	ARCHAEOLOGY	35.00
ANTH 230	ETHNOLOGY	35.00
ANTH 322	ANALYSIS OF MATERIAL CULTURE	50.00
ANTH 369	ANTHROPOLOGY FIELD TRIP	70.00-300.00
ANTH 469	ANTHROPOLOGY FIELD SCHOOL	50.00
ART 106	STUDIO ART FOR THE NON-ARTIST	20.00
ART 119	FOUNDATION DRAWING	50.00
ART 161	GRAPHIC COMMUNICATIONS	20.00
ART 162	COMPUTER-AIDED DESIGN	20.00
ART 171	DESIGN AND COLOR THEORY CONCEPTS	10.00
ART 203	INTRODUCTION TO CERAMICS	70.00
ART 219	FOUNDATION DRAWING II	50.00
ART 230	INTRODUCTION TO SCULPTURE	94.00
ART 235	INTRODUCTION TO JEWELRY	40.00
ART 239	FIBER ARTS	20.00
ART 246	INTRODUCTION TO PHOTOGRAPHY	78.00
ART 256	INTRODUCTION TO PRINTMAKING	65.00
ART 260	ARCHITECTURE: FORM, STRUCTURE, AND FUNCTION	10.00
ART 262	PRESENTATION METHODS	20.00
ART 263	DESIGN APPLICATIONS AND FABRICATION	10.00
ART 270	GRAPHIC DESIGN AND ILLUSTRATION	85.00
ART 271	CALLIGRAPHY/TYPOGRAPHY	30.00
ART 272	DESIGN AND THREE DIMENSIONAL CONCEPTS	20.00
ART 284	AIRBRUSH TECHNIQUES	35.00
ART 285	TECHNIQUES OF PAINTING	30.00
ART 286	WATERCOLOR	20.00
ART 303	INTERMEDIATE CERAMICS	64.00
ART 319	INTERMEDIATE DRAWING	50.00
ART 330	INTERMEDIATE SCULPTURE	94.00
ART 335	INTERMEDIATE JEWELRY	40.00
ART 346	INTERMEDIATE PHOTOGRAPHY	78.00
ART 356	PRINTMAKING: LITHOGRAPHY/MONOPRINT	65.00
ART 357	PRINTMAKING: INTAGLIO/RELIEF	65.00
ART 362	GRAPHIC AND THREE DIMENSIONAL MODELING	20.00
ART 365	METHODS OF TEACHING ART: ELEMENTARY	20.00
ART 366	METHODS OF TEACHING ART: SECONDARY	20.00
ART 368	METHODS OF TEACHING ART: MIDDLE SCHOOL	20.00
ART 371	INTERMEDIATE GRAPHIC DESIGN AND ILLUSTRATION	85.00
ART 375	MAGAZINE PRODUCTION	80.00
ART 381	PAINTING: OIL	30.00
ART 382	PAINTING: VARIED MEDIA	30.00
ART 386	INTERMEDIATE WATERCOLOR	20.00
ART 390	WORKSHOP IN ART	40.00
ART 400	ARTIST'S PORTFOLIO / SENIOR EXHIBITION	30.00
ART 403	ADVANCED CERAMICS	70.00
ART 419	ADVANCED DRAWING	50.00
ART 430	ADVANCED SCULPTURE	94.00
ART 435	ADVANCED JEWELRY	40.00

COURSE	TITLE	r.
ART 446	ADVANCED PHOTOGRAPHY	
ART 457	ADVANCED PRINTMAKING	
ART 462	ENVIRONMENTAL ARCHITECTURE. 20.0	
ART 402 ART 471	ADVANCED DESIGN AND ILLUSTRATION	
ART 480	ADVANCED PAINTING. 30.0	
ART 486	ADVANCED WATERCOLOR. 20.0	
ART 490 ART 490	WORKSHOP IN ART	
ART 490 ART 491	SEMINAR IN ART. 30.0	
BIOL 135	ENVIRONMENTAL BIOLOGY LABORATORY	
BIOL 150	BIOLOGICAL PRINCIPLES	
BIOL 150	DIVERSITY AND PATTERNS OF LIFE	
BIOL 151	GENERAL ZOOLOGY (LABORATORY). 40.0	
BIOL 251	GENERAL BOTANY (LABORATORY)	
BIOL 302	ECOLOGY LABORATORY AND RECITATION	
	CELL AND GENETICS LABORATORY	
BIOL 313		
BIOL 320	ORNITHOLOGY (LABORATORY)	
BIOL 322	MAMMALOGY (LABORATORY)	
BIOL 327	FIELD ENTOMOLOGY	
BIOL 332	PLANT MORPHOLOGY (LABORATORY)	
BIOL 342	MICROBIOLOGY (LABORATORY)	
BIOL 372	HUMAN ANATOMY AND PHYSIOLOGY I (LABORATORY)	
BIOL 373	HUMAN ANATOMY AND PHYSIOLOGY II (LABORATORY)	
BIOL 381	FIELD BIOLOGY	
BIOL 397	SPECIAL TOPICS0-300.0	
BIOL 420	MOLECULAR BIOLOGY (LABORATORY)	
BIOL 430	WILDLIFE ECOLOGY AND MANAGEMENT (LABORATORY)	
BIOL 446	MAMMALIAN PHYSIOLOGY (LABORATORY)	
BIOL 450	HISTOLOGY (LABORATORY)35.0	
BIOL 454	VERTEBRATE EMBRYOLOGY (LABORATORY)	
BIOL 462	ROCKY MOUNTAIN FLORA (LABORATORY)	
BIOL 464	PLANT PHYSIOLOGY (LABORATORY)	
BIOL 466	PLANT ANATOMY (LABORATORY)	
BIOL 473	DESERT ECOLOGY	
BIOL 474	COMPARATIVE ANIMAL PHYSIOLOGY	
BIOL 475	WINTER ECOLOGY	
BIOL 476	AQUATIC BIOLOGY (LABORATORY)	
BIOL 477	PLANT ECOLOGY	
BIOL 484	ADVANCED HUMAN ANATOMY	
BUAC	ALL ACCOUNTING CLASSES	
BUAD	ALL BUSINESS ADMINISTRATION CLASSES	
CHEM 109	INTRODUCTORY ORGANIC AND BIOCHEMISTRY LAB	
CHEM 112	GENERAL CHEMISTRY LABORATORY I	
CHEM 114	GENERAL CHEMISTRY LABORATORY II	0
CHEM 306	ANALYTIC CHEMISTRY	
CHEM 334	ORGANIC CHEMISTRY LABORATORY I	
CHEM 335	ORGANIC CHEMISTRY LABORATORY II	
CHEM 402	INSTRUMENTAL LABORATORY	
CHEM 454	PHYSICAL CHEMISTRY LABORATORY	
CHEM 472	BIOCHEMISTRY II (LABORATORY)	
CIS	ALL COMPUTER INFORMATION SCIENCE CLASSES	it
COTH 119	THEATRE AND MEDIA AESTHETICS	0

22 Tuition and Fees

COURSE	TITLE FEE
COTH 151	MASS MEDIA IN AMERICA
COTH 219	VISUAL COMMUNICATION
COTH 225	ART OF THE THEATRE
COTH 231	STAGECRAFT AND THEATRICAL TRADITION
COTH 264	ELECTRONIC FIELD PRODUCTION
COTH 330	LIGHTING AND SOUND PRODUCTION FOR THEATRE AND TELEVISION \dots 15.00
COTH 331	SCENOGRAPHY
COTH 346	MULTIMEDIA COMMUNICATION
COTH 361	PRINCIPLES OF STUDIO PRODUCTION
COTH 362	AUDIO PROGRAMMING AND PRODUCTION
COTH 390	TELEVISION WORKSHOP
ECON	ALL ECONOMICS CLASSES
ENG 248	FILM AS LITERATURE, LITERATURE AS FILM
ENVS 100	INTRODUCTION TO ENVIRONMENTAL STUDIES
ENVS 301	SCIENCE, TECHNOLOGY AND THE ENVIRONMENT
ENVS 380	PUBLIC LANDS MANAGEMENT
ENVS 390	ENVIRONMENTAL APPLICATIONS
ENVS 397	SPECIAL TOPICS0-150.00
ENVS 400	FIELD EXPERIENCE
ESS 112	BILLIARDS
ESS 112	CORE STABILITY
ESS 112	KAYAKING
ESS 112	YOGA
ESS 114	FLY FISHING
ESS 122	BOWLING
ESS 132	WEIGHT TRAINING
ESS 160	SWIMMING-BEGINNING
ESS 161	SWIMMING-INTERMEDIATE8.00
ESS 170	LIFEGUARD TRAINING
ESS 172	WATER SAFETY INSTRUCTION
ESS 185	LIFETIME WELLNESS
ESS 201	ESSENTIALS OF HUMAN ANATOMY & PHYSIOLOGY (LABORATORY) 40.00
ESS 276	EMERGENCY RESPONSE
ESS 287	CARE & PREVENTION OF EXERCISE INJURIES
ESS 295	TEACHING WELLNESS THROUGH PHYSICAL ACTIVITY
ESS 331	EXERCISE PHYSIOLOGY LAB
ESS 350	INSTRUCTIONAL ASSESSMENT IN PHYSICAL EDUCATION
ESS 392	METHODS OF SECONDARY ACTIVITIES
ESS 395	METHODS OF ELEMENTARY ACTIVITIES
ESS 396	METHODS OF LEISURE ACTIVITIES
ESS 410	ASSESSMENT AND EXERCISE PRESCRIPTION
ESS 453	HEALTH AND PHYSICAL EDUCATION ELEMENTARY SCHOOL
FREN 101	ELEMENTARY FRENCH I
FREN 102	ELEMENTARY FRENCH II
FREN 254	INTERMEDIATE FRENCH II
GEOG 222	MAP AND AIR PHOTO INTERPRETATION
GEOG 340	INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS
GEOL 105	PHYSICAL GEOLOGY LABORATORY35.00
GEOL 201	HISTORICAL GEOLOGY (LABORATORY)
GEOL 220	FIELD GEOLOGY OF WESTERN NORTH AMERICA
GEOL 300	GEOLOGY FIELD TRIP

COURSE	TITLE
GEOL 305	MINERALOGY (LABORATORY)
GEOL 303	STRATIGRAPHY AND SEDIMENTATION (LABORATORY)
GEOL 310	IGNEOUS AND METAMORPHIC PETROLOGY (LABORATORY)
GEOL 311	ENVIRONMENTAL GEOMORPHOLOGY (LABORATORY)
GEOL 320	STRUCTURAL GEOLOGY (LABORATORY)
GEOL 346	SUBSURFACE GEOLOGY (LABORATORY)
GEOL 352	APPLIED GEOPHYSICS (LABORATORY)
GEOL 332	RESEARCH IN VOLCANOLOGY AND PETROLOGY (LABORATORY)50.00
GEOL 411	RESEARCH IN VOICEMOLOGY AND TETROLOGY (LABORATORY)50.00
GEOL 420 GEOL 430	HYDROGEOLOGY (LABORATORY)
GEOL 455	PETROLEUM GEOLOGY (LABORATORY)
GEOL 455	RESEARCH IN BASIN ANALYSIS (LABORATORY)
MUS	ALL PRIVATE LESSONS. 50.00 per credit
MUS 129	THEORY OF MUSIC I
MUS 131	THEORY OF MUSIC II. 30.00
MUS 254	THEORY OF MUSIC III
MUS 256	THEORY OF MUSIC IV. 30.00
MUS 312	INTRODUCTION TO MUSIC TECHNOLOGY 10.00
PHYS 140	INTRODUCTORY PHYSICS (LABORATORY). 35.00
PHYS 170	PRINCIPLES OF PHYSICS I (LABORATORY). 35.00
PHYS 171	PRINCIPLES OF PHYSICS I (LABORATORY)
PHYS 200	GENERAL PHYSICS I (LABORATORY)
PHYS 201	GENERAL PHYSICS I (LABORATORY). 35.00 GENERAL PHYSICS II (LABORATORY). 35.00
PSY 345	BIOPSYCHOLOGY
RECR 189	PRINCIPLES OF OUTDOOR RECREATION
RECR 220	APPLICATIONS IN RECREATION
RECR 220	SPECIAL TOPICS
RECR 331	FOOD & BEVERAGE MANAGEMENT
RECR 351	ECOSYSTEM MANAGEMENT AND INTERPRETATION (FALL)
RECR 352	ECOSYSTEM MANAGEMENT AND INTERPRETATION (FALL)
RECR 392	TEACHING EXPERIENTIAL EDUCATION IN THE OUTDOORS30.00-80.00
RECR 392	OUTDOOR PURSUITS EDUCATION - WATER BASED CLASS 130.00-190.00
RECR 395	OUTDOOR PURSUITS EDUCATION - WATER BASED CLASS
RECR 395	OUTDOOR PURSUITS EDUCATION - SNOW BASED CLASS 130.00-190.00 OUTDOOR PURSUITS EDUCATION - LAND BASED CLASS
RECR 390	SPECIAL TOPICS
RECR 466	MANAGEMENT OF RECREATION FACILITIES
RECR 468	LEADERSHIP AND ADMINISTRATION OF OUTDOOR PURSUITS
RECR 497	SPECIAL TOPICS
SPAN 101	ELEMENTARY SPANISH I
SPAN 101 SPAN 102	ELEMENTARY SPANISH I
SPAN 102 SPAN 254	INTERMEDIATE SPANISH I
DI MIN 234	INTERMIDIATE STANSITT





FINANCIAL AID

All students who feel they lack the necessary resources to finance their educational costs are encouraged to apply for financial assistance. 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 College of Colorado utilizes the Free Application for Federal Student Aid (FAFSA) to determine eligibility for all "need-based" financial aid. This form is available at most high-school counseling offices, college financial aid offices, or on-line at: http://www.fafsa.ed.gov/. The FAFSA should be filed as soon as possible after January 1.

Financial aid applications will be considered complete when:

- 1. the applicant has been officially admitted to Western
- 2. the Financial Aid Office has on file the following documents:
 - a. Free Application for Federal Student Aid (FAFSA)
 - b. Income information documentation as requested by the College, which may include the federal income tax return, proof of child support, federal verification form, etc.

Programs Available

Western offers a wide range of financial aid designed to help bridge the gap between the expected family financial contribution and the cost of attending college. The four types of aid offered include: 1) grants, 2) employment programs, 3) loan programs, and 4) scholarships. The available programs are:

Grants

Grants need not be repaid. The FAFSA application must be completed to receive consideration for any of the following grants:

Federal Need-Based Grants. In 2005-2006, the maximum Federal Pell Grant is \$4,050 per academic year. The maximum Federal SEOG at Western is \$2,000 per academic year.

Need-Based Grants for Colorado Residents. The maximum Colorado Student Grant at Western is \$2,000 per year.

Student Employment Programs. Federal, state, and institutional dollars fund an employment program through which students may work as many as 20 hours per week. Wages vary according to the job, but most jobs start at the minimum-wage rate. Working hours are arranged around a student's classes.

Students must complete the FAFSA to receive consideration for work study programs although it may be possible for students to work on campus even if they are not eligible for other financial aid.

Loan Programs

Loans must be repaid. The FAFSA application must be completed to receive consideration for any of the following loans:

Federal Carl D. Perkins National Direct Student Loan. Eligibility is determined by the Financial Aid Office. Currently, the interest rate is 5%. No interest accrues nor are payments due while students attend college at least half-time. No separate application is required beyond the FAFSA. The maximum loan at Western is \$3,000 per year.

Federal Robert T. Stafford Student Loan—Subsidized. The current interest rate is approximately 4.0%. No interest accrues, and no payments need to be made while students attend college at least half-time. A separate application is required.

Federal Robert T. Stafford Student Loan—Unsubsidized. The current interest rate is approximately 4.0%. Interest does accrue while students attend college. A separate application is required.

Students borrowing on these programs have a yearly maximum borrowing limit. Freshmen (students who have earned 0-29 semester hours of college credit) and sophomores (30-59 semester hours) have a maximum borrowing limit of \$2,625 and \$3,500, respectively, per year. Juniors (60-89 semester hours) and seniors (90+semester hours) have a maximum borrowing limit of \$5,500 per year. Additional funds may be available for independent students or dependent students whose parents are denied a PLUS Loan. Maximum additional funds are \$4,000 per year for freshmen and sophomores and \$5,000 per for year for juniors and seniors. Not all students will qualify for maximum amounts.

Note: If a student is considered a first-time and first-year borrower, federal law requires the College to delay the disbursement of the student's loan for 30 days after the semester begins.

Some students or parents are not eligible to borrow the maximum amount for their classification because of family resources and other aid received. Also, loans are generally disbursed in two equal amounts over the school year. Approximately 4% is withheld from each loan disbursement for government fees.

Federal PLUS Loan. The PLUS (Parent Loans for Undergraduate Students) program is designed to assist parents in providing their contribution to educational costs. Maximum interest rate is approximately 6% on new loans (variable interest rate with a 9% cap.) Repayment begins within 60 days of the loan being fully disbursed, with a minimum payment of \$50 per month required. A separate application is required.

Local Loan Funds. The following short-term loans are available to meet unexpected expenses that might occur during the semester. Applications are available at the Cashier's Office.

Gladys Bartholomew Memorial Student Loan Fund

Frank A. Musgrave Memorial Fund

William Lloyd Nelson Loan Fund

Olivia L. and Fred A. Reichle Memorial Student Loan Fund

The Anna L. Steckelberg Student Loan Fund

Dan and Jessie Thornton Student Loan Fund

Western State College of Colorado Student Loan Fund

Scholarships

Scholarships need not be repaid. Many of these scholarships will become available to students after establishing a record of accomplishment at Western, though some are available to new students that have strong high school or collegiate records. Contact the Western State College of Colorado Financial Aid Office about additional scholarship information or visit the financial aid web page at: http://www.western.edu/finaid. Also, Western offers certain talent scholarships based on proven abilities in athletics, music, and other activities. Contact the specific department of interest or expertise.

High-school counselors or principals may have information about locally-endowed assistance.

Scholarships for Colorado Residents

Western Award: \$500 - \$750. Awarded to accepted resident new freshmen with a 3.000-3.500 cumulative GPA and a 20 ACT or 950 SAT or higher. A one-year award. No separate scholarship application is required. April 1 deadline for application for admission.

Excellence Award: \$1,000 per year. Competitive, renewable scholarships awarded to accepted resident new freshmen with a 3.500 cumulative GPA or higher and a 22 ACT or 1000 SAT or higher. April 1 deadline for application for admission.

Academic Leadership Program: \$1,000-\$1,500. Competitive, renewable scholarships awarded to accepted resident new freshmen. Students must submit application, essay and two letters of recommendation to be considered. April 1 deadline. Requirements include:

- Minimum 3.200 cumulative GPA
- Minimum 21 ACT or 990 SAT
- Demonstrated leadership in at least 3 unrelated activities
- Demonstrated involvement on Western's campus to receive full award
- Must live on campus to receive full award

Trustees Scholarship: Full tuition, four years. Western's premier freshman scholarship. A competitive, renewable scholarship for the highest achieving student. Applicants must have a 3.800 cumulative GPA or higher, 25 ACT or 1100 SAT score or higher. Extracurricular activities will be considered. There are a limited number of Trustees Scholarships available, so early completion of the admission and scholarship applications is critical. Deadline: April 1 or when all Trustees Scholarships are awarded, whichever comes first.

Colorado Girls State/Boys State Award: \$500. The Colorado Girls State/Boys State Scholarship is a competitive scholarship for students who attend Colorado Girls or Boys State. Students must submit a letter of application with their application for admission to Western.

Western Transfer Award: \$1,000 per year. Awarded to accepted resident transfer students with a 3.000 cumulative GPA or higher in at least 30 semester credits of post-secondary college coursework. No separate scholarship application is required. Renewable for two years. April 1 deadline for Application for Admission.

Scholarships for Non-Residents

Academic Leadership Program: \$1,250 - \$3,500. Competitive, renewable scholarships awarded to accepted non-resident new freshmen. An application, essay, and two letters of recommendation are required for consideration. April 1 deadline. Requirements include:

- Minimum 3.200 cumulative GPA
- Minimum 21 ACT or 990 SAT
- Demonstrated leadership in at least 3 unrelated activities
- Demonstrated involvement on Western's campus to receive full award
- Must live on campus to receive full award

Scholarships for All Students

Presidential Scholarship: \$500 - \$2,500. The Presidential Scholarship is a competitive award and is awarded for four years. Minimum qualifications for application are a 3.500 grade point average and evidence of active leadership in high school. For transfer students the qualifications are a 3.200 grade point average in post-secondary college coursework. April 1 deadline.

Foundation Scholars Program: \$4,000. Competitive scholarships awarded to any Western student. Four scholarships are available each year: one each to a freshman, sophomore, junior, and senior. April 1 deadline. Requirements include:

- Minimum 3.5 high school or college GPA
- High school students must have minimum 25 ACT or 1100 SAT
- Candidates must demonstrate leadership qualities or experiences

28 Financial Aid

To apply, send a cover letter, official transcripts and official copy of test score(s) if applicable to:

The Western State College Foundation

The Foundation Scholars Program

909 E. Escalante Drive
P.O. Box 1264

Gunnison, CO 81230

(970) 641-2237

All scholarships are subject to available funding. There are a limited number of scholarships available, so early applications are encouraged.



STUDENT PROGRAMS AND SERVICES

Programs and services in support of the academic program 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 beyond the curriculum 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 afford 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 college 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 and Extra-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.

College Media: Students manage and operate the college newspaper (Top o' the World), radio station (KWSB-FM), cable television station (WSC-TV), and an annual magazine (Western Pathfinder Magazine).

Enrichment Convocations and Lectures: Each semester, Western arranges for special on-campus presentation 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 Societies and Departmental Clubs: Western has student chapters of several national honorary societies and fraternities, which allow students to pursue their disciplinary studies outside the classroom. These groups include: Alpha Kappa Delta (Sociology), Beta Beta Beta (Biology), CCMENC (Music), Chi-Rho-Mu (Math and Computer Information Science), Delta Sigma Pi (Business), Kappa Delta Pi (Education), Phi Alpha Theta (History), Exercise and Sport Science Club, History and Geography Club, Psychology Club, Recreation Club, Roots and Shoots (Anthropology), Sociology Club, Western Sustainability Coalition (Environmental Studies), and the Student Education Association.

Mountain Rescue Team: The team is a fully certified college-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. 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 administration. The Multicultural Center is located in the College Union. 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 College-community 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: Students work in conjunction with Communication and Theatre faculty to present five or six full-length theatre productions each year, including some which are written and directed by students.

Program Council: Each year the Program Council, a student-run organization, sponsors bands, performers, and other entertainers for concerts and presentations as well as a monthly film series in the College Union.

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 six student religious organizations: Christian Challenge, Campus Crusade for Christ, Fellowship of Christian Athletes, Hillel Club, Latter Day Saints Association, and the Newman Center. In addition, churches of all denominations in the community welcome participation from students.

Student Government Association (SGA): The SGA is Western's student government made up 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 College, including expenditures of student fees

Educational and Career-Related Services

Academic Advising: Western State College of Colorado places great value on the relationship built between a student and their academic advisor. Each freshman is assigned a faculty advisor from the Faculty Advisory Corps to assist with course selection, registration, and in understanding academic policies and procedures. During the freshman year students are urged to select an advisor in their area of academic interest. Students who do not have an advisor will be assigned to an advisor prior to registration for the following semester. Any student who needs registration information or advising services may contact Registration Services for assistance or referrals.

Computing, Media and Telecommunications: Computing, Media and Telecommunication Services provides 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 college applications, class registration, payment of fees, financial aid inquiries, and on-line course grades may be accomplished using the College's on-line 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 room using a direct connection in the room or through a wireless configuration.

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 College and operates under the policies and procedures set by the Colorado Commission on Higher Education. Both credit and non-credit courses are offered, and some classes are offered for graduate credit through partner schools.

Learning Assistance Center: The Learning Assistance Center is located in the College Union and provides the following services:

Disability Services: As the key office for providing resources and academic accommodations for students with disabilities, the Learning Assistance Center offers students a variety of services to assist them as they pursue their academic and career goals. Some of these services include extended time for tests, an alternative testing site, notetakers, readers, scribes, written material in alternate format, and priority registration. Other assistance is available, 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.

Learning Skills Assistance: The Learning Assistance 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 Learning Assistance Center's resources.

Service Learning: The community becomes an extension of the classroom through the Service Learning Program. Through arrangements between a faculty coordinator and community agencies, students have the opportunity to apply classroom learning in ways that meet specific needs in the larger community, a process that can enhance both career experience and civic awareness.

Student Services Center: The Student Services Center, located in the College Union, provides a strong support system designed to help students make the most of their Western experience. Staff members are readily available to assist students with the wide array of integrated services and programs offered by the Center. The staff also provides helpful connections to other campus resources, such as academic advising and tutoring. Programs located in the Student Services Center include the following:

Career Services: Career Services provides information to students on career choices and job-search skills. The staff provides support through career counseling, workshops, listings of internships and jobs, and career fairs.

International Student Services: A variety of services are available to international students, such as immigration 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 174 colleges and universities across the United States and its territories for up to one academic year.

Peer Advising: Through educational programming and one-to-one academic assistance, academic peer advisors help students make a successful transition to college life.

Student Employment: The Student Services Center provides information about jobs available to Western students. The Center 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 Tests, LSAT, MCAT, PLACE, PRAXIS Series, and SAT. The Learning Assistance Center administers CLEP and correspondence exams by appointment.

Turning Point: Turning Point is an individualized program offered to at-risk students to help them improve academic performance.

Undeclared Major Advising Program: The Undeclared Major Advising Program (UMAP) is designed to help students with the process of choosing a major using a variety of career counseling assessment tools and techniques.

Recreational and Athletic Programs

Intercollegiate Athletics: Western State College of Colorado is a member of the Rocky Mountain Athletic Conference, participating under the rules and guidelines of the National Collegiate Athletic Association (NCAA), Division II and the National Collegiate Ski Championships for intercollegiate skiing. The College fields men's teams in football, basketball, skiing (both alpine and Nordic), cross-country running, track and field (indoor and outdoor), and wrestling. Western's women's teams represent the College in basketball, volleyball, skiing (both alpine and Nordic), cross-country running, 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, soccer, softball, tennis, and track and field. There are also coeducational competitions in softball and vollevball.

Sports and Outdoor Activity Clubs: Students with special interest in specific sports or outdoor activities have organized a number of clubs to pursue those activities: baseball, boxing, hockey, lacrosse, mountain biking, martial arts, rodeo, free-ride skiing, snowboarding, men's and women's soccer, volleyball, women's wrestling, men's and women's rugby, and others. A number of the sports clubs organize their own intercollegiate competitions with other schools.

Wilderness Pursuits: Wilderness Pursuits (WP) is a co-curricular professionally managed outings 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, the Weekend of Welcome, the Outdoor Floor Expedition and other contract 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 psychologists provide individual, group, marital, and family counseling.
- 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.

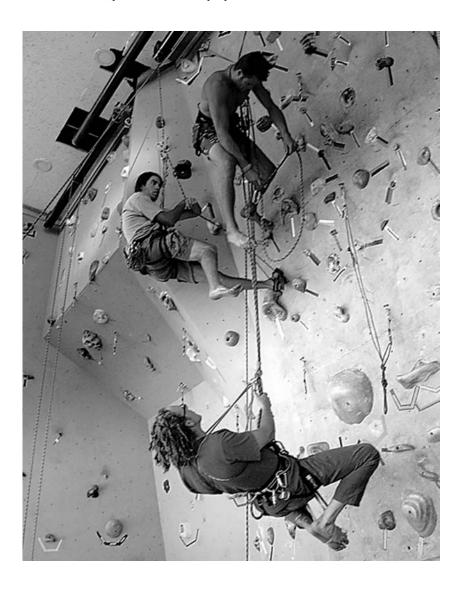
Ombudsperson: This service offers assistance or referrals regarding College policies, procedures, and regulations and assists in resolving student-based problems and conflicts. The Ombudsperson is also readily accessible to students as a neutral and informal mediator, whose role is to promote fair and equitable treatment at Western.

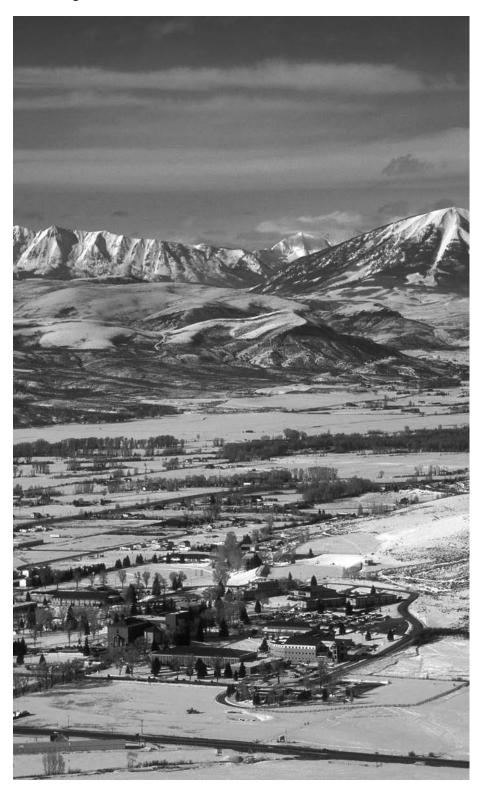
Tenderfoot Child and Family Development Center: A fully-licensed daycare center for up to 38 children, ages $2^{1/2}$ to 8 years old.

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 college 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 College careers. WIT students will find other individuals who share their experiences of going to college 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, published annually by the Student Affairs Office.





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 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. In addition, the Colorado Commission on Higher Education has established minimum class times for credit courses. In the most common type of course (lecture-discussion), one credit requires at least 750 minutes of time in class. In laboratory courses, students are expected to spend at least 1,500 to 2,250 minutes in class for each unit of credit earned.

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, generally not for freshmen and sophomores.

Student Classification by Class Level

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

Classification	Semester Hours Earned
Freshmen	0-29
Sophomores	30-59
Juniors	60-89
Seniors	90 +

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 credit hours. Courses from which a student has withdrawn will not be used in

calculating overloads. With approval, students may replace such courses during the same semester with another course or courses bearing an equal or lower number of credits without being subject to overload policies (petition or surcharge).

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 Registration Services.

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 Vice President for Academic Affairs. The completed petition must be submitted to Registration Services.

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

Registration

Advising

All Western State College of Colorado 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 *Course 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 one of the new student orientation programs. Information about registration and orientation is mailed to all new students admitted to the College. Currently enrolled students may register during the present semester for the next semester or summer session. Registration timelines and procedures are detailed in the *Course 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.

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 or classes that meet in sessions shorter than a full semester. (Note the difference between this rule and "withdrawal" explained below.)

Western State College of Colorado faculty reserve the right to drop students from class rolls if they miss the first class meeting. Not all faculty 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 students' responsibility to contact each faculty member to request that their seat in the class be held.

If, in violation of the course instructor's announced attendance policy, a student has excessive absences, the course instructor may initiate the grade "W" (withdraw) during the withdrawal period.

Course instructors may also withdraw a student from a class for violations of academic integrity or disruptive behavior. The Registrar will notify students that they have been withdrawn from a course.

Class Attendance

Faculty members make every effort to make coursework meaningful, and students should feel a similar obligation to attend classes. The interactions a student has in the classroom, both with the faculty member teaching the course and with fellow students, represent a significant part of coursework. Faculty members may set specific attendance policies for each of their courses and specify those policies in the course syllabus.

Internships

Internships offer students the opportunity to combine academic credit with work in their career field. The learning objectives and academic requirement for this experience 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 College of Colorado 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 coursework 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 (NC) to

credit or from credit to no-credit after the class has begun. Students enrolled for no-credit (NC) 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 College, 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 Vice President for Academic Affairs, Taylor Hall 221, (970) 943-3045.

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.

Withdrawal from College

Students who wish to withdraw from the College may do so any time during the semester. Contact the Dean of Students in the Student Affairs Office to initiate an official withdrawal from the College. Students should also consult with course instructors and their academic advisor.

After the official Add/Drop period, but before the last one-third of the term has begun, 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, unless the course instructor deems that an "Incomplete" (see definition in section on Grades and Grade-Point Average that follow) would be a more appropriate grade.

Withdrawal from Variable Credit Courses. After 15% of the course has been completed, a student wishing to withdraw from the College 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 College in person, the student may notify the Dean of Students' Office (970) 943-2011 and request that the Dean of Students 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

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:

A	=	4.000 grade points	C	=	2.000 grade points
A-	=	3.670 grade points	C-	=	1.670 grade points
B+	=	3.330 grade points	D+	=	1.330 grade points
В	=	3.000 grade points	D	=	1.000 grade points
B-	=	2.670 grade points	D-	=	0.670 grade points
C+	=	2.330 grade points	F	=	0.000 grade points

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 credit hours 12	Total grade points	30.000

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

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, with no rounding procedure used to reduce them to a smaller number of decimal places.

Repetition of Courses

A student who has received a low grade in a course can improve her/his 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:

For coursework taken for the first time prior to the Summer of 1991, recalculation of cumulative GPA on the basis of course repetitions is not automatic. In order to assure that such a recalculation is done, a student must notify the Registrar's Office each time a course is repeated.

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 Registrar's Office.

Coursework 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 coursework 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 "TF" (Technical Failure) 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 catalog 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, and the credit hours are counted toward hours earned (except for remedial courses, MATH 099 and ENG 099. The grade of "U" is equivalent to the letter grades of D+ or below and no credit hours 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, at 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 which are completed after the undergraduate degree has been posted will not be included in the undergraduate GPA.

Attendance-Related Grades

A course grade of "TF" (Technical Failure) 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

Western recognizes that the adjustment to college 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. All students should strive to achieve at least the minimum level of a 2.000 GPA from their first 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 Dean's List

Students who have attained a grade-point average of 3.700 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

A student whose cumulative grade-point average exceeds that which would place them on probation is 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

Western places students in this category when they fall below the minimum cumulative grade-point averages required (see below). It is an early warning that the student should take steps to improve academic performance. A student is placed on academic probation if that student:

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

The student is expected to raise her/his 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. If a student on probation achieves at least a 2.000 semester grade-point average (even though her/his cumulative grade-point average has not reached the specified level), that student 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 the grade-point average required by their probationary status:

- Students who have attempted fewer than 10 credit hours 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.

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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. 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.

If the Academic Appeals Committee approves a petition, it is authorized to specify conditions, including but not restricted to these general regulations, 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 her/his 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 College of Colorado 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 the student may be submitted, through the Registrar, to the Faculty Academic Policies Committee. Students must submit a petition for academic amnesty before the end of their first term of reentry. Academic Amnesty will be granted to a student only once.

Graduation Requirements

Four-year Graduation Plan

Western State College of Colorado has adopted a four-year graduation plan. If a student signs the four-year graduation plan agreement and fulfills all of the conditions and is still unable to graduate in four years, the College will absorb the cost of the additional coursework required for the degree. The four-year graduation plan may be obtained on-line or from Registration Services.

Operative College 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 Update. 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 College Requirements

A minimum of 120 semester credits are required for graduation. Of the 120 total credits required, students must earn 40 credits in upper-division courses (those courses numbered 300 and 400). 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 College of Colorado. 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 Western.

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

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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 College of Colorado 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 gradepoint average at Western State College of Colorado 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 Western's academic requirements. The College attempts to assist students in monitoring their academic progress by providing an academic advisor, academic program and General Education evaluation forms, on-line grade reports, and copies of the student's permanent record.

Students must submit academic program and General Education evaluation forms through their advisor to the Registrar's Office during the semester in which they expect to earn their 89th credit hour. The Registrar reviews the evaluation forms and updates 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 Registrar's Office 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 Registration Services 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 9 or fewer credits left to complete program requirements and be registered for those credits the following term or have only a capstone, internship, or student teaching to complete and be registered for it the next term it is offered. Students must be in good standing and 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 College assumes as a basic and minimum standard of conduct in academic matters that students be honest and that they 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 are 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. 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 Examinations. Involves giving or receiving unauthorized help before, during or after an examination. Examples of unauthorized help include the use of notes, texts or "crib sheets" during an examination (unless specifically approved by their 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, 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: an "F" grade or a zero for the assignment, an "F" for the course, withdrawal from the course, or suspension or expulsion from the college. 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, college vacation days, and other days when the College is not in session and holding classes.

Academic Administrator. Professional personnel of the College 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 fifteen 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 College of Colorado, and ultimately, to the Board of Trustees.

GENERAL EDUCATION

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 the basis for further studies, and continued intellectual growth.

The thirty-eight credit General Education Program contains two components: Essential Skills (12 credits) and the Liberal Arts (26 credits).

I. Essential Skills (12 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' college career.

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

First-Year Writing Course (3 credits). Complete one of the following:	
ENG 102* Academic Writing	r
ENG 102* Honors Academic Writing	

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

Second Writing Course (3 credits). All degree programs at Western include a designated Second Writing Course. Second Writing Courses are incorporated in the degree requirements listed in the Academic Programs section of this catalog.

Speaking Course (3 credits). Complete the following:	
COTH 200 Public Speaking and Advocacy	cr

Mathematics Course (3 credits). The mathematics requirement varies by program of study (major, emphasis, minor). Many programs have specific requirements beyond the College minimum. In all cases, these specific requirements satisfy the College 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 College may be satisfied by passing, with a "C-" or better, one of the following courses:

r
r
r
r
r
r

^{*}Colorado State Guaranteed General Education Transfer Course

48 General Education

disciplines.

Enrollment in college-level mathematics courses (numbered 100 or above) requires mathematics abilities consistent with the college entry-level expectations defined by the Colorado Commission on Higher Education. Students should consult with their advisor about which Mathematics course to 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:

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

- Students will use social science methods and reasoning.
- Students will demonstrate knowledge of how historical, political, economic, cultural or social contexts shape the human environment.
- Students will demonstrate knowledge of how individuals relate to the social world, past and present.

ANTH 107* Introduction to General Anthropology.................................. 3 cr HIST 260 Introduction to Latin American History 3 cr

- Students will demonstrate knowledge of scientific viewpoints.
- Students will use the scientific method.
- Students will evaluate the impacts of science and technology on society.
- Students will demonstrate scientific literacy.

Eight credits are required from the following:

BIOL 120	Studies in Biology 3 cr
BIOL 130*	Environmental Biology
BIOL 135*	Environmental Biology Laboratory1 cr
	Biological Principles (with laboratory)4 cr
BIOL 151	Diversity and Patterns of Life
BIOL 200	Environmental and Public Health
BIOL 130* BIOL 135* BIOL 150* BIOL 151	Environmental Biology3 crEnvironmental Biology Laboratory1 crBiological Principles (with laboratory)4 crDiversity and Patterns of Life4 cr

^{*}Colorado State Guaranteed General Education Transfer Course

CHEM 101 Introduction to Inorganic Chemistry	
CHEM 111* General Chemistry	
CHEM 112* General Chemistry Laboratory	
CHEM 113 General Chemistry II	cr
CHEM 114 General Chemistry Laboratory II	
GEOL 101* Physical Geology	
GEOL 105* Physical Geology Laboratory	
PHYS 120 Meteorology	
PHYS 140 Introductory Physics (with laboratory)	
PHYS 170 Principles of Physics (with laboratory)	
PHYS 171 Principles of Physics II	
PHYS 197 Solar System Astronomy	
PHYS 200* General Physics (with laboratory)	
PHYS 201 General Physics II	cr
AREA III: Arts and Humanities (9 credits). Courses in Area III focus on the	he
following goals:	
• Students will enhance their appreciation of the modes of creative expression.	
 Students will ask fundamental questions of value and meaning. 	
• Students will survey a variety of ways humans have perceived their world.	
• Students will explore the ways in which the human environment is shaped by	
social, cultural, linguistic, religious, philosophical, and historical circumstances.	
• Students will gain increased awareness of the moral and ethical dimensions of th	e
human condition.	
Nine credits are required from the courses listed below. Students must choose fro	m
Nine credits are required from the courses listed below. Students must choose fro three disciplines. English, French, and Spanish are counted as one discipline for	
three disciplines. English, French, and Spanish are counted as one discipline for General Education purposes.	or
three disciplines. English, French, and Spanish are counted as one discipline f General Education purposes. ART 105* Introduction to Art	or cr
three disciplines. English, French, and Spanish are counted as one discipline for General Education purposes. ART 105* Introduction to Art	or cr cr
three disciplines. English, French, and Spanish are counted as one discipline for General Education purposes. ART 105* Introduction to Art	or cr cr cr
three disciplines. English, French, and Spanish are counted as one discipline for General Education purposes. ART 105* Introduction to Art	or cr cr cr
three disciplines. English, French, and Spanish are counted as one discipline for General Education purposes. ART 105* Introduction to Art	cr cr cr cr
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three disciplines. English, French, and Spanish are counted as one discipline from General Education purposes. ART 105* Introduction to Art	cr cr cr cr cr cr
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three disciplines. English, French, and Spanish are counted as one discipline from General Education purposes. ART 105* Introduction to Art	er er er er er er er
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three disciplines. English, French, and Spanish are counted as one discipline for General Education purposes. ART 105* Introduction to Art	er er er er er er er er er
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three disciplines. English, French, and Spanish are counted as one discipline for General Education purposes. ART 105* Introduction to Art	er er er er er er er er er er
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three disciplines. English, French, and Spanish are counted as one discipline for General Education purposes. ART 105* Introduction to Art	cr cr cr cr cr cr cr cr cr cr cr cr cr c
three disciplines. English, French, and Spanish are counted as one discipline for General Education purposes. ART 105* Introduction to Art	er er er er er er er er er er er er er e
three disciplines. English, French, and Spanish are counted as one discipline for General Education purposes. ART 105* Introduction to Art	cr cr cr cr cr cr cr cr cr cr cr cr cr c

^{*}Colorado State Guaranteed General Education Transfer Course

Colorado State Guaranteed General Education Transfer Courses

Western State College of Colorado 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 can transfer up to 35 to 37 credits of successfully (C- or better) completed State Guaranteed General Education Transfer Courses. Courses must incorporate specific content and competency areas as defined by the State Guaranteed General Education Transfer Curriculum. These courses will automatically transfer and count toward the general education core for any liberal arts or science associate or bachelor's degree program. For more information regarding State Guaranteed General Education Transfer Courses and the 35 to 37 credit State Guaranteed General Education Transfer Curriculum, please consult the Colorado Commission on Higher Education website: http://www.state.co.us/cche (gtPathways link).



ACADEMIC PROGRAMS Accounting (BUAC)

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 and liberal arts courses while still completing all necessary accounting and related business courses. This approach results in graduates who have over half of their coursework 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.

Western State College of Colorado offers three programs of study in Accounting: a Comprehensive Major: Professional Emphasis, a Comprehensive Major: Finance Emphasis, and a Standard Accounting Major.

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 coursework 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 the Comprehensive Major do not need a Minor area of study.

Students interested in becoming a Certified Public Accountant should be aware that many states have passed a requirement for 150 credits to take the CPA exam. In Colorado the requirement continues to be 120 credits. Completion of the Professional Emphasis meets these requirements. In addition, Western offers classes that meet all aspects of the 150-credit requirement. Students should consult with an Accounting faculty advisor to develop an appropriate academic program if they are interested in meeting out-of-state requirements.

The Finance Emphasis in Accounting is designed for students who are interested in a career in accounting or finance but who do not intend to seek professional accounting certification (CPA). This Emphasis includes courses in the traditional areas of managerial finance, financial institutions, investments and corporate finance, and also requires a substantial core of Accounting courses. This approach maximizes the post-graduate opportunities available to students. Students completing the Finance 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.

The Accounting Program at Western State College of Colorado is recognized by the Colorado State Board of Accountancy. Many majors are student members of the Colorado Society of Certified Public Accountants and the American Institute of Certified Public Accountants.

52 Accounting

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": BUAC 201 Introduction to Financial Accounting, BUAC 202 Introduction to Managerial Accounting, BUAC 301 Intermediate Accounting I, BUAC 302 Intermediate Accounting II, BUAC 320 Advanced Management Accounting, and BUAC 350 Income Tax.

While Western furnishes sufficient personal computer resources for its student body, the Accounting faculty at Western strongly recommends that all Accounting majors have their own personal computer, preferably a laptop, by the time the student enrolls in BUAC 301 Intermediate Accounting I.

FACULTY

Professors F. James Hahn, Monica D. Newman, and Scott G. Newman; Lecturer Mary J. Hudson.

DESCRIPTION OF THE PROGRAMS

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

Tool Courses
BUAC 201 Introduction to Financial Accounting
BUAC 202 Introduction to Managerial Accounting3 cr
ECON 202 Microeconomics
ECON 216 Statistics for Business and Economics
MATH 131 Math for the Managerial and Social Sciences3 cr
One of the following:
BUAD 220 Computer Applications in Business3 cr
CIS 120 Information Management and Analysis3 cr
Students are strongly encouraged to complete all Tool Courses before enrolling in
upper-division Supporting or Accounting Nucleus courses.
Accounting Nucleus
BUAC 301 Intermediate Accounting I3 cr
BUAC 302 Intermediate Accounting II3 cr
BUAC 320 Advanced Management Accounting3 cr
BUAC 350 Income Tax3 cr
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:
BUAD 210 Legal Environment of Business
BUAC 498 Accounting Theory, Analysis, and Ethics3 cr
Any two of the following:
BUAC 340 Accounting Information Systems3 cr
BUAC 410 Auditing
BUAC 450 Advanced Accounting3 cr
BUAC 460 Advanced Income Tax3 cr
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:
BUAC 340 Accounting Information Systems3 cr
BUAC 410 Auditing3 cr
BUAC 450 Advanced Accounting3 cr
BUAC 498 Accounting Theory, Analysis, and Ethics3 cr

BUAD 210 Legal Environment of Bus	iness3 cr
	3 cr
	3 cr
	ment3 cr
	3 cr
FINANCE EMPHASIS	
A minimum of 57 credits is required inclu	ding 18 credits of Tool Courses, the 12
credit Accounting Nucleus and the following	
	3 cr
BUAD 210 Legal Environment of Bus	iness3 cr
	3 cr
	ment3 cr
	3 cr
	3 cr
	sis and Strategy3 cr
	3 cr
ECON 361 Money, Banking and Finan	ncial Markets3 cr
Accounting Minor	
A minimum of 18 credits is required:	
	accounting3 cr
	Accounting
	9 cr
Accounting electives	9 Cr

General Education Requirement. The following course in the Accounting Major fulfills the Second Writing Course component of the Essential Skills Requirement: BUAD 309 Business Communication.

Capstone Course Requirement. The following courses in the Accounting Major fulfills the Capstone Course Requirement: BUAC 498 Accounting Theory, Analysis, and Ethics (Standard Accounting Major or Professional Emphasis); or BUAD 495 Advanced Financial Analysis and Strategy (Finance Emphasis).

ACCOUNTING COURSES

BUAC 197 Special Topics

1-6 credits

Course fee: \$13 per credit.

BUAC 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. The influence of financial statements on the distribution of the pool of capital resources, nationally and globally, is also addressed. Prerequisites: completion of the College mathematics competency, or instructor permission. Accounting majors must pass this class with a minimum grade of "C." Course fee: \$39.

BUAC 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. Prerequisite: a grade of "C" or better in BUAC 201. Accounting majors must pass this class with a minimum grade of "C." Course fee: \$39.

BUAC 297 Special Topics Course fee: \$13 per credit.

1-6 credits

BUAC 301 Intermediate 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. Prerequisites: a grade of "C" or better in BUAC 201 and MATH 131. Accounting majors must pass this class with a minimum grade of "C." Course fee: \$39.

BUAC 302 Intermediate Accounting II

3 credits

Continuation of BUAC 301. As the BUAC 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. Prerequisites: BUAC 301. Accounting majors must pass this class with a minimum grade of "C." Course fee: \$39.

BUAC 320 Advanced Management Accounting

3 credits

A study of the information needed by managers for planning, control and decision-making. 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 nonroutine 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. Prerequisites: BUAC 202 and BUAC 301. Accounting majors must pass this class with a minimum grade of "C." Course fee: \$39.

BUAC 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. Prerequisites: BUAC 201, and either BUAD 220 or a CIS course. Course fee: \$39.

BUAC 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. Prerequisite: minimum sophomore standing. Accounting majors must pass this class with a minimum grade of "C." Course fee: \$39.

BUAC 397 Special Topics

1-6 credits

Course fee: \$13 per credit.

BUAC 410 Auditing

3 credits

An examination of the standards and methods used by certified professional accountants when attesting to the fairness of corporate financial statements. The course begins with an introduction to the profession of accounting, its code of ethics, formal auditing standards and pronouncements, as well as the legal environment in which it operates. Auditing concepts and applications are then considered. These include internal control, sampling techniques, audit planning, internal control and balance-audit programs, and working-paper documentation. Emerging government policies concerning the auditor's responsibilities for fraud detection and the effect of these policies on the accounting profession are also discussed. Prerequisite: BUAC 302. Course fee: \$39.

BUAC 450 Advanced 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 needs 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: BUAC 302. Course fee: \$39.

BUAC 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: BUAC 350. Course fee: \$39.

BUAC 490 Workshop in Accounting

1-6 credits

A specialized study area dynamically suited to small-group analysis. Course fee: \$13 per credit.

BUAC 491 Seminar in Accounting

3 credits

A boardroom approach to problem solving through research, discussion, and analysis. Course fee: \$39.

BUAC 492 Independent Study

1-6 credits

A singular investigation into a unique problem arrived at between the researcher and the advisor. Course fee: \$13 per credit.

BUAC 493 Problems in Accounting

1-6 credits

A small-group approach to contemporary problems which require discussion, investigation, business-world coordination, and resolution. Course fee: \$13 per credit.

BUAC 497 Special Topics

Course fee: \$13 per credit.

1-6 credits

BUAC 498 Accounting Theory, Analysis, and Ethics

3 credits

A Capstone Course which investigates the theories upon which accounting measurement and valuation are based. Requires the student to apply, integrate, and critically analyze all aspects of financial accounting procedures and reporting, in light of the three major streams accounting theory and research have taken: income determination theory, the efficient markets hypothesis, and agency theory. Students are expected to make significant written and oral contributions to the class. Accounting ethics and professional responsibilities are also covered. Each student is expected to leave the class with his or her own perspective of accounting's place in society and its prospects for the future. This is the Capstone Course for the Standard Accounting Major and the Professional Emphasis. Prerequisite: senior status. Course fee: \$39.

BUAC 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. Course fee: \$13 per credit.



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 ethnology involves classroom, laboratory, and field work. Electives focus primarily on huntergatherer adaptations. Students majoring in Anthropology at Western apply information from the classroom as they participate in field studies. Majors are required to attend the Anthropology Field School, offered every summer session. 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, forensics and law enforcement, teaching, community planning, international business, and governmental research. With additional graduate work, careers in ethnology, archaeology, and physical anthropology are possible.

FACULTY

Professor Mark A. Stiger; Lecturer Casey D. Dukeman.

DESCRIPTION OF THE PROGRAM

Anthropology Major: Standard Program

A minimum of 38 credits including 32 credits of Anthropology and 6 credits of supporting course work are required.

Required courses:

ANTH 107 Introduction to General Anthropology3 cr
ANTH 218 Physical Anthropology (with laboratory)4 cr
ANTH 219 Archaeology (with laboratory)4 cr
ANTH 230 Ethnology (with laboratory)4 cr
ANTH 465 Advanced Theory and Method in Anthropology3 cr
Two of the following:
ANTH 319 Paleolithic Archaeology3 cr
ANTH 321 Post-Pleistocene Adaptations in the Old World3 cr
ANTH 333 Archaeology of Colorado3 cr
ANTH 344 Indians of North America3 cr
Eight credits of the following field and laboratory courses (ANTH 469 may be repeated for 8 credits):
ANTH 322 Analysis of Material Culture (with laboratory)4 cr
ANTH 469 Anthropology Field School4 cr
Required Supporting Courses:
MATH 213 Probability and Statistics3 cr
SCI 202 Scientific Writing
Anthropology Minor
A minimum of 18 credits, including:
ANTH 107 Introduction to General Anthropology3 cr
ANTH 465 Advanced Methods and Theory in Anthropology3 cr
ANTH 469 Anthropology Field School4 cr

Eight credit.	s of the following:	
ANTH 218	Physical Anthropology	4 cr
ANTH 219	Archaeology	4 cr
ANTH 230	Ethnology	4 cr
ANTH 319	Paleolithic Archaeology	3 cr
ANTH 321	Post-Pleistocene Adaptations in the Old World	3 cr
ANTH 322	Analysis of Material Culture	4 cr
ANTH 333	Archaeology of Colorado	3 cr
	Indians of North America	
ANTH 369	Anthropology Field Trip	1-3 cr

Students minoring in Anthropology are encouraged, but not required to take MATH 213 Probability and Statistics and CIS 120 Information Management and Analysis.

General Education Requirement. The following course in the Anthropology Major fulfills the Second Writing Course component of the Essential Skills Requirement: SCI 202 Scientific Writing

Capstone Course Requirement. The following course in the Anthropology Major fulfills the Capstone Course Requirement: ANTH 465 Advanced Methods and Theory in Anthropology.

ANTHROPOLOGY COURSES

ANTH 107 Introduction to General Anthropology

3 credits

A general introductory course in anthropology. All three sub-fields of modern anthropology: cultural anthropology (archaeology and ethnography), physical anthropology, and linguistics are covered.

ANTH 197 Special Topics

1-6 credits

ANTH 218 Physical Anthropology (with laboratory)

4 credits

A course with a laboratory which examines biological variation in modern human populations and biological evolution of humans as shown by the fossil record. Prerequisite: ANTH 107. Course fee: \$35.00.

ANTH 219 Archaeology (with laboratory)

4 credits

A course with a laboratory, covering methods and theory of modern archaeology. Emphasis is on how archaeologists understand the past. A general chronology of world prehistory is presented. Prerequisite: ANTH 107. Course fee: \$35.00.

ANTH 230 Ethnology (with laboratory)

4 credits

A course with a laboratory which presents a world perspective of modern hunter-gatherer and simple agricultural peoples. Also describes the methods used by ethnologists. Prerequisite: ANTH 107. Course fee: \$35.00.

ANTH 297 Special Topics

1-6 credits

ANTH 319 Paleolithic Archaeology

3 credits

An in-depth study of the early development of culture-bearing humans. The evolution of Paleolithic lifeways will be traced, from early pebble tool cultures, through the peopling of the Old World by Homo erectus, to the coexistence of Neanderthals and Cro-Magnon in Europe, and finally to the advent of specialized hunters during the Upper Paleolithic. The course will cover Paleolithic culture history as well as methods. Artifact analysis will be included. Prerequisite: ANTH 218 or ANTH 219.

ANTH 321 Post-Pleistocene Adaptations in the Old World

3 credits

An overview of culture change from the Mesolithic to the Iron Age in the Old World. An anthropological perspective on the development of complex societies as seen from archaeological data from Western Europe, Africa, the Mediterranean, and China. Cross-cultural comparisons of plant and animal domestication, early metallurgy, and

the rise of the state focus on processes of adaptive shifts in these areas. The course explores the history of culture as well as methodological approaches and anthropological explanations of these long-term changes. Prerequisite: ANTH 219.

ANTH 322 Analysis of Material Culture (with laboratory) 4 credits

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 will include lithics, fauna, ceramics, and botanical remains. An excellent preparation for (or follow-up to) the Archaeological Field School. Prerequisite: ANTH 219. Course Fee: \$50.

ANTH 333 Archaeology of Colorado

3 credits

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 course is a recommended preparatory course for the Archaeological Field School in Colorado or the Archaeological Field Trip. Prerequisite: ANTH 219.

ANTH 344 Indians of North America

3 credits

A detailed look at the native people found in North America. Emphasis is on the Gunnison area and the southwestern United States. Several field trips are anticipated.

ANTH 369 Anthropology Field Trip

1-3 credits

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 is offered during the Summer session and may be taken for a maximum of six hours. Course Fee: \$70-300.

ANTH 392 Independent Study in Anthropology

1-4 credits

ANTH 397 Special Topics

1-6 credits

ANTH 465 Advanced Methods and Theory in Anthropology 3 credits An advanced course for Anthropology minors. Especially recommended for students

An advanced course for Anthropology minors. Especially recommended for students planning to pursue graduate school or employment in anthropology. Discussions detail the intellectual growth of anthropology. Prerequisite: ANTH 107.

ANTH 469 Anthropology Field School

4 credits

A field-experience course in which students learn and perform proper field techniques. Some laboratory work may be done. This course is offered during the summer session and may be taken for a maximum of eight hours. Prerequisites: ANTH 107 and ANTH 219 or ANTH 230 or instructor permission. Course fee: \$50.00.

ANTH 497 Special Topics

1-6 credits.



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, sustainable architecture and the built environment 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, graphic design, or sustainable architecture and the built environment design.

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

To apply for admission, a student must:

- 1. submit an application for admission. An application form is available at: www.western.edu/art/application.pdf;
- 2. present a portfolio of recent art work with 20 labeled slides presented in a slide holder or on CD (submit a self-addressed, stamped envelope for return of slides or CD);
- 3. have an overall grade point average of 2.0 or better.

All majors must have an overall grade point average of 2.5 or better in order to graduate.

FACULTY

Professors Albert R. Caniff, Jr., Harry E. Heil, Jerry J. Kowal, Terri J. Lennon, Heather S. Orr, and Ludwig J. Stromayer; Associate Professor Don E. Seastrum.

DESCRIPTION OF THE PROGRAMS

Bachelor of Arts Degree in Art

All majors require the 24-credit Art Foundation Courses. A senior exhibition or thesis is the Capstone and is required of all majors. A quality representation of the student's artwork from the junior and senior years will be used for the senior exhibition.

Art Foundation Courses

Fall offerings

ART 119	Foundation Drawing I	cr
	Design and Color Theory Concepts	
	Art History I	

ART 319 Intermediate Drawing	
Spring offerings ART 219 Foundation Drawing II	cr
Art Major: Standard Program	
A minimum of 36 credits is required including the 24-credit Art Foundation cours 12 credits of Art electives (9 credits must be at the 300 or 400 level), a Sen Exhibition, and ART 000 with a grade of "S" each semester in residence.	
Art Major: Comprehensive Programs	
STUDIO ART EMPHASIS - Painting, Photography, Printmaking, Ceramics, Jewel	ry,
and/or Sculpture A minimum of 54 credits is required including the 24-credit Art Foundation Cours 24 credits of Art electives (9 credits must be at the 300 or 400 level), 6 credits non-art supporting courses selected in consultation with an Art advisor, a Sen Exhibition and ART 000 with a grade of "S" each semester in residence.	of
GRAPHIC DESIGN EMPHASIS A minimum of 54 credits is required including the 24-credit Art Foundation Cours 3 credits of Art electives, 3 credits of non-art supporting courses selected in cons tation with an Art advisor, a Senior Exhibition, ART 000 with a grade of "S" ea semester in residence, and the following 24 credits: Fall Offerings	ul-
ART 246 Introduction to Photography	cr
Spring Offerings ART 271 Calligraphy / Typography	cr cr
Sustainable Architecture and the Built Environment Design Emphasis A minimum total of 54 credits is required including the 24-credit Art Foundati Courses, a Senior Exhibition, ART 000 with a grade of "S" each semester residence, and the following 30 credits: Fall offerings:	
ART 161 Graphic Communications	cr cr cr
Spring offerings: ART 162 Computer-Aided Design	cr cr cr
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In consultation with an Art advisor, BIOL 130 Environmental Biology or ART 499 Internship may be substituted for ART 263 Design Applications and Fabrication.

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 arranged through the Teacher Education Program (see description under Education). A minimum of 48 credits is required including the 24-credit Art Foundation courses, a Senior Exhibition, ART 000 with a grade of "S" each semester in residence, and the following 24 credits:

Six of the following (18 credits total): Fall offerings Spring offerings ART 271 Calligraphy / Typography3 cr Required Art Methods courses (6 credits): Fall offerings ART 368 Methods of Teaching Art in the Middle School......2 cr Spring offerings

ART HISTORY AND THEORY EMPHASIS

A minimum of 54 credits is required including the 24 credits of Foundation courses, 6 credits of Art electives, 6 credits of non-art supporting courses selected in consultation with an Art advisor, a Senior Thesis, ART 000 with a grade of "S" each semester in residence, and the following 18 credits:

Fall offerings

ART 324	Art: Context and Criticism	r
ART 325	Women Artists	r
ART 422	Art of Native North America	r
Spring offering	gs	
ART 321	American Art: Colonial to Modern3 c	r
ART 421	Art of Native Middle, Central, and South America3 c	r
ART 424	Modern Art History, Aesthetics, Theory, and Criticism3 c	r

Bachelor of Fine Arts Degree in Art

To receive and maintain Bachelor of Fine Arts (B.F.A.) in Art candidate status each semester, a student 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. A student's advisor will be responsible for critiques, guidance, and help in the completion of the senior exhibition.

At the completion of the B.F.A. Foundation program, the student's portfolio 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 during their sophomore or junior year, must present a portfolio of recent art works, specify an emphasis of study, be in good academic standing and have completed the following courses: Fall Offerings Spring Offerings All Bachelor of Fine Arts in Art Majors require the 33-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 the student's artwork from the junior and senior years will be used for the senior exhibition. **BFA Foundation Courses** Fall offerings ART 119 Foundation Drawing I3 cr ART 319 Intermediate Drawing3 cr Spring offerings ART 223 Art History II3 cr ART 419 Advanced Drawing3 cr TWO DIMENSIONAL ART: PAINTING EMPHASIS A minimum of 63 credits is required including the 33-credit BFA Foundation Courses, 6 credits of Art electives, a Senior Exhibition, ART 000 with a grade of "S" each semester in residence, and the following 24 credits: Fall offerings Spring offerings Offered both Fall and Spring ART 480 Advanced Painting (repeated for 9 credits)......3 cr TWO DIMENSIONAL ART: PHOTOGRAPHY EMPHASIS A minimum of 63 credits is required including the 33-credit BFA Foundation Courses, 6 credits of Art electives, a Senior Exhibition, ART 000 with a grade of "S" each semester in residence, and the following 24 credits: Fall offerings Spring offerings

Offered both Fall and Spring ART 446 Advanced Photography (repeated for 9 credits)3 cr
Two DIMENSIONAL ART: PRINTMAKING EMPHASIS A minimum of 63 credits is required including the 33-credit BFA Foundation Courses, 6 credits of Art electives, a Senior Exhibition, ART 000 with a grade of "S' each semester in residence, and the following 24 credits:
Fall offerings ART 256 Introduction to Printmaking
Spring offerings ART 284 Airbrush Techniques
THREE DIMENSIONAL ART: CERAMICS EMPHASIS A minimum of 63 credits is required including the 33-credit BFA Foundation Courses, 6 credits of Art electives, a Senior Exhibition, ART 000 with a grade of "S' each semester in residence, and the following 24 credits:
Fall offerings ART 203 Introduction to Ceramics 3 cr ART 230 Introduction to Sculpture 3 cr ART 235 Introduction to Jewelry 3 cr ART 491 Seminar in Art 3 cr
Spring offerings ART 303 Intermediate Ceramics
THREE DIMENSIONAL ART: JEWELRY EMPHASIS A minimum of 63 credits is required including the 33 credits of BFA Foundation Courses, 6 credits of Art electives, a Senior Exhibition, ART 000 with a grade of "S' each semester in residence, and the following 24 credits: Fall offerings
ART 203 Introduction to Ceramics 3 cr ART 230 Introduction to Sculpture 3 cr ART 235 Introduction to Jewelry 3 cr ART 491 Seminar in Art 3 cr
Spring offerings ART 335 Intermediate Jewelry
THREE DIMENSIONAL ART: SCULPTURE EMPHASIS A minimum of 63 credits is required including the 33-credit BFA Foundation Courses, 6 credits of Art electives, a Senior Exhibition, ART 000 with a grade of "S' each semester in residence, and the following 24 credits: Fall offerings
ART 203 Introduction to Ceramics 3 cr ART 230 Introduction to Sculpture 3 cr ART 235 Introduction to Jewelry 3 cr ART 491 Seminar in Art 3 cr
Spring offerings ART 330 Intermediate Sculpture

ART 430 Advanced Sculpture (repeated for 9 credits)3 c	r
Design Art: Graphic Design Emphasis	,1
A minimum of 63 credits is required including the 33-credit BFA Foundation	าท
Courses, a Senior Exhibition, ART 000 with a grade of "S" each semester	
residence, and the following 30 credits:	111
Fall offerings	
ART 246 Introduction to Photography3 c	r
ART 256 Introduction to Printmaking	
ART 270 Graphic Design and Illustration	
ART 375 Magazine Production (one semester required)	
ART 491 Seminar in Art	
Spring offerings	
ART 271 Calligraphy / Typography3 c	cr
ART 284 Airbrush Techniques3	cr
ART 371 Intermediate Graphic Design3	
ART 375 Magazine Production (one semester required)3	cr
Offered both Fall and Spring	
ART 471 Advanced Design and Illustration (repeated for 6 credits)3	er
DESIGN ART: SUSTAINABLE ARCHITECTURE AND THE BUILT ENVIRONMENT DESIGN	J
Emphasis	
A minimum of 63 credits is required including the 33-credit BFA Foundation Course	es.
a Senior Exhibition, ART 000 with a grade of "S" each semester in residence, and the	
following 30 credits:	
Fall offerings	
ART 161 Graphic Communications	cr
ART 260 Architecture: Form, Structure, and Function in Design*3	
ART 286 Watercolor	
ART 362 Graphic and Three Dimensional Modeling*3	
ART 364 Environmental Design Issues in the Human-Built World*3	
ART 491 Seminar in Art	cr
Spring offerings	
ART 162 Computer-Aided Design	cr
ART 262 Presentation Methods*	
ART 360 Sustainable Energy Systems, Materials, and Processes*3	
ART 462 Environmental Architecture*	cr
*offered in alternate years (subject to change)	
Art Minor	
A minimum of 18 credits is required:	
ART 119 Foundation Drawing I	
Art electives	cr
One of the following:	
ART 171 Design and Color Theory Concepts	
ART 272 Design and Three dimensional Concepts	cr
One of the following:	
ART 222 Art History I	
ART 223 Art History II	cr
General Education Requirement. The following course in the Art Major fulfills the	he

General Education Requirement. The following course in the Art Major fulfills the Second Writing Course component of the Essential Skills Requirement: ART 222 Art History I. Art Majors are encouraged to take MATH 105 Mathematics for the Liberal Arts, to fulfill the Mathematics Course Requirement.

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. Attending all of the posted events in each semester qualifies as a "satisfactory" grade. Each semester of ART 000 with a grade of "S" is required of all Art majors prior to graduation.

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 will be announced each time the course is offered. Some examples include Architecture, Native American Art, Non-Western Art, Women In Art, Crafts, and European Art. Students may only take this course once for credit. (Does not count toward the Art major or minor.)

ART 106 Studio Art for the Non-Artist

3 credits

A course designed to give the student a "hands-on" experience in various studio activities: drawing, design, and painting. The theories and processes of art will be discussed on a nonprofessional level. (Does not count toward the Art major or minor.) Course fee: \$20.

ART 119 Foundation Drawing I

3 credits

A beginning foundation course in drawing with special attention to line, value, perspective, texture, and shape. Landscape, still life, and other forms will be used as subject matter. The visual elements and principles of organization in relationship to perceiving both flat and illusionary space will be explored. Black and white media will be exclusively practiced. Prerequisite: Art major or minor status. Course fee: \$50.

ART 161 Graphic Communications

3 credits

Graphic communication methods are used to compliment the written word as students learn to develop orthographic perspective drawings, graphs and charts, maps, and other methods of recording visual data. Sketching, as a beginning of idea formation, is used throughout, followed by perspective drawing, shade and shadow, and the drawing of isometric solids. Computer graphics are explored as a means by which students can generate and import images to enhance their communication skills. The development of the required portfolio is introduced as part of the content of this course. Course fee: \$20.

ART 162 Computer-Aided Design

3 credits

A course which introduces the language of computer graphics to enable students to communicate their ideas in a graphic format. Visual thinking, problem solving, and systematic methodologies for development and presentation of ideas is practiced using Vector Works software. Prerequisite: ART 161. Course fee: \$20.

ART 171 Design and Color Theory Concepts

3 credits

An introduction to design organization with an emphasis on the exploration of line, value, texture, and shape. Color problems and three-dimensional forms will also be explored. Prerequisite: Art major or minor status. Course fee: \$10.

ART 197 Special Topics

1-6 credits

ART 203 Introduction to Ceramics

3 credits

A beginning course concerned with some of the basic techniques and processes of ceramics: pinch, coil, slab, and some wheelwork. Prerequisite: ART 272. Course fee: \$70.

ART 219 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. Course fee: \$50.

ART 222 Art History I

3 credits

A survey of western and non-western art from approximately 30,000 years ago to the fourteenth 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 fourteenth 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 exploratory course consisting of various processes: carving, modeling, and casting. Aesthetic qualities and craftsmanship of the sculptural forms will be emphasized. Prerequisite: ART 272. Course fee: \$94.

ART 235 Introduction to Jewelry

3 credits

A course concerning itself with the creative use of silver and precious gemstones in the making of jewelry. Design and craftsmanship will be stressed. Prerequisite: ART 272. Course fee: \$40.

ART 239 Fiber Arts

3 credits

A course which stresses the creative use of all fiber materials and a variety of techniques. The student can elect to learn to weave on the floor loom or by hand weaving and construction. Design and craftsmanship will be emphasized. Course fee: \$20.

ART 246 Introduction to Photography

3 credits

A course covering the basic tenets and skills of photographic methods centering on black-and-white methods. Lectures introduce topic areas that the student must practice in lab sessions. Students must supply their own "quality" 35mm or 120mm camera and pay for materials used. Prerequisites: ART 171 and 219. Course fee: \$78.

ART 256 Introduction to Printmaking

3 credits

A beginning course in printmaking concerning basic techniques in lithography, woodcut, etching, and the collagraph. Emphasis will be on the traditional approaches in printmaking. Prerequisites: ART 171 and 219. Course fee: \$65.

ART 260 Architecture: Form, Structure, and Function in Design 3 credits A study of the use of form, structure, and function in the natural and human-made world. Specific cases of incompatibility of present-day form, structure and function, and the development and use of new architectural components that capitalize on unique geometry and materials will be studied. Course fee: \$10.

ART 262 Presentation Methods

3 credits

Architectural presentation techniques will be studied and development of student competence in the use of these techniques will be emphasized. One- and two-point perspective in the illustration of architectural form, along with isometric drawing and procedural flow charting, will be addressed. Various media will be used throughout the class. Prerequisites: ART 161 and ART 162. Course fee:\$20.

ART 263 Design Applications & Fabrication

3 credits

This course serves to link design theory with practice. Planning, construction practice, cooperative effort, quality expression in one's work, and on-site problem solving are major elements of this class. Whenever possible, this class will be involved in service learning. Course fee: \$10.

ART 270 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 will be explored. This course will give emphasis to illustration, new techniques, materials, and tools used by the designer. Prerequisite: ART 119 and 171. Course fee: \$85.

ART 271 Calligraphy/Typography

3 credits

A study of individual letter forms as design elements that relate to visual communication. Prerequisite: ART 171. Course fee: \$30.

ART 272 Design and Three Dimensional Concepts

3 credit

An introduction to design organization with the emphasis on the exploration of mass, texture, process, and techniques in the three dimensional area. Tools and materials will be explored. Prerequisite: Art major or minor status. Course fee: \$20.

ART 284 Airbrush Techniques

3 credits

A course consisting of the use of the airbrush as a tool for painting, drawing, and design. The multiple use of the tool within traditional and non-traditional directions, along with tool maintenance, will be stressed. Prerequisites: ART 171 and ART 219. Course fee: \$35.

ART 285 Techniques of Painting

3 credits

A beginning course in oil painting, using basic tools, materials, techniques, and the development of compositional methods. Prerequisites: ART 171 and ART 219. Course fee: \$30.

ART 286 Watercolor

3 credits

A course using both the traditional and contemporary methods of watercolor. The various watercolor media will be explored. Prerequisites: ART 171 and ART 219. Course fee: \$20.

ART 297 Special Topics

1-6 credits

ART 303 Intermediate Ceramics

3 credits

A course using the technical and experimental approaches to creative work in ceramics. Craftsmanship will be stressed, dealing mainly with wheel and some glaze work. Prerequisites: ART 119, ART 171, and ART 203. Course fee: \$64.

ART 319 Intermediate Drawing

3 credits

An intermediate course in figure drawing with emphasis on structure, figure compositions, and portrait studies from the model, using various drawing media and techniques. Prerequisite: ART 219. Course fee: \$50.

ART 321 American Art: Colonial to Modern

3 credits

A survey of the arts of America from the 17th century to the present. This course will consider 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 status or instructor permission.

ART 324 Art: Context and Criticism

3 credits

This course involves research and intensive review and criticism of special topics/issues in Art History. Appraisal of thoughts and assumptions in painting, sculpture, and architecture from prehistoric times to the present. An important aspect of this program is to develop the ability to recognize and comprehend the historical significance of specific major periods and styles. The content of this course will vary as the instructor will select different topics/issues. Prerequisites: ART 222 and ART 223.

ART 325 Women Artists

3 credits

A survey of women artists and their work from the sixteenth century (Renaissance) to contemporary times. The contributions of women artists, and the changing roles of women in the western tradition of the visual arts will be examined within relevant historical, political, social, theoretical, and gender contexts. Prerequisite: junior status or instructor permission.

ART 330 Intermediate Sculpture

3 credits

A course designed for the development of individual sculptural direction in all media. Advanced welding, molding, and casting techniques are among the media explored. Prerequisites: ART 119, ART 171, and ART 230. Course fee: \$94.

ART 335 Intermediate Jewelry

3 credits

The advanced student explores the expressive possibilities of his or her own individual jewelry direction. Students will collaborate with the instructor to plan a suitable and particular direction for study. Prerequisites: ART 119, ART 171, and ART 235. Course fee: \$40.

ART 346 Intermediate Photography

3 credits

An advanced photography course with a variable direction. The content will be announced each time the course is offered. Prerequisites: ART 119, ART 171, and ART 246. Course fee: \$78.

ART 356 Printmaking: Lithography/Monoprint

3 credits

A course which includes techniques in the lithographic and the monoprint processes. Emphasis is on the traditional and experimental approaches in printmaking. Prerequisites: ART 219 and ART 256. Course fee: \$65.

ART 357 Printmaking: Intaglio/Relief

3 credits

A course which includes techniques in etching and engraving on copper and zinc plates and the collagraph process. Relief printmaking will include woodcut and wood engraving. Emphasis is on traditional and experimental approaches. Prerequisites: ART 219 and ART 256. Course fee: \$65.

ART 360 Sustainable Energy Systems, Materials, and Processes 3 credits A course designed to bring about an understanding of energy, resources, and new materials in an architectural context. The limitations and potential of alternative and conventional systems will be set in the context of "Appropriate Technology." An emphasis in this course will be in the designing of sustainable futures.

ART 362 Graphic and Three Dimensional Modeling 3 credits

The modeling of structures and systems will be emphasized. Three dimensional modeling, including landscapes, will be practiced by students in the development of their personal styles. Graphic and computer models which illustrate systems and processes will also be studied. Prerequisite: ART 262. Course fee: \$20.

ART 364 Environmental Design Issues in the Human-Built World 3 credits A course that explores the impacts of the human-built world on people and the environment. The psychological, aesthetic, functional, and natural environment are considered primarily in the urban and suburban setting. Writings and works of architectural philosophers and practitioners are evaluated in retrospect and prospect. Philosophical and design solutions are developed by students. Prerequisites: junior status or instructor permission.

ART 365 Methods of Teaching Art in the Elementary School 1 credit A study of the place of art in the elementary school. The students will be exposed to the constructs in the discipline and enriched through expressive studio experiences. Course fee: \$20.

ART 366 Methods of Teaching Art in the Secondary School 3 credits

A study of the place of art in the secondary school curriculum and an exploration of a variety of materials and processes suitable for secondary art education. Lecture and studio. Course fee: \$20.

ART 368 Methods of Teaching Art in the Middle School 2 credits

A study of Art Education in the middle schools. The students are exposed to the constructs in the discipline and enriched through expressive studio experiences. This course is a required course specifically designed for prospective Art teachers who are enrolled in the K-12 Art Education Licensure program. Course fee: \$20.

ART 371 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 will include past and current design trends, tools, and computer related graphics. Prerequisite: ART 270. Course fee: \$85.

ART 375 Magazine Production

3 credits

A course which allows eligible students to integrate Journalism and Art coursework into a study of magazine production. Faculty supervise students in design and production work that leads to the publication of the campus Western Pathfinder magazine, both hard copy and on line versions. May be taken for a maximum of twelve credits. Prerequisite: ART 371 and instructor permission. Course fee: \$80.

ART 381 Painting: Oil

3 credits

An oil painting course with emphasis on original compositions. Experimental and traditional techniques are included. Prerequisite: ART 285. Course fee: \$30.

ART 382 Painting: Varied Media

3 credits

A painting course with emphasis on original compositions. Techniques include various media, such as egg tempera, encaustic, acrylic, and other varied media. Prerequisite: ART 285. Course fee: \$30.

ART 386 Intermediate Watercolor

3 credits

A watercolor course with emphasis on original compositions. Experimental and traditional techniques are included. Prerequisite: ART 286. Course fee: \$20.

ART 390 Workshop in Art

3 credits

A course that involves research, review, and critiques of advanced problems in art: two dimensional, three dimensional, or designing. May be repeated for a maximum of 9 credits (3 per semester). Prerequisites: junior or senior status and instructor permission. Students must have completed 300-level course in chosen emphasis. Course fee: \$40.

ART 397 Special Topics

1-6 credits

ART 400 Artist's Portfolio/Senior Exhibition

3 credits

A course designed to help the art student develop a portfolio of recent work. The portfolio will enhance the student's chances in making a successful search for a job, gallery representation, or application to graduate school. This course aids students in preparation for their Senior Exhibition. Prerequisite: senior standing. Course fee: \$30.

ART 403 Advanced Ceramics

3 credits

The advanced student explores the expressive possibilities of his or her own individual ceramic direction. Instruction and experimentation of glaze calculation will be the main focus of this course. Kiln firing and kiln building will be included. Students collaborate with the instructor to plan a suitable and particular direction of study. May be taken for a maximum of 9 credits (3 credits per semester). Prerequisite: ART 303. Course fee: \$70.

ART 419 Advanced Drawing

3 credits

An advanced course 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. May be taken for a maximum of 9 credits (3 credits per semester). Prerequisite: ART 319. Course fee: \$50.

ART 421 Art of Native Middle, Central, and South America 3 credits
A study of the arts and cultures of the Pre-Contact peoples in the Americas south of the
United States. The arts of these civilizations are examined within their socio-political and
religious contexts. Information is drawn from iconographic, epigraphic, archaeological,
and ethnographic sources. Prerequisite: junior status or instructor permission.

ART 422 Art of Native North America

3 credits

A study of the art forms of the native cultures north of Mexico. Many aspects of Native American life will be explored—prehistory, social, etc. Prerequisite: junior status or instructor permission.

ART 424 Modern Art History, Aesthetics, Theory, and Criticism 3 credits
This class explores trends and developments in the Western tradition of the visual arts
from the mid-nineteenth century to the present, considering Modernism, PostModernism, 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: ART 324.

ART 430 Advanced Sculpture

3 credits

The advanced student explores the expressive possibilities of his or her own individual sculptural direction. Students collaborate with the instructor to plan a suitable and particular direction of study. May be taken for a maximum of 9 credits (3 credits per semester). Prerequisite: ART 330. Course fee: \$94.

ART 435 Advanced Jewelry

3 credits

The advanced student explores the expressive possibilities of his or her own individual jewelry direction. Students collaborate with the instructor to plan a suitable and particular direction for study. May be taken for a maximum of 9 credits (3 credits per semester). Prerequisite: ART 335. Course fee: \$40.

ART 446 Advanced Photography

3 credits

The advanced student explores the expressive possibilities of his or her own individual direction in photography. Emphasis is in formal art design. May be taken for a maximum of 9 credits (3 credits per semester). Prerequisite: ART 346. Course fee: \$78.

ART 457 Advanced Printmaking

3 credits

An advanced course in printmaking where the student will explore the expressive possibilities of his or her own individual printmaking direction. The content is announced each time the course is offered. May be taken for a maximum of 9 credits (3 credits per semester). Prerequisite: ART 356 or ART 357. Course fee: \$65.

ART 462 Environmental Architecture

3 credits

A course which studies the human living environment in the structures we inhabit, with sensitivity toward physical, functional, and aesthetic needs. Natural systems are integrated into human-built structures wherever possible, and an emphasis is placed on materials, structure, efficiency, and aesthetics. Prerequisites: ART 260, ART 262, ART 360, and ART 362. Course fee: \$20.

ART 471 Advanced Design and Illustration

3 credits

A study of advanced problems in graphic design involving the developmental process of concept through production. Illustrative methods and tools (including computer-aided illustration) are utilized. Packaging and three dimensional design is included. May be taken for a maximum of 9 credits (3 credits per semester). Prerequisite: ART 371. Course fee: \$85.

ART 480 Advanced Painting

3 credits

A course of representational and nonrepresentational painting, using oil or related media. May be taken for a maximum of 9 credits (3 credits per semester). Prerequisites: ART 285 and ART 382, and one of the following: ART 284, ART 286, or ART 381. Course fee: \$30.

ART 486 Advanced Watercolor

3 credits

A course of representational and nonrepresentational watercolor painting, using related media. May be taken for a maximum of 9 credits (3 credits per semester). Prerequisites: ART 286 and ART 386, and one of the following: ART 284, ART 285, or ART 381. Course fee: \$20.

ART 490 Workshop in Art

3 credits

A course that involves research, review, and critiques of advanced problems in art: two dimensional, three dimensional, or design. May be repeated for a maximum of 9 credits (3 credits per semester). Prerequisites: senior status and instructor permission. Students must have completed 400-level course in chosen emphasis. Course fee: \$40.

ART 491 Seminar in Art

3 credits

The seminar investigates and evaluates contemporary topics in art. Students are exposed to how artists express their ideas through current and ongoing visiting artist programs, exhibitions, and workshops. Students are encouraged to select and develop their own research topics. The instructor facilitates the seminar through lecture, scheduling of events, and directing class discussions. Prerequisites: B.F.A. candidate and senior standing. Course fee: \$30.

ART 492 Directed Study

1-6 credits

A course 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

1-12 credits

A course which offers supervised practical experiences in art. With faculty approval, credit earned in this course may be applied to the Major or Minor in Art. Consult advisor for details.



Biology (BIOL)

The Biology Program provides broad training in the life sciences, which can lead to a variety of careers. Because biology careers span a broad spectrum, five different emphases are offered: cell and molecular biology, environmental biology and ecology, general biology, pre-allied health, and 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 Biology Program provides a comprehensive educational experience consistent with the liberal arts philosophy of the College. 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 corporations and local agencies.

Many Biology 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.

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

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. This concentration is intended for students seeking certification as professional wildlife biologists.

The General Biology Emphasis allows students to major in Biology while pursuing an education rich in the liberal arts. This Emphasis is appropriate for a student seeking licensure as an elementary teacher (grades K-6).

The Pre-Allied Health Emphasis is designed for students planning to enter professional programs in allied health such as chiropractic, dentistry, epidemiology, medical technology, medicine, nursing, optometry, pharmacy, physical therapy, podiatry, public health, and physician's assistant programs.

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

FACULTY

Professors Peter H. Gauss, Curtis J. Gravis, Terry L. Mullen and John B. Sowell; Associate Professors Kevin D. Alexander, Robin A. Bingham, and Jessica R. Young; Thornton Chair Patrick A. Magee;

Thornton Visiting Professor Demetrius P. Gravis;

Visiting Professor Gregory R. Schrott;

Lecturer Mark A. Lung.

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 19-credit Biology Nucleus.
Biology Nucleus BIOL 150 Biological Principles (with laboratory)
CELL BIOLOGY/PRE-MEDICINE EMPHASIS The Cell Biology / Pre-Medicine Emphasis requires a minimum of 69 credits, including the 19-credit Biology Nucleus, 16 additional credits in Biology, and 34 credits of supporting courses. Required Biology courses: BIOL 313 Cell and Genetics Laboratory
Three of the following: BIOL 342 Microbiology (with laboratory)
Minimum supporting courses: CHEM 111 General Chemistry I
Environmental Biology and Ecology Emphasis The Environmental Biology and Ecology Emphasis requires a minimum of 64 credits, including the 19-credit Biology Nucleus, 19 additional credits in Biology and 26 credits of supporting courses. Required Biology Courses: BIOL 302 Ecology Laboratory and Recitation

One of the following: BIOL 322 Mammalogy (with laboratory)
One of the following: BIOL 462 Rocky Mountain Flora
One of the following: BIOL 362 Evolutionary Biology
At least 2 credits of Capstone Experience courses: BIOL 495 Senior Seminar (may be repeated)
Minimum Supporting Courses: CHEM 105 Introduction to Organic Chemistry and Biochemistry
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. Select appropriate courses by consulting with your advisor.
GENERAL BIOLOGY EMPHASIS The General Biology Emphasis requires a minimum of 55 credits including the 19-credit Biology Nucleus, 14 credits of 300- and 400-level Biology electives, and 22 credits of supporting courses: CHEM 105 Introduction to Organic Chemistry and Biochemistry
CHEM 111 General Chemistry Laboratory I

76 Biology

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. NOTE: Students taking the General Biology Emphasis for Elementary Education Licensure may substitute 14 credits of EDUC 430 Student Teaching: Elementary as the Capstone Course Requirement, replacing 2 credits of BIOL 495 Senior Seminar or BIOL 496 Senior Thesis.

PRE-ALLIED HEALTH EMPHASIS

The Pre-Allied Health Emphasis requires a minimum of 58 credits including the 19-credit Biology Nucleus, 17 additional Biology credits, and 22 credits of supporting courses. Select appropriate chemistry and physics courses in consultation with your advisor.

Required Biology courses:
BIOL 300 Basic Nutrition
BIOL 342 Microbiology4 cr
BIOL 372 Human Anatomy & Physiology I (with laboratory)4 cr
BIOL 373 Human Anatomy & Physiology II (with laboratory)4 cr
At least 2 credits of Capstone Experience Courses:
BIOL 495 Senior Seminar (may be repeated)
BIOL 496 Senior Thesis2-4 cr
Minimum supporting courses:
CHEM 105 Introduction to Organic Chemistry and Biochemistry3 cr
CHEM 109 Introductory Organic and Biochemistry Laboratory1 cr
CHEM 111 General Chemistry I
CHEM 112 General Chemistry Laboratory I
CHEM 113 General Chemistry II
MATH 213 Probability and Statistics
PHYS 140 Introductory Physics (with laboratory)
SCI 202 Scientific Writing
SECONDARY LICENSURE EMPHASIS
The Secondary Licensure Emphasis requires a minimum of 56 credits including the
19-credit Biology Nucleus, 8 additional credits in Biology, and 29 credits in supporting
courses. Students must fulfill the requirements for the Secondary Licensure Option
described under Education. EDUC 432 Student Teaching: Secondary, 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 105 Introduction to Organic Chemistry and Biochemistry3 cr
CHEM 109 Introductory Organic Chemistry and Biochemistry Laboratory1 cr
CHEM 111 General Chemistry I
CHEM 112 General Chemistry Laboratory I1 cr
CHEM 113 General Chemistry II
CHEM 114 General Chemistry Laboratory II1 cr
GEOL 101 Physical Geology
GEOL 105 Physical Geology Laboratory1 cr
MATH 213 Probability and Statistics 3 cr

PHYS 140 Introductory Physics (with laboratory)	4 cr
SCI 202 Scientific Writing	3 cr
SCI 366 Methods of Teaching Secondary Science	3 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 (3 credits), CHEM 332 Organic Chemistry (3 credits), CHEM 334 Organic Chemistry Lab I (1 credit), CHEM 335 Organic Chemistry Lab II (1 credit) may be substituted for CHEM 105 Introduction to Organic Chemistry and Biochemistry (3 credits) and CHEM 109 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 I (5 credits), PHYS 201 General Physics II (5 credits) may be substituted for PHYS 170 Principles of Physics I (4 credits), PHYS 171 Principles of Physics II (4 credits).

General Education Requirement. The following course in the Biology Major fulfills the Second Writing Course component of the Essential Skills Requirement: SCI 202 Scientific Writing.

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 432 Student Teaching: Secondary (Secondary Licensure Emphasis).

BIOLOGY COURSES

BIOL 120 Studies in Biology

3 credits

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.

BIOL 130 Environmental Biology

3 credits

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.

BIOL 135 Environmental Biology Laboratory

1 credit

This laboratory course utilizes 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. Course fee: \$40.

BIOL 150 Biological Principles (with laboratory) 4 credits

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 111. Prerequisite or corequisite: BIOL 195 (Biology majors only). Course fee: \$40.

BIOL 151 Diversity and Patterns of Life (with laboratory) 4 credits

This course provides 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 111. Prerequisite or corequisite: BIOL 195 (Biology majors only). Course fee: \$40.

BIOL 195 Biology Gateway

1 credit

This course introduces biology majors to the subdisciplines of biology and the research interests of the biology faculty. Students explore the professional opportunities and practices of the discipline. Reading and writing assignments focus on weekly seminar activities. Graded Satisfactory/Unsatisfactory only.

BIOL 197 Special Topics

1-6 credits

BIOL 200 Environmental and Public Health

3 credits

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.

BIOL 251 General Zoology (with laboratory)

4 credits

A survey of the field of zoology and its major subdisciplines. Consideration is given to the structure, function, taxonomy, and evolution of animals. Prerequisite: BIOL 150. Course fee: \$40.

BIOL 297 Special Topics

1-6 credits

BIOL 300 Basic Nutrition

3 credits

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 or BIOL 372; and CHEM 101, CHEM 105 or higher.

BIOL 301 General Ecology

3 credits

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 or permission of instructor.

BIOL 302 Ecology Laboratory and Recitation

2 credits

The ecology laboratory and recitation uses 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 and BIOL 151; CHEM 113. Prerequisite or corequisite: BIOL 301. Course Fee: \$50.00.

BIOL 310 Cell Biology

3 credits

An introduction to cellular function and structure. Prerequisites: BIOL 150, BIOL 151, and CHEM 111.

BIOL 312 Genetics (with recitation)

4 credits

A course in Mendelian inheritance, linkage, chromosomal aberrations, molecular genetics, gene regulation, genetic engineering, and population genetics. Prerequisites: BIOL 301 and BIOL 310; CHEM 105 and CHEM 109, or CHEM 331.

BIOL 313 Cell and Genetics Laboratory

2 credits

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. Course fee: \$100.

BIOL 320 Ornithology (with laboratory and recitation) 5 credits

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: Biology nucleus and SCI 202, or instructor permission. Course fee: \$40.

BIOL 322 Mammalogy (with laboratory and recitation)

5 credits

An introduction to the study of mammal taxonomy, evolution, ecology and conservation. **Prerequisite: Biology nucleus and SCI 202, or instructor permission.** Course fee: \$40.

BIOL 327 Field Entomology (with laboratory)

4 credits

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. Prerequisites: Biology nucleus and SCI 202 or instructor permission. Course fee: \$40.

BIOL 340 Invertebrate Zoology (with laboratory)

4 credits

A comparative study of the structure, classification, physiology, and life history of representative invertebrates. Prerequisite: Biology nucleus and SCI 202, or instructor permission.

BIOL 342 Microbiology (with laboratory)

4 credits

An introduction to microbial morphology, identification, physiology, genetics and microbiology laboratory techniques. A brief consideration is given to fungi. Prerequisites: Biology nucleus; CHEM 105 and CHEM 109; SCI 202. Course fee: \$100.

BIOL 352 Plant Anatomy and Morphology (with laboratory) 4 credits
An examination of plant anatomy and morphology. This course focuses on evolu-

An examination of plant anatomy and morphology. This course focuses on evolutionary trends and relationships of the mosses, liverworts, lower vascular plants, gymnosperms and flowering plants as understood through comparative morphology and anatomy. Plant cells and tissues in relation to structure, function and development are also explored. Prerequisites: Biology nucleus and SCI 202, or instructor permission. Course fee: \$40.

BIOL 362 Evolutionary Biology

3 credits

A comprehensive synthesis of evolutionary processes and mechanisms. Prerequisite: Biology nucleus and SCI 202, 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, muscular system, and nervous system. The course is designed for allied health and kinesiology students. Prerequisite: CHEM 101 or above. Course fee: \$40.

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. Course fee: \$40.

BIOL 381 Field Biology

3 credits

An introduction to experimentation and field techniques used in ecology, including experimental design, data analysis, and presentation of research results. This course

meets the General Education Integrated Skills requirement. Prerequisites: Biology nucleus and SCI 202 and MATH 213 or instructor permission. Course fee: \$50.

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

Variable course fee: \$0-\$300 depending on topic.

BIOL 420 Molecular Biology (with laboratory)

4 credits

A combination of lecture and laboratory work that explores the organization, expression and regulation of genes at the molecular level. Recombinant DNA techniques are integrated into the laboratory exercises. Prerequisites: Biology nucleus; SCI 202, and CHEM 332 or CHEM 471. Course fee: \$100.

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: Biology nucleus and SCI 202, or instructor permission. Course fee: \$40.

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 and SCI 202, 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: Biology nucleus and SCI 202, or instructor permission.

BIOL 446 Mammalian Physiology (with laboratory)

4 credits

A study of the function of mammalian organ systems with emphasis upon the human. Prerequisites: BIOL 310 and PHYS 140. Course fee: \$40.

BIOL 450 Histology (with laboratory)

4 credits

A comprehensive analysis of the structure and function of mammalian tissues and organs. Recommended for Biology majors and students interested in medical sciences. Prerequisites: Biology nucleus and SCI 202, or instructor permission. Course fee: \$35.

BIOL 454 Vertebrate Embryology (with laboratory)

l credits

An examination of the embryology of vertebrates, stressing mammalian embryonic development and comparisons with amphibians, reptiles, and birds. Prerequisites: Biology nucleus and SCI 202, or instructor permission. Course fee: \$35.

BIOL 462 Rocky Mountain Flora

3 credits

A field course introducing the principles of plant taxonomy involving collection, identification, naming, classification and evolution of flowering plant groups represented in the Rocky Mountains. Prerequisites: Biology nucleus and SCI 202, or instructor permission. Course fee:\$40.

Plant Physiology (with laboratory)

4 credits

An examination of plant function with emphasis at the organismic level. Prerequisites: Biology nucleus, SCI 202, and PHYS 140. Course fee: \$40.

BIOL 473 Desert Ecology

3 credits

An examination of the North American deserts including the physical environment and the ecology of desert organisms, communities, and ecosystems. Prerequisites: Biology nucleus and SCI 202, or instructor permission. Course fee: \$70-\$300.

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. Course fee: \$40.

BIOL 475 Winter Ecology

3 credits

A study of the winter environment and how plants and animals endure a season of snow and ice. Prerequisites: Biology nucleus, SCI 202, and PHYS 140. Course fee: \$40.

BIOL 476 Aquatic Ecology (with laboratory)

3 credits

A study of physical, chemical, and biological parameters of lakes and streams in the functioning of freshwater eco-systems. Prerequisites: Biology nucleus and SCI 202, or instructor permission. Course fee: \$40.

Plant Ecology (with laboratory)

4 credits

An introduction to plant populations and communities, including their role within terrestrial ecosystems. Prerequisite: Biology nucleus and SCI 202, or instructor permission. Course fee: \$40.

BIOL 478 Animal Ecology

3 credits

A course in the dynamics of animal populations in relation to the environment. Prerequisites: Biology nucleus and SCI 202, or instructor permission.

Advanced Human Anatomy (with laboratory)

4 credits An advanced study of human gross anatomy, with a special emphasis on regional clinically significant anatomy and medical applications. The laboratory involves the dissection of human cadavers. Prerequisite: BIOL 454. Course fee: \$40.

BIOL 495 Senior Seminar

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, SCI 202, 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, SCI 202, 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 upperdivision 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 or Latin American business), 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.

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.

FACULTY

Professors Cynthia L. Drexel, David W. Glascoff, F. James Hahn, and Roger L. Hudson;

Associate Professor Christopher Mausolff;

Emeritus Professor Phil C. Klingsmith;

Visiting Professor Richard L. Daerr;

Lecturers Richard L. Craig, Cathie A. Elliott and Karin B. Holmen.

DESCRIPTION OF THE PROGRAMS

All Business Administration majors require the 18-credit Base Curriculum. 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.

Base Curriculum

BUAC 201 Introduction to Financial Accounting3 cr
BUAC 202 Introduction to Managerial Accounting3 cr
ECON 202 Microeconomics
ECON 216 Statistics for Business and Economics3 cr
MATH 131 Mathematics for the Managerial and Social Sciences3 cr
One of the following:
BUAD 220 Computer Applications in Business3 cr
CIS 120 Information Management and Analysis3 cr

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 coursework and in their business career.

Business Administration Nucleus

BUAD 210	Legal Environment of Business	3 (cr
BUAD 270	Principles of Marketing	3 (cr
BUAD 309	Business Communication	3 (cr
	Human Resource Management		
	Managerial Finance		

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 9 credits of upper-division Business Administration electives. Electives should be chosen in consultation with an advisor and should best fit with the technical skills the student intends to acquire by completing a minor in another discipline.

Business Administration and Recreation Coordinated Double Major: If a student elects to complete a Business Administration Major: Standard Program and the coordinated Recreation Major: Standard Program, the recreation management courses designated in the Recreation Standard Program will fulfill up to 5 credits of the 9 upper-division required electives in Business Administration. The student must complete the elective requirement by taking two of the following: RECR 331 Food and Beverage Management, RECR 332 Rental and Retail Management, and three credits of upper-division BUAD courses. The student may also substitute RECR 333 Ski Marketing and Public Relations for BUAD 270 Principles of Marketing; ECON 215 Environmental Economics for ECON 202 Microeconomics; BUAD 494 Entrepreneurial Analysis and Consulting for BUAD 491 Strategic Management.

Business Administration Major: Comprehensive Programs

MANAGEMENT EMPHASIS	
A minimum of 57 credits is required including the 18-credit Base Curriculum, the	16
15-credit Business Administration Nucleus, and the following courses:	
BUAD 375 Entrepreneurship and Business Planning3	cr
BUAD 450 Organizational Behavior	
BUAD 485 Quantitative Decision-making	
BUAD 491 Strategic Management	
ECON 201 Macroeconomics	
Three of the following:	
BUAD 300 Social Responsibility of Business	cr
BUAD 315 Business Law	
BUAD 325 Management Information Systems	cr
BUAD 329 E-Commerce	
BUAD 340 Global Business	
BUAD 440 Fundamentals of Risk and Insurance	
BUAD 455 Managing Productivity	
BUAD 499 Internship in Business Administration	cr
ECON 303 International Economics and Globalization	cr
PSY 361 Industrial and Applied Psychology	cr
MARKETING EMPHASIS	
A minimum of 57 credits is required including the 18-credit Base Curriculum, the	1e
15-credit Business Administration Nucleus, and the following courses:	
BUAD 340 Global Business	cr
BUAD 365 Sales, Advertising, and Sales Management3	
BUAD 370 Marketing Analysis and Management	
BUAD 445 Retailing	
BUAD 491 Strategic Management	
Three of the following courses:	
COTH 271 Small Group Communication	cr
COTH 371 Argument and Conflict Management3	
COTH 372 Issues Management	
COTH 374 Public Relations Communication	cr
ECON 201 Macroeconomics	
ENG 302 Technical Writing	cr
PSY 361 Industrial and Applied Psychology	cr
Entrepreneurship Emphasis	
A minimum of 57 credits is required including the 18-credit Base Curriculum, the	ne
15-credit Business Administration Nucleus, 15 credits of Business Administration	
and Accounting courses, and 9 credits of electives.	
Required Business Administration and Accounting courses:	
BUAC 350 Income Tax	cr
BUAD 315 Business Law	
BUAD 370 Marketing Analysis and Management	
BUAD 375 Entrepreneurship and Business Planning	
BUAD 494 Entrepreneurial Analysis and Consulting	
Three of the following courses:	
BUAD 300 Social Responsibility of Business	cr
BUAD 329 E-Commerce 3	
BUAD 340 Global Business	
BUAD 365 Sales, Advertising, and Sales Management3	

BUAD 445 Retailing
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
BUAD 455 Managing Productivity
Please see the Finance Emphasis in Accounting.
Business Administration Minor The following 15 credits are required as well as one upper-division Business Administration elective, for a total of 18 credits: BUAD 100 Pusiness in Society.
BUAD 100 Business in Society

General Education Requirement. The following course in the Business Administration Major fulfills the Second Writing Course component of the Essential Skills Requirement: BUAD 309 Business Communication.

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. Course fee: \$39.

BUAD 197 Special Topics

1-6 credits

Course fee: \$13 per credit.

BUAD 206 Personal Finance

3 credits

A course 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. Course fee: \$39.

BUAD 210 Legal Environment of Business

3 credits

A course which gives the student 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. Course fee: \$39.

BUAD 220 Computer Applications in Business

3 credits

A course designed to teach the students to apply a variety of interdisciplinary computer applications in their business professions. Topics include integrating word processing, spreadsheets, databases, communications, and graphics on multiple platforms of personal computers. A minimal skill in typing is required. Course fee: \$39.

BUAD 250 Principles of Management

3 credits

This course presents an analysis of the management functions and processes utilized by all business enterprises. Discussion is centered on principles and concepts through the use of a basic text, examples, and cases. Course fee: \$39.

BUAD 270 Principles of Marketing

3 credits

A study of the objectives of the marketing activity within a business and the theories, principles, and procedures relevant to the performance of the functions of marketing such as analysis and selection of markets, product development, distribution, pricing, and promotion. Global and domestic marketing issues are discussed in each of the functional areas. Course fee: \$39.

BUAD 297 Special Topics

1-6 credits

Course fee: \$13 per credit.

BUAD 300 Social Responsibility of Business

3 credits

A study of the responsibility of business organizations in finding solutions to the problems faced by a modern society, emphasizing the connection between ethical behavior and social responsibility, considering the interaction between business and the other segments of society and the proactive versus reactive role of business in meeting its responsibilities. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 309 or other Second Writing Course or instructor permission. Course fee: \$39.

BUAD 301 Topics in Business Administration

1-6 credits

A course designed to provide an opportunity for students to examine current issues, topics, problems, and trends within the field. Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$13 per credit.

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 and sophomore standing. Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$39.

BUAD 315 Business Law

3 credits

Study includes: sales, commercial paper, secured transactions, corporations, partnerships, estates, trusts, and agency. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 210.Course fee: \$39.

BUAD 325 Management Information Systems

3 credits

This course emphasizes 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. Prerequisites: BUAD 220 or a course that includes hands-on coverage of application. Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$39.

BUAD 329 E-Commerce

3 credits

A course designed to examine the impact of technology on traditional business functions including management, marketing, operations and distribution. Areas of study include the Internet, Intranets, and extranets, and their influence on business to consumer, business to business, and consumer to consumer e-commerce. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 220 or a course that includes hands-on coverage of application. Course fee: \$39.

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. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 270; BUAD 309 or other Second Writing Course; or instructor permission. Course fee: \$39.

BUAD 350 Human Resource Management

3 credits

A study of the principles of personnel administration and the responsibilities of the personnel function within organizations. Emphasis is given to the procurement, development, utilization, and maintenance of a work force. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 309. Course fee: \$39.

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. Prerequisites; overall GPA of 2.5 or higher, or department chair permission; BUAC 202, MATH 131, and ECON 216. Course fee: \$39.

BUAD 365 Sales, Advertising, and Sales Management

3 credits

A study of the recruitment, training, compensation, and supervision of the sales force. A discussion of sales management techniques and advertising principles from the viewpoint of the creative marketing executive. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 270. Course fee: \$39.

BUAD 370 Marketing Analysis and Management

3 credits

An advanced course designed for the marketing manager whose job it is to identify target markets and develop specific market strategies to achieve the goals and objectives of the firm. Concepts drawn from microeconomics and behavioral sciences are used to develop and implement the marketing strategies. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 270. Course fee: \$39.

BUAD 375 Entrepreneurship and Business Planning 3 credits

This course is designed to give the future entrepreneur the skills and insights necessary to minimize the 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: overall GPA of 2.5 or higher, or department chair permission; BUAD 270, BUAD 350, and BUAD 360. Course fee: \$39.

BUAD 397 Special Topics

1-6 credits

Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$13 per credit.

BUAD 440 Fundamentals of Risk and Insurance

3 credits

A study of the basic ideas, concepts, and principles found in all types of modern risk management. The course explores the nature of the insurance device and principles of risk management with an overview of the insurance industry and the manner in which it operates. Life insurance, health insurance, property and liability insurance, and social insurance are treated according to a wide range of insurable risks to which individuals or organizations are exposed. This knowledge permits an individual to integrate coverage under these programs for protection-planning purposes. Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$39.

BUAD 445 Retailing

3 credits

A course which provides an understanding of the application of management and marketing principles and techniques to the operation of retail businesses. Emphasis is given to small retail businesses. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 270. Course fee: \$39.

BUAD 450 Organizational Behavior

3 credits

A course designed to show how human behavior theories and principles can be incorporated into procedures for implementing the various functions of management to develop effective, positive relations between managers and their subordinates. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 350. Course fee: \$39.

BUAD 455 Managing Productivity

3 credits

A course which demonstrates how the various components of management are used to efficiently deliver to the consumer both products and services. Both manufacturing and service industries will be studied together with current techniques of both, such as flexible production/operation and total quality management (TQM). Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 309 and BUAD 360. Course fee: \$39.

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. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 360. Course fee: \$39.

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: overall GPA of 2.5 or higher, or department chair permission; CIS 120 or BUAD 220; ECON 216; BUAD 360; or instructor permission. Course fee: \$39.

BUAD 487 Government Regulation of Business 3 credits

A study of the influence of government administrative, legislative, and judicial controls on policy determination in selected areas of business activity; i.e., antitrust law, securities regulation, employment law, consumer-protection law, environmental law, products liability, international law, and business ethics. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 210 or BUAD 315. Course fee: \$39.

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 will integrate the student's knowledge from the areas of accounting, finance, marketing, and management. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 350, BUAD 360 and senior standing. Students are encouraged to take this course during their last semester; graduating seniors will be given priority in enrollment. Course fee: \$39.

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: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$13 per credit.

BUAD 493 Problems in Business Administration

1-6 credits

A series of one current or contemporary problem which requires discussion, investigation, business-world coordination, and resolution. Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$13 per credit.

BUAD 494 Entrepreneurial Analysis and Consulting 3 credits

This course investigates 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. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 375. Course fee: \$39.

BUAD 495 Advanced Financial Analysis and Strategy 3 credits

This course focuses on advanced principles and applications in modern corporate managerial finance. Students are expected to make significant oral and written contributions to this class and to gain practice and experience in group work and team building. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; BUAD 360. Course fee: \$39.

BUAD 497 Special Topics

1-6 credits

Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$13 per credit.

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: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$13 per credit.

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 four areas of emphasis selected according to the interests and career goals of the student. These emphases are: general chemistry, biochemistry, environmental chemistry, and secondary education licensure.

The secondary education licensure 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

Professor Dale L. Orth; Associate Professor Anne W. Ryter; Lecturer Jarral W. Ryter.

DESCRIPTION OF THE PROGRAMS

All Chemistry Majors require the 23-credit Chemistry Nucleus.

Chemistry Nucleus

CHEM 111	General Chemistry	3 cr
CHEM 112	General Chemistry Laboratory I	1 cr
CHEM 113	General Chemistry	3 cr
CHEM 114	General Chemistry Laboratory II	1 cr
CHEM 306	Quantitative Analysis	4 cr
CHEM 331	Organic Chemistry	3 cr
CHEM 332	Organic Chemistry	3 cr
	Organic Chemistry Laboratory I	
	Physical Chemistry	

Chemistry Major: Comprehensive Program

GENERAL CHEMISTRY EMPHASIS
A minimum of 61 credits is required including the 23-credit Chemistry Nucleus and
the following:
CHEM 335 Organic Chemistry Laboratory II1 cr
CHEM 401 Instrumental Analysis
CHEM 402 Instrumental Laboratory
CHEM 452 Physical Chemistry4 cr
CHEM 454 Physical Chemistry Laboratory
CHEM 461 Advanced Inorganic Chemistry
CHEM 494 Research Problems in Chemistry
Required Supporting Courses:
MATH 161 Calculus I
MATH 162 Calculus II
PHYS 200 General Physics I (with laboratory)
PHYS 201 General Physics I (with laboratory)
• • • • • • • • • • • • • • • • • • • •
One of the following:
ENG 302 Technical Writing
SCI 202 Scientific Writing3 cr
BIOCHEMISTRY EMPHASIS
A minimum of 68 credits is required including the 23-credit Chemistry Nucleus and
the following:
Required Supporting Courses:
BIOL 150 Biological Principles (with laboratory)4 cr
BIOL 151 Diversity and Patterns of Life (with laboratory)4 cr
BIOL 310 Cell Biology3 cr
BIOL 312 Genetics (with recitation)4 cr
chem 335 Organic Chemistry Laboratory II1 cr
chem 471 Biochemistry I4 cr
chem 472 Biochemistry II4 cr
chem 494 Research Problems in Chemistry2-4 cr
MATH 161 Calculus I
MATH 162 Calculus II
PHYS 200 General Physics I (with laboratory)
PHYS 201 General Physics II (with laboratory)5 cr
One of the following:
ENG 302 Technical Writing
SCI 202 Scientific Writing3 cr
Note: BIOL 420 Molecular Biology I may substitute for CHEM 472 Biochemistry II
with permission of your advisor.
Environmental Chemistry Emphasis
A minimum of 60 credits is required including the 23-credit Chemistry Nucleus and
the following:
CHEM 250 Environmental Chemistry3 cr
CHEM 401 Instrumental Analysis
CHEM 402 Instrumental Laboratory
CHEM 452 Physical Chemistry4 cr
CHEM 454 Physical Chemistry Laboratory
CHEM 461 Advanced Inorganic Chemistry
CHEM 494 Research Problems in Chemistry2-4 cr

92 Chemistry

Required Supporting Courses: MATH 161 Calculus I
recommended.
SECONDARY LICENSURE EMPHASIS A minimum of 63 credits is required including the 23-credit Chemistry Nucleus and the following. In addition, students must fulfill the requirements for the Secondary Licensure Option described under Education.
CHEM 250 Environmental Chemistry CHEM 335 Organic Chemistry Laboratory II 1 cr CHEM 454 Physical Chemistry Laboratory 2 cr BIOL 130 Environmental Science 3 cr BIOL 150 Biological Principles (with laboratory) 4 cr GEOL 101 Physical Geology 3 cr GEOL 105 Physical Geology Laboratory 1 cr MATH 161 Calculus I 3 cr MATH 162 Calculus II 3 cr MATH 213 Probability and Statistics 3 cr PHYS 170 Principles of Physics I (with laboratory) 4 cr PHYS 171 Principles of Physics II (with laboratory) 4 cr SCI 366 Methods of Teaching Secondary Science 3 cr One of the following: ENG 302 Technical Writing 3 cr SCI 202 Scientific Writing 3 cr
Chemistry Minor The Chemistry Minor requires a minimum of 19-20 credits including the following:
CHEM 111 General Chemistry
And either Plan A or B (below) Plan A: CHEM 331 Organia Chamietry
CHEM 331 Organic Chemistry
CHEM 451 Physical Chemistry 4 cr CHEM 452 Physical Chemistry 4 cr CHEM 454 Physical Chemistry Laboratory 2 cr Chemistry Elective (300 level or above) 2 cr

General Education Requirement. The following courses fulfill the Second Writing Course component of the Essential Skills Requirement for the Chemistry Major: ENG 302 Technical Writing or SCI 202 Scientific Writing.

Capstone Course Requirement. The following courses fulfill the Capstone Course Requirement for the Chemistry Major: CHEM 494 Research Problems in Chemistry or EDUC 432 Student Teaching: Secondary (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 contemporary 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.

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.

CHEM 105 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 109 Introductory Organic and Biochemistry Laboratory 1 credit An introductory laboratory to accompany CHEM 105. 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. Corequisite/Prerequisite: CHEM 105; Prerequisite: CHEM 101. Course fee: \$40.

CHEM 111 General Chemistry

3 credits

A comprehensive course designed for students whose academic plans require advanced work in chemistry, such as Chemistry majors and minors, pre-med students, etc. Includes lectures, problem sessions, and assigned readings. Prerequisite or corequisite: MATH 140 or Accuplacer College-Level Mathematics test with a score of 75 or above, or instructor permission.

CHEM 112 General Chemistry Laboratory I

1 credit

An introduction to basic laboratory techniques of inorganic chemistry correlating with CHEM 111. Experiments emphasize safety, handling, and disposing of laboratory chemicals, as well as an introduction to techniques, instrumentation and solution chemistry. Corequisite: CHEM 111. Course fee: \$40.

CHEM 113 General Chemistry

3 credits

A continuation of CHEM 111. Prerequisite: CHEM 111.

CHEM 114 General Chemistry Laboratory II

1 credit

A continuation of CHEM 112. Prerequisite: CHEM 112. Corequisite: CHEM 113. Course fee: \$40.

CHEM 197 Special Topics

1-6 credits

CHEM 250 Environmental Chemistry

3 credits

An in-depth study of current environmental problems, including air pollution, water pollution, nuclear waste, food, drugs, and pesticides. Students are required to do library research and report writing. Prerequisites: CHEM 113 or instructor permission.

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. Course fee: \$50.

CHEM 331 Organic Chemistry

3 credits

An in-depth study of the Chemistry of major classes of carbon compounds (alkanes, alkenes, alkynes, alcohols, ethers, alkyl halides, and aromatic hydrocarbons). Topics include structure, nomenclature, stereochemistry, reaction mechanisms, and spectroscopy (NMR, IR, and mass spectroscopy). The course emphasizes both structure and mechanism. Prerequisite: CHEM 113.

CHEM 332 Organic Chemistry

3 credits

A continuation of CHEM 331. Topics included are aldehydes, ketones, carboxylic acids, and amines, as well as biochemical compounds (carbohydrates, lipids, nucleic acids, and proteins). Prerequisite: CHEM 331.

CHEM 334 Organic Chemistry Laboratory I

1 credit

An introduction to basic macro- and microscale organic laboratory techniques as applied to separation, isolation, and characterization of organic substances from a variety of sources. Methods utilized include distillation, extraction, chromatography (partition, ion-exchange), applied absorption spectroscopy (IR, UV, and NMR), and chemical modification. Prerequisite: CHEM 114. Corequisite: CHEM 331. Course fee: \$45.

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, as well as organic qualitative analysis. Prerequisite: CHEM 334. Corequisite: CHEM 332. Course fee: \$45.

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 basic electronics, spectrophotometric methods, electrometric methods, and chromatography. Offered in alternate years, 2006-2007. Prerequisite: CHEM 306 and 331.

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, 2006-2007. Prerequisite: CHEM 401. Course fee: \$50.

CHEM 451 Physical Chemistry

4 credits

A detailed study of thermodynamics, phase equilibria, kinetic theory and chemical kinetics. Offered in alternate years, 2005-2006. Prerequisites: CHEM 113, MATH 261, and PHYS 201.

CHEM 452 Physical Chemistry

4 credits

A continuation of CHEM 451, which examines quantum chemistry, atomic, and molecular structure and spectra, photochemistry, and statistical mechanics. Offered in alternate years, 2005-2006. Prerequisites: CHEM 113, MATH 261, and PHYS 201.

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, 2005-2006. Prerequisite: CHEM 451. Course fee: \$50.

CHEM 461 Advanced Inorganic Chemistry

3 credits

A lecture course whose topics include descriptive inorganic chemistry, structural concepts, inorganic reactions, acids and bases, periodic trends, nomenclature, chelates, nuclear reactions, and magnetic, electrical, and x-ray measurements. Offered in alternate years, 2006-2007. Prerequisite: CHEM 452.

CHEM 471 Biochemistry I

4 credits

An introductory biochemistry course, examining the chemistry of proteins, carbohydrates, nucleic acids, and lipids. Intermediary metabolism of carbohydrates, proteins, and lipids will be introduced. Additional topics include respiration and photosynthesis. Prerequisite: CHEM 332. BIOL 150 is highly recommended.

CHEM 472 Biochemistry II (with laboratory)

4 credits

A continuation of CHEM 471. It primarily focuses molecular biology and topics such as photosynthesis, amino acid metabolism and advanced enzyme kinetics. The laboratory will introduce students to techniques used with proteins, enzymes, carbohydrates, lipids and nucleic acids. Prerequisite: CHEM 471. Course Fee: \$100.

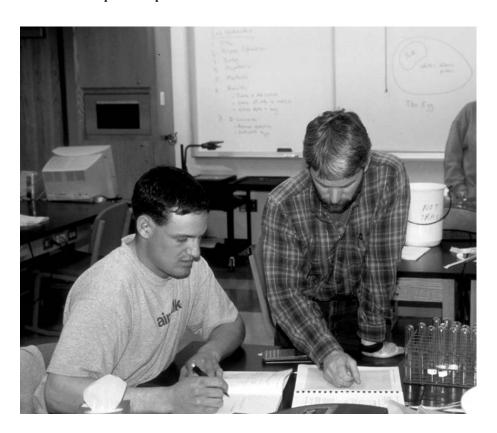
CHEM 494 Research Problems in Chemistry

1-4 credits

An advanced, supervised laboratory or library research experience involving methods of chemical research in an area of analytical, physical, organic, or biochemistry. An oral presentation of research results is required.

CHEM 497 Special Topics

1-6 credits



Communication and Theatre (COTH)

The program in Communication and Theatre at Western is designed to provide the student with a quality liberal arts education. The generalist approach to the fivecourse nucleus is supplemented by the more specific courses within each emphasis.

Throughout their education, students have opportunities for hands-on experience in both the classroom and through participation. Students have access to professional internship opportunities and foundation-supported grants for special projects as they progress towards their senior year.

Upon graduation, students should be ready for graduate study or for specialized training in business, industry, and government.

Students majoring in Communication and Theatre may select one of the two standard emphases, or one of the two comprehensive emphases. The Organizational Communication Emphasis is a study of applied communication in complex organizations. The Communication Emphasis is designed for students desiring a generalist, liberal arts approach to the fields of communication and theatre. The Journalism and Mass Media Emphasis combines theoretical and applied learning in the areas of television, radio, print media and multimedia production in an effort to provide an understanding of how these media play an important role in society. The Theatre Emphasis is designed to provide the student with an in-depth, multidisciplinary approach to the study of theatre.

Admission to the Program. All degree-seeking students who wish to major in Communication and Theatre must be admitted to the program. For admission, a student must:

- 1. have demonstrated a minimum competency by completing COTH 200 Public Speaking and Advocacy, COTH 219 Visual Communication, and COTH 222 Analysis and Interpretation in Communication, each with a grade of "C" or better.
- 2. have an overall grade-point average of 2.500 or better; and

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

FACULTY

Professors Michael R. Brooks, Paul A. Edwards, and Frank A. Venturo; Assistant Professors Karin A. Waidley and Justin C. Zimmerman; Lecturers Karon L. Jahn, George E. Sibley, and Terry D. Stanley.

DESCRIPTION OF THE PROGRAMS

The 18-credit Communication and Theatre Nucleus is required for all Communication and Theatre Majors.

Communication and Theatre Nucleus

COTH 219	Visual Communication	cr
COTH 222	Analysis and Interpretation in Communication	cr
COTH 304	Human Communication	cr
COTH 470	Philosophy and Theory of Communication	cr
COTH 478	Symbols in Communication	cr
COTH 484	Communication and Theater Seminar	cr

Communication and Theatre Major: Standard Program

COMMUNICATION EMPHASIS

A minimum of 36 credits is required including the 18-credit Communication and Theatre Nucleus, 9 credits of upper-division Communication and Theatre courses and the following:

THEATRE EMPHASIS

A minimum of 60 credits is required including the 18-credit Communication and Theatre Nucleus, 18 credits of electives with a thematic focus and theatre faculty approval to include 9 credits of upper-division COTH and 9 credits from outside COTH and the following:

nom outside corri, and the following.	
COTH 225 Art of the Theatre	3 cr
COTH 231 Stagecraft and the Theatrical Tradition	3 cr
COTH 235 Fundamentals of Acting	3 cr
COTH 323 Media / Arts Management	3 cr
COTH 325 Advanced Scene Study	3 cr
ENG 306 Writing for the Stage and Screen	3 cr
A minimum of two courses from the Theatre and Culture Sequence:	
COTH 315 Theatre and Culture: Development of Renaissance Theatre	3 cr
COTH 316 Theatre and Culture: Renaissance to Modern Theatre	3 cr
COTH 318 Theatre and Culture: Theatre in the Modern World	3 cr
COTH 319 Theatre and Culture: Performance in World Culture	

Communication and Theatre Minor

A minimum of 18 to 21 credits is required for a Communication and Theatre Minor. Students are advised to consult with their faculty advisor before deciding upon an appropriate emphasis to meet their specific needs. Communication and Theatre majors may not minor in Journalism or another emphasis in Communication and Theatre.

	n Concentration
Required course	
COTH 219	Visual Communication3 cr
COTH 222	Analysis and Interpretation in Communication3 cr
COTH 251	Telecommunications
	Human Communication3 cr
COTH 376	Organizational Communication3 cr
COTH uppe	er-division (300-400) electives6 cr
Mass Media Co	
Required course	
	Visual Communication3 cr
COTH 222	Analysis and Interpretation in Communication3 cr
COTH 241	Media Writing3 cr
COTH 304	Human Communication3 cr
	Media Operations3 cr
	er-division electives
One of the 1	following:
COTH 264	Electronic Field Production
COTH 361	Principles of Studio Production
Theatre Concer	1
Required course	s include:
	Visual Communication
	Analysis and Interpretation in Communication3 cr
	Art of the Theatre
	Stagecraft and the Theatrical Tradition3 cr
COTH 235	Fundamentals of Acting
COTH 304	Human Communication
One of the f	
COTH 315	Theatre and Culture: Development of Renaissance Theatre3 cr
	Theatre and Culture: Renaissance to Modern Theatre3 cr
COTH 318	Theatre and Culture: Theatre in the Modern World3 cr
	Theatre and Culture: Performance in World Culture3 cr
Journalism Con	
Required course	
	Media Writing3 cr
COTH 343	Persuasive and Expressive Writing on Public Issues3 cr
	Advanced Reporting and Journalistic Analysis3 cr
One of the t	following:
ART 270 C	Graphic Design and Illustration
COTH 251	Telecommunications 3 cr
	from the following:
COTH 245	Newspaper Production
COTH 345	Magazine Production 3 cr
	Internship
	may not use the same course to fulfill requirements for both their
Major and a Jou	

General Education Requirements. The following courses in the Communication and Theatre Major fulfill the Second Writing Course component of the Essential Skills Requirement: COTH 219 Visual Communication or COTH 222 Analysis and Interpretation in Communication.

Capstone Course Requirement. The following course in the Communication and Theatre Major fulfills the Capstone Course Requirement: COTH 484 Communication and Theatre Seminar.

COMMUNICATION AND THEATRE COURSES

COTH 119 Theater and Media Aesthetics

3 credits

This course analyzes theatre and media (film and/or television) from an artistic perspective. Through historical and practical points of view, students will gain a greater appreciation of theatre and other media forms. Form, function, symbolism, and genre will be applied to specific plays, films, and/or video productions. The productions analyzed will vary form term to term. Course fee: \$10.

COTH 151 Mass Media in America

3 credits

This course examines the media-related industries in America-broadcasting, journalism, advertising, public relations and online communications-how they work, and the issues related to those industries that affect contemporary public discourse. Course fee: \$10.

COTH 197 Special Topics

1-6 credits

COTH 200 Public Speaking and Advocacy

3 credits

Competency in speaking requires that a student demonstrate the ability to effectively apply the concepts of argument, advocacy, persuasion, and information in publicspeaking situations. This course gives considerable attention to development of listening and critical-thinking skills.

COTH 219 Visual Communication

3 credits

A study of the processes and techniques of visual communication as they apply to theatre, television, and film. The course covers such topics as communication aesthetics, elements of design, visual organizational principles, and tools and techniques of the various media. Prerequisite: ENG 102. Course fee: \$10.

COTH 222 Analysis and Interpretation in Communication 3 credits

This course is concerned with the transfer of a written text into aesthetic performance in the theatrical or electronic medium. Discussion and group study are combined with development of performance and analytical skills. Prerequisite: ENG 102.

COTH 225 Art of the Theatre

A course involving students in theoretical application and study of the basic concepts, principles, and techniques of the art of the theatre. Students study the traditional theatre arts of playwriting, performing, and stagecrafts, while exploring the relationship of these various arts in the context of the production of live theatre. The class consists of a mixture of lecture on the theoretical and conceptual basis of theatre arts, as well as various activities which include play development projects, performance of scenes, creative improvisation techniques, and technical craft assignments. Course fee: \$10.

COTH 231 Stagecraft and the Theatrical Tradition

A course in how things are done in the theatre and why they are done that way. The basic customs and traditions of backstage work and the philosophy, esthetics, and process of play 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 running crew duties. Course fee: \$15.

COTH 235 Fundamentals of Acting

3 credits

This course introduces students 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.

COTH 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: successful completion of ENG 102.

COTH 245 Newspaper Production

1-2 credits

A course that allows eligible students to integrate journalism coursework into the production of a working newspaper for the College community. Under faculty supervision, students develop community journalism skills, including but not limited to, writing, photography, electronic pagination, and paste-up/layout of the publication. May be taken for one or two hours per semester, up to six hours maximum. May be used toward the fulfillment of the six required "production" hours for a Journalism Minor. Prerequisite: instructor permission.

COTH 251 Telecommunications

3 credits

An overview of the role, development, and function of information and communication technologies, emphasizing the convergence of broadcasting, satellites, telephony, and computer networks. Global economic and policy issues are included.

COTH 261 Broadcast Media Production

1-6 credits

A course for experienced students working with

faculty supervision in the College radio station or television facilities. Students improve their specialty skills while working with the practical applications of the media.

COTH 264 Electronic Field Production

3 credits

The key theories and practice of camera operations and editing in the single-camera production style will be covered by exploring the common production methods used in the news interview, commercials, documentaries, and dramatic/film styled projects. The course will consist of lecture, field shooting and editing lab assignments. Course fee: \$35.

COTH 271 Small Group Communication

3 credits

The theory and practice of communication within small groups. Key concepts, such as leadership, consensus, and effectiveness, are integrated into laboratory discussions.

COTH 297 Special Topics

1-6 credits

COTH 298 Practicum

1-4 credits

This course offers entry-level supervised experiences in theatre, organizational communication and journalism/mass media. Students must obtain permission of instructor.

COTH 304 Human Communication

3 credit

A comprehensive examination of the underpinnings of human communicative behavior. Theories, concepts, and practices are applied to everyday settings, with specific focus on dyads, communication relationships, and cross-cultural situations. Prerequisite: successful completion of college competencies and second writing requirement.

COTH 315 Theatre and Culture: Development of Renaissance Theatre 3 credits

The course covers the formation and elaboration of Western conventions of performance as functions of the medieval world view; the influence of Greek and Roman drama on the Renaissance; Greek and Roman scripts as products of their cultures; the development of new theatre in Spain, France, Italy, and Britain; and the fusion of medieval performance traditions with Roman scripts. Prerequisite: ENG 102.

COTH 316 Theatre and Culture: Renaissance to Modern Theatre The course covers how the mass theatre developed in Western civilization from 1600 to about 1900. Emphasis is on the ways in which the theatre reflected the changes brought on by religious wars, the colonial age, the Industrial Revolution, and the birth of modern democracy. The intellectual currents and important theatres of the late Renaissance, Baroque, Enlightenment, Romantic, and early Realist eras also will be explored. Prerequisite: ENG 102.

COTH 318 Theatre and Culture: Theatre in the Modern World A course on the division and diversification of theatre from the late nineteenth tury to the present. The influence of intellectual and social trends on the theatre will be explored, as well as developments in theatre technology, the rise of the director, contemporary acting theory, and the challenges faced by the traditional dramatic text. Prerequisite: ENG 102.

COTH 319 Theatre and Culture: Performance in World Culture A course in which theatrical performance from other world cultures is compared to the Western tradition. Particular emphasis will be given to the distortion and creative insight resulting from applying a Western theatre paradigm to performance in East Asian, South Asian, Polynesian, Indian, African, and American indigenous cultures. Prerequisite: ENG 102.

COTH 323 Media/Arts Management

This course introduces the student to the basic principles and structure of management as it applies to Communication Arts. Particular focus s 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.

COTH 324 Advanced Acting: Techniques

3 credits

Using established and accepted methods of voice and movement training, this course explores the requirements of different styles of acting. Particular emphasis will be given to classical, Elizabethan, Restoration/18th Century, Commedia, and Advanced Contemporary acting styles. Prerequisite: COTH 235.

COTH 325 Advanced Scene Study

3 credits

This course provides training in three areas: analyzing a dramatic text; understanding the cultural context in which a text is produced; and integrating text and context in order to produce a work that is accessible to contemporary audiences. Topics covered include oral interpretation the elements of dramaturgy, and researching period style and décor. Prerequisites: COTH 231 and COTH 235 or permission of the instructor.

COTH 330 Lighting & Sound Production for Theatre & Television A course involving the student in intermediate study in the areas of lighting and sound production for the mediums of theatre and television. Instruction is provided in the proper and safe operation of rigging, lighting, and sound, including optics, basic electrical theory, the nature of light and color, and the physics of sound acoustics. The design and use of light and sound for theatre and television are explored. A practical experience is required. Prerequisite: COTH 219. Course fee: \$15.

COTH 331 Scenography

3 credits

A course in designing visually for the stage, with an emphasis on a unified look and a single intense effect. A strong emphasis on scene design as the key to the overall look of the stage, with additional material on costume, lighting, and harmonization of the total effect. Prerequisite: COTH 231. Course fee: \$20.

COTH 343 Persuasive and Expressive Writing on Public Issues A writing course that draws upon the analysis and practice of both editorials and features as interpretive responses to issue-related topics in newspaper, magazine, and Web-related media. Prerequisites: COTH 241 or instructor permission.

COTH 345 Magazine Production

1-6 credits

A course that allows eligible students to integrate journalism and artwork into magazine production. Faculty supervise students in design and production work that leads to the publication of the campus magazine. May be used toward the fulfillment of the six required "production" hours for a Journalism Minor. Prerequisites: ART 172 or COTH 241; ENG 300 strongly recommended.

COTH 346 Multimedia Communication

3 credits

This course explores the theory and application of multimedia communication principles through projects that use common interactive multimedia, animation, nonlinear editing, web authoring, and desktop-publishing programs. Prerequisites: COTH 219, COTH 251, and COTH 360 or instructor permission. Course fee: \$20.

COTH 351 Mass Media in Society

3 credits

An examination of the issues and controversies surrounding the mass media. Particular emphasis is given to freedom of the press and media effects. Prerequisites: COTH 219, COTH 251, or instructor permission.

COTH 360 Media Operations

3 credits

An examination of newspaper, magazine, radio, television, and cable operations from an organizational perspective. Topics covered include departmental functions and duties, programming, formats, promotions, regulations, and finances. Prerequisite: COTH 241 or COTH 251.

COTH 361 Principles of Studio Production

3 credits

This course will instruct students in the theories and practices of studio-based television production. Students will receive training in the operation of various studio equipment. They will learn how to assume the various job duties required within a studio production environment. In particular, they will learn the basics of television direction. Finally, students will also learn about some of the program formats that are employed in common studio production situations. Prerequisite: COTH 219 or instructor permission. Course fee: \$20.

COTH 362 Audio Programming and Production

3 credits

A course designed for the intermediate student to gain insight into the audio component of media. The focus is on the listener and various audio audiences. The course will concentrate on the use of audio in radio. Additional applications will be discussed for video production, computer applications and audio streaming. Prerequisite: COTH 251. Course fee: \$15.

COTH 371 Argument and Conflict Management

3 credits

A course exploring 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.

COTH 372 Issues Management

3 credits

A course explaining 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.

COTH 374 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.

COTH 376 Organizational Communication

3 credits

A study of communication patterns within organizations, utilizing general-systems theory. Includes the history of contemporary organization theory, the study of conflict management, and communication flow within organizations through lectures, discussions, and case studies and analysis.

COTH 390 Television Workshop

1-6 credits

A course involved in various aspects of television production, from basic studio work to producing and directing videos for cable, syndication, or agencies. Students are assigned to various tracks, depending upon ability, academic level, and interest. Prerequisite: instructor permission. Course fee: \$35.

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

COTH 397 Special Topics

1-6 credits

COTH 398 Practicum

1-4 credits

This course provides supervised applications and experiences in communication and theatre. 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: COTH 241, COTH 261, or COTH 298.

COTH 423 Directing

3 credits

A comprehensive introduction to the theory and practice of directing for the stage. Includes an exploration of play selection, character and script analysis, conceptualization of production, actor coaching approaches, staging techniques; as well as the actual direction and presentation of scenes and plays. Prerequisites: COTH 231, COTH 235, and one Theatre and Culture course.

COTH 446 Advanced Reporting and Journalistic Analysis 3 credits

An advanced writing course that helps students develop skills in analytical thinking and investigative reporting, and put a more polished "edge" on their writing skills. The course also explores some of the history and philosophical development of American journalism, and helps students develop better copy-editing skills. Prerequisites: COTH 241; one or more credits of COTH 245 or COTH 345 is recommended but not required; concurrent enrollment in COTH 499 or ENVS 499 is suggested but not required.

COTH 470 Philosophy and Theory of Communication 3 credits

An introduction to the major philosophical and theoretical approaches to understanding human communications. Prerequisites: COTH 304 and admission to Communication and Theatre Major; or instructor permission.

COTH 474 Campaign Planning in Advertising and Public Info. 3 credits This course offers students 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 will be expected to build their own information campaigns. Prerequisite: COTH 374.

COTH 478 Symbols in Communication

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: COTH 304 and admission to Communication and Theatre Major; or instructor permission.

COTH 484 Communication and Theatre Seminar

3 credits

A Capstone Course which requires intensive study and completion of a semester project in one of the following areas: theatre, mass media, community journalism or organizational communication. Emphasis is on individual and group research and problem solving. Prerequisites: senior standing and completion of COTH 304.

COTH 495 Honors Thesis

3 credits

A course which requires the successful writing and oral defense of a thesis in an area of Communication and Theatre which interests the student. Prerequisites: senior standing, completion of COTH 485 with a "B-" or better, and instructor permission.

COTH 497 Special Topics

1-6 credits

COTH 499 Internship

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 careers in software development, management of information systems, or further study in graduate school.

CIS students can choose from two comprehensive emphases: information science and information systems. The emphases share a core of course work in programming fundamentals, visual application development, systems analysis, software engineering, and database design. The Information Science Emphasis requires additional study in data structures and algorithms, computer architecture, and operating systems. The Information Systems Emphasis requires additional study in business administration, accounting, and economics.

Currently the main teaching and development language is Java. Coursework also covers other general purpose languages such as C++ and Visual Basic, as well as web development languages such as JavaScript, PHP, and Perl. Many courses use SQL, the language of database manipulation. Modern software engineering techniques are practiced throughout.

Coursework 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 an increasingly popular option with students.

FACULTY

Professor Daniel L. Schuster:

CIS Core Courses

Associate Professors Andrew G. Keck and John C. Peterson.

DESCRIPTION OF THE PROGRAMS

All Computer Information Science Majors require the 27-credit CIS Core.

CIS COIL CO	our ses		
CIS 190	Computer Science I	.3 0	r
CIS 191	Computer Science II	3 0	r
CIS 235	Computer Networks	3 0	r
CIS 250	Web Applications Development I	3 0	r
CIS 310	Visual Programming	.3 0	r
CIS 350	Web Applications Development II	3 0	r
	Systems Analysis		
CIS 415	Systems Design	3 0	r
	Database & File Management Systems		

Computer Information Science Major: Comprehensive Program

INFORMATION SCIENCE EMPHASIS

A minimum of 48 credits is required, including the 27-credit CIS Core and the following:

106 Computer Information Science

One of the following: CIS 480 CIS Application Project
INFORMATION SYSTEMS EMPHASISA minimum of 69 credits is required, including the 27-credit CIS Core and the following:3 crBUAC 201 Introduction to Financial Accounting
Computer Information Science Minor
A minimum of 18 credits is required, including 3 upper-division credits in CIS or in the student's Major (with approval of the CIS coordinator), and the following: CIS 190 Computer Science I
General Education Requirements. The following courses in the Computer Information
Science Major fulfill the Second Writing Course component of the Essential Skills Requirement: ENG 302 Technical Writing or SCI 202 Scientific Writing.
Canstone Course Requirement. The following courses fulfill the Canstone Course

Requirement in the Computer Information Science Major: CIS 499 Internship in Computer Information Science, or CIS 480 Application Project. Students in the Information Systems Emphasis may also choose BUAD 491 Strategic Management.

COMPUTER INFORMATION SCIENCE COURSES

Information Management and Analysis

A course which covers in depth 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 College. Applications are presented from various fields. Course fee: \$39.

Computer Science I

3 credits

3 credits

An introduction to software development using modern environments, languages and techniques. Topics include: web page markup and styling with XHTML and CSS; programming constructs, principles and interactive web pages with JavaScript; and object oriented programming in Java with application to applets and graphical user interfaces (GUI). Emphasis is placed on analysis of problems, emphasizing good software engineering practices for program construction, documentation, testing, and debugging. Prerequisite: MATH 131, MATH 140, high school equivalent, Accuplacer College-Level Mathematics score of 75 or above, or instructor permission. Course fee: \$39.

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. Prerequisites: CIS 190. Course Fee: \$39.

CIS 197 Special Topics

1-6 credits

Course fee: \$13 per credit.

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. Prerequisite: CIS 191. Course fee: \$39.

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 will be studied. Cross platform development, applications to e-commerce, Internet and Intranet will be considered. At least one major project will be required. Prerequisite: CIS 191. Course fee: \$39.

CIS 265 Programming in COBOL

3 credits

An introduction to business data processing using the COBOL programming language. Logical structures, modular design, and documentation techniques are presented. The syntax and logic structure of COBOL are studied through a sequence of increasingly complex business-application programming assignments. Offered on sufficient demand. Prerequisite: CIS 190. Course fee: \$39.

CIS 275 Scientific Programming, Modeling and Simulation 3 credits

A course designed to develop programming skills appropriate for scientific and industrial applications. Emphasis is placed on problem modeling, algorithm development and data visualization. Standard techniques such as linear and non-linear equation solving, discrete difference equations and curve fitting are applied to typical industrial problems to give dynamic simulations. The use of a standard programming language, currently FORTRAN, and ancillary applications such as Maple, or a spreadsheet, allow the rapid prototyping required of industrial development. Prerequisites: CIS 190 and MATH 161. Course fee: \$39.

CIS 280 Data Structures

3 credits

This course surveys more 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. Currently taught in Java. Prerequisite: CIS 191. Course fee: \$39.

CIS 297 Special Topics

1-6 credits

Course fee: \$13 per credit.

CIS 300 Intro to Computer Architecture with Assembly Language 3 credits

An introduction to computer organization using assembly-language programming. Topics will include numeral systems, byte instructions, branching, indexing, computer arithmetic, subroutines, logical operators, and I/O. Also covers the fundamental concepts and terminology associated with computer hardware systems. The physical and electronic components of a computer, including processing units, memory units, and input/output devices will be surveyed. Prerequisite: CIS 280. Course fee: \$39.

CIS 310 Visual Programming

3 credits

A course focusing on common environment and design tools used in the development and implementation 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 will be C++ or Visual Basic. May be repeated with a different implementation language. Prerequisite: CIS 191. Course fee: \$39.

CIS 330 Operating Systems with UNIX System Administration 3 credits A course covering 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 which will include 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. Course fee: \$39.

CIS 350 Web Applications Development II

3 credits

A study of client-server applications designed around the World Wide Web. Students will design and implement applications which provide access to centralized resources such as databases and mail servers from web browsers. Students will 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 will be emphasized. Prerequisite: CIS 250. Course fee: \$39.

CIS 375 Numerical Methods

3 credits

A course designed to provide the skills needed to solve mathematical problems using a computer. Topics will include: computer arithmetic, roots of a single equation, nonlinear simultaneous equations, matrices, determinants, linear simultaneous equations, numerical integration, differential equations, interpolation, curve fitting and other topics as time permits. Prerequisites: CIS 275 or 280 and MATH 161. Course fee: \$39.

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 credit hours. Prerequisite: minimum junior standing. Course fee: \$13.

CIS 397 Special Topics

1-6 credits

Course fee: \$13 per credit.

CIS 410 Systems Analysis

3 credits

The fundamental concepts of systems analysis are studied in relation to the development of computerized information systems. Topics include the role of the analyst, traditional systems and object-oriented systems development, client/server architecture, data modeling, activity modeling, feasibility, database deign and impact of e-commerce on information systems. Each student will complete an independent

systems analysis project in a CASE environment. Offered in alternate years, 2005-2006. Prerequisite: CIS 310. Course fee: \$39.

CIS 415 Systems Design

3 credits

A continuation of CIS 410, covering system design/implementation concepts such as: data flow; forms, reports and GUI interfaces; prototyping, implementation, installation and testing. Each student will complete an independent systems design project in a CASE environment. Offered in alternate years 2005-2006. Prerequisite: CIS 410. Course fee: \$39.

CIS 420 Data Base and File Management Systems

3 credits

An investigation of general and specialized data management systems, including: file structure, file organization, back-end processing, distributed databases and problems of security, integrity and efficiency. Network, hierarchical, relational and object-oriented approaches to design are discussed. Guidelines are presented for evaluation of vendor-supplied database systems and specifications of in-house systems. Students will interact with typical database systems and will develop projects that utilize those systems. Prerequisite: CIS 310. Course fee: \$39.

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. Course fee: \$39.

CIS 480 Computer Information Science Application Project 3 credits Students will 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 will be made before the CIS faculty and students. Prerequisite: 24 credits of CIS coursework, including 12 upper division credits. Course fee: \$39.

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. Course fee: \$13 per credit.

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. Course fee: \$13 per credit.

CIS 497 Special Topics

1-6 credits

Course fee: \$13 per credit.

CIS 499 Internship in Computer Information Science 3-12 credits

Students will participate in a supervised field experience with a cooperating firm in the computer science field. The sponsoring faculty member will provide evaluations during periodic visitations. A formal paper is required of the student. Specific department requirements must be met to participate in this course. Only 3 credits may count toward the Computer Information Science Minor or the Mathematics Major with an Emphasis in Computer Science. Prerequisite: 18 credits of Computer Information Science coursework, including nine upper-division credits. Course fee: \$13 per credit.

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 with a secondary licensure emphasis.

FACULTY

Associate Professors Scott A. Lazerus and David J. Plante; Assistant Professor Sally E. Hays.

DESCRIPTION OF THE PROGRAMS

All Economics Majors require completion of the 24-credit Economics Nucleus and completion of MATH 131 or higher.

Nucleus Courses

ECON 201	Macroeconomics	3	cr
ECON 202	Microeconomics	3	cr
ECON 216	Statistics for Business and Economics	3	cr
ECON 301	Intermediate Macroeconomics	3	cr
ECON 302	Intermediate Microeconomics	3	cr
ECON 303	International Economics and Globalization	3	cr
ECON 416	Econometrics	3	cr
ECON 498	Income Distribution, Poverty and Wealth	3	cr

Economics Major: Standard Program

A minimum of 33 credits is required including the 24-credit Nucleus and 9 credits of 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 66 credits in Economics and supporting courses are required including the 24-credit Economics Nucleus. In addition, students must fulfill the requirements of the Secondary Licensure Option described under Education. Required Courses:

ANTH 107	Introduction to General Anthropology	.3 cr
ECON 476	American Economic Development	.3 cr
GEOG 110	World Regional Geography	.3 cr
GEOG 310	Human Geography	.3 cr
HIST 102	World History Since 1650	.3 cr
HIST 126	American History to 1865	.3 cr
HIST 127	American History Since 1865	.3 cr
POLS 180	American Federal Government	3 cr
POLS 255	Introduction to Comparative Government	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

PSY 100 General Psychology	3 cr
SOC 201 The Sociological Imagination	
SOSC 366 Methods for Teaching Secondary Social Studies	3 cr
Economics Minor	
A minimum of 18 credits is required including 9 credits of Econom	ic electives and
the following:	

One of the following: ECON 301 Intermediate Macroeconomics......3 cr

General Education Requirements. The following course in the Economics Major fulfills the Second Writing Course component of the Essential Skills Requirement: ECON 301 Intermediate Macroeconomics.

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 121 History of Economic Thought

3 credits

This course traces the evolution of thinking about value, price, technology, and other determinants of real income from the ancient Greeks to the latest Nobel recipient. Course fee: \$39.

ECON 173 Economics and Society

3 credits

The goal of this course is to provide a step-by-step approach to analyzing and solving social problems. By understanding and using the theoretical principles on which social policy is based—seeing relationships, quantifying data, analyzing issues, and employing practical applications toward social problems—the student should develop a sound background in understanding real-world problems. Course fee: \$39.

ECON 197 Special Topics

1-6 credits

Course fee: \$13 per credit.

ECON 201 Macroeconomics

3 credits

This course provides 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 will endeavor 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 will be given to the making of economic policy in an era of globalization. Finally, students will be exposed to multiple schools of thought regarding macroeconomic reasoning. Prerequisites: One of the following: ACT math score of 19 or above, SAT math score of 460 or above, pass MATH 099 or score 85 or higher on the Accuplacer Elementary Algebra test. Course fee: \$39.

ECON 202 Microeconomics

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. Prerequisites: One of the following: ACT math score of 19 or above, SAT math score of 460 or above, pass MATH 099 or score 85 or higher on the Accuplacer Elementary Algebra test. Course fee: \$39.

ECON 215 Environmental Economics

3 credits

This course presents 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. Course fee: \$39.

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 131. Course fee: \$39.

ECON 297 Special Topics

1-6 credits

Course fee: \$13 per credit.

ECON 301 Intermediate Macroeconomics

3 credits

This course is 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: overall GPA of 2.5 or higher, or department chair permission; ECON 201 and ECON 202. Course fee: \$39.

ECON 302 Intermediate Microeconomics

3 credits

Intermediate Microeconomics extends the analysis of individual economic behavior and the functioning of markets learned in ECON 202 (Macroeconomics) 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: overall GPA of 2.5 or higher, or department chair permission; ECON 202 and MATH131; ECON 201 recommended. Course fee: \$39.

ECON 303 International Economics and Globalization 3 credits

This course is 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 will include 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 will include understanding the balance of payments, exchange rate determination, currency crises, and international debt. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; ECON 201; ECON 202 recommended. Course fee: \$39.

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: overall GPA of 2.5 or higher, or department chair permission; ECON 202; ECON 201 recommended. Course fee: \$39.

ECON 317 Economics and Public Policy

3 credits

This course examines the field of Public Economics, which is 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 will be emphasized. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; ECON 202; ECON 201 recommended. Course fee: \$39.

ECON 321 Gender and Economics

3 credits

This course examines the role of gender in our economic system. It is designed to provide students with a critical examination of issues germane to the economic status of women and to explore the question of whether gender bias exists in economics. Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$39.

ECON 361 Money, Banking and Financial Markets

3 credits

This course provides 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 will also be 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: overall GPA of 2.5 or higher, or department chair permission; ECON 201. Course fee: \$39.

ECON 370 Natural Resource Economics

3 credits

This course will deal with the fundamental concept of natural resource and environmental policy, and in particular, the role of economic analysis in informing, analyzing, evaluating, and assisting in the development of the policy. Although economics is the focal point and the unifying theme in this course, economics is not treated in isolation. A considerable respect is accorded to the natural sciences, and legal, political and administrative concerns are substantially integrated with economic analysis whenever the opportunity arises. Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$39.

ECON 397 Special Topics

1-6 credits

Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$13 per credit.

ECON 416 Econometrics

3 credits

Econometrics is the application of advanced statistical methods and modeling to an empirical understanding of economic issues. This course combines elements of statistical reasoning with economic theory. It should provide and excellent opportunity to combine concepts learned in previous economics courses. Topics to be covered include multiple regression analysis, model specification, dummy variables, multicollinearity, heteroscedasticity, autocorrelation, limited dependent variables, simultaneity, time series, forecasting and methodological issues. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; ECON 201, ECON 202, and ECON 216. Course fee: \$39.

ECON 461 Economics of the Public Sector

3 credits

An economic analysis of the government's role in correcting and compensating for the working of the private sector. Taxing and spending policies at federal, state, and local levels are evaluated as to their impact upon and interaction with the private sector in achieving an efficient allocation of resources and equitable distribution of real income. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; ECON 201 and 202.Course fee: \$39.

ECON 476 American Economic Development

3 credits

This course is 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. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; instructor permission. Course fee: \$39.

ECON 492 Independent Study

1-4 credits

Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$13 per credit.

ECON 493 Problems in Economics

1-3 credits

An opportunity for detailed study by advanced students. Prerequisite: nine credits of Economics. Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$13 per credit.

ECON 497 Special Topics

1-6 credits

Prerequisite: overall GPA of 2.5 or higher, or department chair permission. Course fee: \$13 per credit.

ECON 498 Income Distribution, Poverty and Wealth

3 credits

A seminar-style course examining 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 macroeconomic 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. Prerequisites: overall GPA of 2.5 or higher, or department chair permission; instructor permission. Course fee: \$39.

ECON 499 Economics Internship

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: overall GPA of 2.5 or higher, or department chair permission; 18 credits of Economics courses including ECON 201, ECON 202, and ECON 216. Course fee: \$13 per credit.



Education (EDUC)

The Teacher Education Program at Western State College of Colorado is accredited by the Colorado Department of Education, the Colorado Commission on Higher Education, and the Teacher Education Accreditation Council. The Teacher Education Program currently maintains a 100% pass rate for licensing assessments for Colorado educators as reported to Title II for program completers.

The faculty of the Teacher Education Program is committed to creating a community of teachers who are competent in their subject matter, 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 preservice teachers to understand and accept the responsibility for creating a community that recognizes and appreciates diversity where individual members possess the content knowledge, skills and abilities needed to think critically, solve problems, and make responsible decisions.

FACULTY

Professor Terri L. Wenzlaff;

Associate Professors Nella B. Anderson, James A. Erekson, and Katherine C. Wieseman; Assistant Professor Christine L. Purkiss:

Lecturers Sandra Anderson-O'Banion, Anne B. Hausler, and Marta J. Smith.

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, K-12, special education, and linguistically diverse licensure options. Licensure options require a complementary academic major.

Students pursuing Elementary, Elementary/Special Education, or Elementary/Linguistically Diverse Education licensure may choose from the following majors:

Biology English

Geology: Environmental Earth Science Emphasis

Interdisciplinary Studies / Liberal Arts

Mathematics

Students pursuing Secondary, Secondary/Special Education or Secondary/Linguistically Diverse Education licensure may choose from the following majors:

Biology Chemistry English

Geology: Earth-Space Science Emphasis

Mathematics

Music

Social Science (Economics, History or Political Science)

Spanish

Students pursuing K-12, K-12/Special Education or K-12/Linguistically Diverse Education licensure may choose from the following majors:

Exercise and Sport Science

Music

Art

All students seeking to be licensed as teachers in the public schools must complete a planned program of professional studies. The teacher education information provided in this catalog meets the current requirements of the Colorado K-12 Model Content Standards.

Admission to the Teacher Education Program. There are two levels of admission to the Teacher Education Program: provisional and formal.

Provisional Admission. Students seeking provisional admission for initial licensure or pursuing an Elementary Education Minor must meet the following requirements to obtain provisional admission to the Teacher Education Program:

- 1. Basic Level Education Courses. Students must complete both basic level education courses (EDUC 105 and EDUC 175) with a combined GPA of 2.5.
- 2. Admission Career Counseling. Students must meet with an education faculty member to discuss licensure and career options.
- 3. Fifty Hours. Students must provide the Teacher Education Program with a completed form providing evidence of a minimum of 50 clock hours of appropriate experiences with children or youth. These experiences must take place in an institutional setting and may include, but are not limited to, service as a volunteer student aid in an elementary or secondary school, Scouts of America, YMCA or YWCA counselor, summer-camp counselor, or coach in a summer athletic program. The sponsor, supervisor, or other authority of the experience must verify the experience on the completed form. The student should contact a member of the Teacher Education Program for a copy of the form and further information. The 50 hour experience must have occurred within five years of applying for admission to the Teacher Education Program.

Formal Admission. Students may not enroll in any professional-level education course until they have successfully completed the requirements for provisional admission and the requirements described below:

- 1. Basic Skills Competency Exam. Each teacher education candidate must pass the Basic Skills Competency Exam prior to formal admission to the Teacher Education Program. The student's score must be equivalent to or surpass the determined passing score. Information on test dates, test fees, and location is available from the Teacher Education Office. Students should take this exam during their sophomore year and/or near completion of their general education course work.
- 2. Technology Competency Performance-Based Assessment. Each teacher education candidate must show proficiency in the following skill areas: word processing, spreadsheets, web-page design, digital media, presentation software, and webbased course tools. Students who do not pass the proficiency test will be required to complete technology skill area modules of instruction until proficiency is reached.
- 3. GPA. Students must possess an overall GPA of 2.650.
- 4. Fingerprints. Students must submit the completed fingerprint form or 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.

Student Disposition and Performance Assessment. Each semester the Teacher Education faculty evaluate students in terms of their potential for becoming effective teachers. This process of evaluation will be used for screening Teacher Education students for admission and continuation in the Teacher Education Program.

Field Experience. Each student seeking licensure is expected to complete a minimum of 800 clock hours of field-based experience during the Teacher Education Program.

Field experience hours are required in each professional education course with the majority of field hours occurring during the 640 contact hours of student teaching. All field experiences are supervised by public school and / or College faculty. Field-based experiences may include a variety of experiences associated with teaching in supervised settings, e.g., classroom observations, assisting licensed teachers in school settings and within a professional development school model. Student teaching is a field-based experience in which licensure candidates demonstrate their competence to develop curriculum, teach and assess students, and diagnose learning difficulties in a specific classroom setting over an extended period of time under supervision of a lead or master teacher.

Elementary Licensure

A student seeking licensure as an elementary teacher (grades K-6) must complete an appropriate academic major, all other college requirements, and the Elementary Licensure option. The academic major may be Biology, English, Geology: Environmental Earth Science Emphasis, Interdisciplinary Studies / Liberal Arts, or Mathematics. Students pursuing the Elementary Licensure option must meet all of the requirements for provisional and formal admission to the Teacher Education Program.

The required courses for the elementary licensure program are:

ART 365 Teaching Art in the Elementary School
EDUC 292 Instructional Design and Assessment for Elem. Preservice Teachers3 cr
EDUC 300 Introduction to Education for Diverse Learners3 cr
EDUC 342 Teaching Reading in the Elementary School3 cr
EDUC 346 Teaching Science in the Elementary School1 cr
EDUC 347 Teaching Mathematics in the Elementary School1 cr
EDUC 348 Elem. School Language and Writing Methods for Preservice Teachers2 cr
EDUC 349 Teaching Social Studies in the elementary School
EDUC 371 Classroom Management and Discipline
EDUC 396 Field Experience in Elementary Teaching
EDUC 430 Student Teaching: Elementary
ENG 352 Children's Literature
ESS 453 Health and Physical Education in the Elementary School2 cr
MATH 209 Theory of Arithmetic and Geometry I3 cr
MATH 210 Theory of Arithmetic and Geometry II3 cr
MUS 337 Integrating Music into the Elementary Classroom1 cr
EDUC 292 should be completed before or taken concurrently with the elementary
methods courses. The five elementary methods courses (Teaching Science,
Mathematics, Social Studies, Language and Writing Methods for Preservice
Teachers) are corequisites.

EDUC 396 Field Experience in Elementary Teaching should be taken after or concurrently with the methods courses.

NOTE: Science requirements include a Biology course and a Physics or Chemistry course.

Elementary Education Minor

A student not seeking licensure, but who wants to pursue an Elementary Education Minor must complete a major in Biology, English, Geology: Environmental Earth Science, or Mathematics. Students must meet all of the requirements for provisional and formal admission to the Teacher Education Program. The required courses for the Elementary Education Minor are the same as the required courses for elementary licensure with the exception that EDUC 430 Student Teaching: Elementary is not required.

Secondary Licensure

A student seeking licensure as a secondary teacher (grades 7-12) must complete an appropriate academic major, all other college requirements, and the Secondary Licensure option. The academic major may be Biology, Chemistry, English, Geology: Earth and Space Science, Mathematics, Music, Social Science (Economics, History or Political Science), or Spanish.

Students pursuing the Secondary Licensure option must meet all of the requirements for provisional and formal admission to the Teacher Education Program.

Required education courses:

EDUC 293 should be completed before or taken concurrently with the methods courses (Content area prefix 366). Check with the appropriate department or the Teacher Education Program for scheduling information regarding the secondary methods courses in the content area as they are not offered each semester. Students should be admitted to the Teacher Education Program prior to enrolling in methods courses in their content area.

K-12 Art, Physical Education and Music Licensure

A student seeking licensure as a K-12 Art, Physical Education or Music teacher must complete an academic major in Art, Exercise and Sport Science or Music, all other college requirements, the secondary licensure option, EDUC 396 Field Experience in Elementary Teaching, and the elementary methods course(s) in their major field.

Linguistically Diverse Education

This undergraduate endorsement program is for students seeking their first bachelor's degree, for individuals holding a bachelor's degree but not a teaching license, or for individuals holding a current teaching license. Students seeking their first bachelor's degree or individuals holding a bachelor's degree but not a Colorado teaching license must be formally admitted into the Teacher Education Program.

The aim of the program is to prepare individuals to work with K-12 students who are not yet academically proficient in the English language and for whom English is a non-native language. This program is comprised of three four-credit courses coupled with extensive K-12 classroom field experience. The courses focus on a variety of educational methodologies as well as the legal and historical implications related to Linguistically Diverse Education. Completers of this twelve-credit endorsement program should be able to design and implement programs that (1) target the Colorado English Language Development Standards for K-12 Students and (2) support oral language, literacy, cognitive academic language, communication and cultural competence of the K-12 linguistically diverse student. All CCHE Linguistically Diverse Education Standards are targeted in the courses of the program.

All applicants to the program must fulfill two program admission requirements: (1) demonstrate background knowledge in other languages/cultures, and (2) participate in various aspects of professional development in the area of LDE.

In addition, individuals holding a current teaching license (i.e., post- baccalaureate teacher education students) must provide the following admission materials: (1) copy of current teaching license and (2) official transcripts showing completion of a bachelor's degree or higher from an accepted institution of higher education.

The required courses for the Linguistically Diverse Education endorsement program are:

EDUC 380 Oral Language Development and	Pedagogies4 c	r
EDUC 381 Literacy Development and Pedago	ogies4 c	r
EDUC 382 Cross-Cultural Communication,		

Cultural Practices and Pedagogies4cr

Special Education, Generalist

This undergraduate endorsement program is for students seeking their first bachelor's degree, for individuals holding a bachelor's degree but not a teaching license, or for individuals holding a current teaching license. Students seeking their first bachelor's degree or individuals holding a bachelor's degree but not a Colorado teaching license must be formally admitted into the Teacher Education Program.

The aim of the program is to prepare individuals to work with K-12 students who are disabled. This program is comprised of six three-credit courses coupled with extensive K-12 classroom field experience. The courses focus on a variety of educational methodologies as well as the legal and historical implications related to special education. Completers of this eighteen-credit endorsement program should be able to design and implement programs that target the Colorado Special Education Generalist Standards for K-12 Students.

The required courses for the Special Education, Generalist endorsement programs are:

	EDUC 300	Introduction to Education for Diverse Learners	3 cr
	EDUC 351	Assessment and Decision Making	3 cr
	EDUC 352	Assistive Technology	3 cr
-	EDUC 353	Educational Partnerships	3 cr
		Educational Approaches for Students with High Incidence Disabilities.	
1	EDUC 355	Educational Approaches for Students with Low Incidence Disabilities	3 cr
1	EDUC 356	Affective Focus on Individual Needs	3 cr
ri	or to studen	t teaching, the student must pass all components of the State Lice	ensure

Prior to student teaching, the student must pass all components of the State Licensure Exam, including the Special Education and Elementary Exam.

Student Teaching Requirements

- 1. All students (Elementary, Secondary, K-12, Elementary/Special Education, Secondary/Special Education, K-12/Special Education, Elementary/Linguistically Diverse Education, Secondary/Linguistically Diverse Education, or K-12/Linguistically Diverse Education) must meet the following requirements by the semester prior to the semester which they intend to student teach.
 - a) Pass the following components of the State Licensure Exam:
 - 1. Content Area
 - 2. Special Education and Elementary Education (for students seeking a license in Special Education)
 - 3. Linguistically Diverse Education (for students seeking a license in Linguistically Diverse Education)
 - b) Submission of an application for student teaching
 - c) Demonstration of oral competency by completing a public-speaking class at the college level (COTH 200 Public Speaking and Advocacy or an approved course from another institution) with a grade of "C-" or better.
 - d) A 2.750 overall GPA with not less than a 2.650 in the major and the Teacher Education courses.

- e) A grade of "C-" or better in
 - 1. all teacher education courses (EDUC)
 - 2. MATH 209 Theory of Arithmetic and Geometry I and MATH 210 Theory of Arithmetic and Geometry II (Elementary Licensure and Minor programs only)
 - 3. all courses in the academic major. Note: for Interdisciplinary/Liberal Arts majors this includes both the Liberal Arts Core and Emphasis areas.
- f) Completion of all Education coursework, practicum, field work, and coursework within the academic major and emphasis.
- g) Attendance at student teaching planning meetings and seminars
- 2. Placement. Host schools are selected by employing teachers who meet the criteria used for selecting cooperating teachers. Cooperating teachers are selected carefully to ensure that Western State College of Colorado student teachers have strong role models. The potential cooperating teacher self assesses his or her knowledge on the standards and standard elements. The principal of the host school completes and returns a checklist documenting criteria for selection of a Cooperating Teacher before a student teacher is placed at the host school. Upon receiving a student teaching placement and prior to accepting the placement, a student is expected to arrange for and have an interview with the cooperating teacher and observe in the classroom. Students accepting a student teaching placement will be expected to successfully complete the placement. Students who do not successfully complete the placement will be withdrawn from the Teacher Education Program and must appeal to the Selection and Retention Committee for readmittance.
- 3. Assignment. Elementary Licensure option students will be assigned an elementary classroom teacher for a minimum of 640 hours. Secondary Licensure option students will be assigned a secondary content area cooperating teacher for a minimum of 640 hours. K-12 Art, Physical Education or Music Licensure option students will be assigned a cooperating teacher for half of the student teaching experience at the elementary level and half of the student teaching experience at the secondary level. Special Education and Linguistically Diverse Education Licensure option students will be assigned a regular classroom teacher and a special education or linguistically diverse cooperating teacher for a minimum of 640 hours.
- 4. Student Teaching Semester. Students must complete the following requirements during the student teaching semester:
 - a) register for the appropriate student teaching course(s) (refer to list below);
 - b) attend required seminars:
 - c) complete responsibilities of a student teacher;
 - d) submit a complete work sample to the Teacher Education office for final approval as stipulated in the work sample requirements handout. Students must receive a score of not less than "3" on each standard element of the student teaching work sample review to be recommended for licensure;
 - e) apply for licensure from the Colorado Department of Education within the five years immediately following program completion. (Applications are available from the Teacher Education office.)

Note: In addition, students are encouraged to purchase liability insurance coverage to take effect during their student teaching semester.

EDUC 43	Student Teaching: Elementary14 c	r
EDUC 43	Student Teaching: Elementary	r
EDUC 43	Student Teaching: Secondary	r
EDUC 43	Student Teaching: Secondary	r

EDUC 434	Student Teaching: Elementary and Special Education14 cr
EDUC 435	Student Teaching: Elementary (K-12) and Special Education7 cr
EDUC 436	Student Teaching: Secondary and Special Education14 cr
EDUC 437	Student Teaching: Secondary (K-12) and Special Education7 cr
EDUC 438	Student Teaching: Elementary and
	Linguistically Diverse Endorsement14 cr
EDUC 439	Student Teaching: Secondary and
	Linguistically Diverse Endorsement14 cr
EDUC 440	Student Teaching: Secondary (K-12) and
	Linguistically Diverse Endorsement7 cr
EDUC 444	Student Teaching: Elementary (K-12) and
	Linguistically Diverse Endorsement

State Licensure Exam. Students must pass the appropriate State Licensure Exam prior to student teaching placement. Information about the State Licensure Exam can be obtained through the Teacher Education Program or the Colorado Department of Education.

Teacher Education Program Selection and Retention Process. Throughout the Teacher Education Program, students are systematically assessed by the Selection and Retention Committee of 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 will result in withdrawal from the program. A student who does not pass each course in the Teacher Education Program with at least a "C-" will have one semester (or the next time the semester course is offered) to remove the "D" or "F" with a grade of "C-" or better or be withdrawn from the Program. Before receiving provisional admission to the Teacher Education Program, students must complete both basic level education courses (EDUC 105 and EDUC 175) with a combined GPA of 2.500. Before formal admission to the Program, students must possess an overall GPA of 2.650. Prior to the semester in which they intend to student teach, students must have an overall GPA of 2.750 with not less than a 2.650 in the Major and the Teacher Education courses.

Anyone who fails two or more courses in the Teacher Education Program will be withdrawn from the Program. Any student who fails or withdraws from a course involving field experience and who wants to register for the field experience again must submit a written appeal to the Selection and Retention Committee.

In considering transfer credit for required Education courses, the Selection and Retention Committee will consider 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 their 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.

TEACH NOW ONLINE TEACHER LICENSURE PROGRAMS

Western State College of Colorado offers an online teacher licensure program: Teach Now. Within this program, there are two unique options for candidates seeking elementary, secondary, special education or linguistically diverse education licensure.

Both Teach Now Programs can be completed in twelve months and provide onthe-job teacher preparation for second career professionals. School districts are invited to collaborate with Western State College of Colorado on the implementation of these post-baccalaureate teacher licensure programs.

Route 1: Teach Now Alternative Licensure

Alternative licensure is designed for candidates who have a full time teaching position in an accredited Colorado school. The alternative licensure candidate must be teaching in the content area that they are seeking licensure.

Admissions. To apply, students must:

- 1. Hold a minimum of a bachelor's degree from an accredited institution
- 2. Complete the Teach Now Program application
- 3. Complete the Colorado Department of Education (CDE) application, including transcript review for content knowledge
- 4. Pass the appropriate state content exam (PLACE or Praxis II)
- 5. Secure a full-time teaching contract with an accredited Colorado school
- 6. Attend the Teach Now Program orientation during the summer

Program Design and Support. Alternative licensure students will:

- Complete 18-20 Teach Now undergraduate college credits throughout the school year
- Receive ongoing support from a master level mentor teacher in the content area in which the candidate is seeking licensure
- Receive support team assistance from school administrator, mentor teacher and the Teach Now Regional Coordinator

Cost. Fees remitted by the candidate cover the cost of delivering the training program, providing mentoring and school support, professional development, and eighteen to twenty college credits. Additional fees that candidates are responsible for include: Colorado Department of Education (CDE) application fees, transcript evaluation fees, lodging and travel costs, and textbooks associated with the program.

Route 2: Teach Now Internship

The internship option is designed so that candidates receive intensive licensure training in K-12 classrooms within their local communities. During the internship, candidates will be working with master teachers in the same content area that they are seeking licensure.

Admissions. To apply, students must:

- 1. Hold a minimum of a bachelor's degree from an accredited institution
- 2. Complete the Teach Now Program application
- 3. Undergo transcript review for content knowledge and degree verification
- 4. Pass the appropriate state content exam (PLACE or Praxis II)
- 5. Pass Professional Disposition Screening prior to placement
- Accept internship placements approved by Teach Now Program faculty and local school personnel
- 7. Attend the Teach Now Program orientation during the summer

Program Design and Support. Teach Now interns will:

- Co-teach with master teachers equivalent to 3 full school days per week for the entire school year
- Complete 18-20 Teach Now undergraduate college credits throughout the school year
- Receive ongoing support from a master level mentor teacher in the content area in which the candidate is seeking licensure
- Receive support team assistance from a school administrator, a mentor teacher, and the Teach Now Regional Coordinator

Cost. Fees remitted by the candidate cover the cost of delivering the training program, providing mentoring and school support, professional development, and eighteen to twenty college credits. Additional fees that candidates are responsible for include: transcript evaluation fees, lodging and travel costs, and textbooks associated with the program.

The course work, totaling 18 credits, for students seeking elementary education, secondary education, and K-12 licensure consists of:

secondary education, and it is necessare consists of.
EDUC 480 Essentials for Teaching / Orientation3 cr
EDUC 481 Preparing Learning Environments
EDUC 482 Differentiated Learning Based on Student Need
EDUC 483 Assessment Guides Instruction
EDUC 484 Technology Integration1 cr
EDUC 485 Standards Based Instruction
EDUC 486 Knowledge of Literacy
EDUC 487 Knowledge of Math1 cr
EDUC 488 Historical, Legal and Ethical Role of Schools
The course work, totaling 18 credits, for students seeking special education licensure consists of :
EDUC 351 Assessment and Decision Making
EDUC 352 Instructional Technology
EDUC 353 Educational Partnerships3 cr
EDUC 354 High Incidence Disabilities3 cr
EDUC 355 Low Incidence Disabilities3 cr
EDUC 356 Affective Focus on Individual Needs
The course work, totaling 22 credits, for students seeking linguistically diverse education licensure consists of :
EDUC 380 Oral Language Development and Pedagogies4 cr
EDUC 381 Literacy Development and Pedagogies4 cr
EDUC 382 Cross-Cultural Communication, Cultural Practices and .
Pedagogies4 cr
EDUC 484 Technology Integration3 cr
EDUC 481 Preparing Learning Environments
EDUC 483 Assessment Guides Instruction

EDUCATION COURSES

EDUC 105 Introduction to Education in a Multicultural Society 2 credits
This course is a study of the relationship between the school and the community including recognition of the multicultural nature of the American Society and its impact on the schools. The course provides an opportunity for the preservice teacher to recognize the school's role in teaching and perpetuating our democratic system. The

preservice teacher will learn about the relationships among the various governmental entities that create laws, rules, regulations, and policies that determine educational practices. Field experiences are required in this course. [Through enrollment in this course and completion of the following Teacher Education Admission Criteria: admission career counseling, and 50 hours of documented experiences with children, the student will gain provisional admission to the Teacher Education Program.]

EDUC 175 Psychological Foundations of Education

3 credits

This course is a study of what individuals think and do as they teach and learn. To become effective at working with others there needs to be an understanding of the physical, social, emotional, and cognitive development; cultural, social, emotional, and intellectual differences; learning and problem-solving process; self-esteem, motivation; testing; and measurement. The course provides an opportunity for relating the before mentioned characteristics and behaviors to current practice and environmental situations. Field experiences are required in this course. [Through enrollment in this course and completion of the following Teacher Education Criteria: admission career counseling, and 50 hours of documented experiences with children, the student will gain provisional admission to the Teacher Education Program.]

EDUC 197 Special Topics in Education

1-6 credits

EDUC 292 Instructional Design and Assessment for Elementary Preservice Teachers

3 credits

Students will learn how to design an elementary classroom that is an integrated curriculum learning environment. Students will learn through developing a physical environment, developing lesson and unit plans based on state content standards, learning teaching and assessment strategies, and learning how to effectively use instructional materials and media. Students will learn how to develop effective working partnerships with diverse families and their children. Students will demonstrate their competencies in the above listed objectives within public school classrooms and/or with peers. Field experiences are required in this course. Prerequisite: formal admission to the Teacher Education Program. This course is a Second Writing Course for elementary licensure students.

EDUC 293 Instructional Design and Assessment for Secondary Preservice Teachers

4 credits

This course encompasses standards-based unit and lesson planning, teaching strategies, program planning, measurement and evaluation, and the use of instructional materials, technology, and media for secondary preservice students. Students will plan standards-based lessons and units for diverse student populations based on their respective content areas and learn the theories for teaching strategies such as the various forms of discussion groups, inquiry/discovery, and concept attainment, which compliment content areas. Students will demonstrate the various strategies within public school classrooms and/or with peers. Students will have the opportunity to design and interpret various types of formative and summative evaluations and assessments. Students will learn how to use assessment data to drive standards-based curriculum and formulate informed viewpoints regarding issues related to pedagogy and assessment. Field experiences are required in this course. Prerequisite: formal admission to the Teacher Education Program. This course is a Second Writing Course for secondary education and K-12 licensure students.

EDUC 297 Special Topics in Education

1-6 credits

EDUC 300 Introduction to Education for Diverse Learners 3 credits

This is an introductory course on the education of students with diverse needs in the general education environment. Emphasis is placed upon the learning characteristics and teaching strategies for students covered in IDEA (Individuals with Disabilities

Education Act), students who are at-risk, and students from multicultural backgrounds. This course will address historical and legal perspectives, special education procedures, collaborative practices, identification methods, teaching strategies, and infusion of individual learner outcomes into general curriculums by expanding state standards. This course is taught on the Internet. Field experiences are required in this course. Prerequisite: formal admission to the Teacher Education Program.

EDUC 342 Teaching Reading in the Elementary School (with field experience)

3 credits

Teaching Reading in the Elementary School is a course designed to help prospective teachers develop and implement an effective literacy program in the contemporary classroom. The course will include instruction and practice in designing environments for individualized learning in reading. The course will include instruction and practice in methods of direct and indirect instruction in word recognition skills including explicit phonic strategies as well as context strategies and whole-word recognition. Students will learn about emergent literacy, including concepts of print. Special attention will be given to students' development of and ability to use a variety of instruments for ongoing, standards-based assessment. Students will be expected to demonstrate their knowledge with the use of authentic narrative and informational reading materials. Students will be assigned a field placement. Field experiences are required in this course. Prerequisite: formal admission to the Teacher Education Program. Corequisite: EDUC 348. Prerequisite or corequisite: EDUC 292.

EDUC 346 Teaching Science in the Elementary School (with field experience)

1 credit

This course provides elementary education students with opportunities to develop and apply their understandings of elementary science teaching and learning. They will also demonstrate their science content knowledge and pedagogy through designing and teaching lessons appropriate for elementary school science. Key tenets of standards-based education are emphasized. Students will become aware of children's ideas about science concepts and how these ideas influence learning. Students will also have multiple opportunities to articulate their own beliefs about the nature of science, and science teaching and learning. Students will design long and short-range standards-based lesson plans and assessments for diverse learners, and become informed about the crucial role of assessment informing teaching and learning. Field experiences are required in this course. Prerequisite: formal admission to the Teacher Education Program. Corequisite: EDUC 347 and EDUC 349. Prerequisite or corequisite: EDUC 292.

EDUC 347 Teaching Mathematics in the Elementary School (with field experience) 1

1 credit

This course provides elementary education students with opportunities to develop and apply their understandings of the content of elementary mathematics. They will demonstrate their mathematics content knowledge and pedagogy through the design and teaching of lessons appropriate for elementary school mathematics. National Council of Teachers of Mathematics standards are emphasized. Students will design long and short range standards based lesson plans and assessments for diverse learners, and become informed about the crucial role of assessment informing teaching and learning. Field experiences are required in this course. Prerequisite: formal admission to the Teacher Education Program. Corequisite: EDUC 346 and EDUC 349. Prerequisite or corequisite: EDUC 292.

EDUC 348 Elementary School Language and Writing Methods for Preservice Teachers (with field experience) 2 credits

This is a course designed to help prospective teachers integrate reading, writing, speaking, listening and critical viewing into the curriculum. The course will include development of strategies for teaching oral language and writing. Students will develop

strategies for fostering children's phonemic awareness. Instruction in writing methods will include a focus on emergent writing. The course will also include instruction in strategies for helping students develop ideas for writing, and in writing processes including conferencing, revision, and editing. Students will develop strategies for fostering conventional written language (including spelling, punctuation, capitalization, handwriting, and sentence structure). Field experiences are required in this course. Prerequisite: formal admission to the Teacher Education Program. Corequisite: EDUC 342. Prerequisite or corequisite: EDUC 292.

EDUC 349 Teaching Social Studies in the Elementary School (with field experience) 1 credit

This course provides elementary education students with opportunities to develop and apply their understandings of elementary teaching and learning in the social studies. They will also demonstrate social studies content knowledge and pedagogy through designing and teaching lessons appropriate for elementary social studies. Key tenets of standards-based education will be emphasized. Students will become aware of children's ideas about social studies concepts and how these ideas influence learning. Students will also have multiple opportunities to articulate their own beliefs about the nature of social studies disciplines and knowledge areas, and the potential role of these different areas in the elementary classroom. Students will design long and short-range standards-based lesson plans and assessments for diverse learners, and become informed about the crucial role of assessment informing teaching and learning. Field experiences are required in this course. Prerequisite: formal admission to the Teacher Education Program. Corequisites: EDUC 346 and EDUC 347. Prerequisite or corequisite: EDUC 292.

EDUC 351 Assessment and Decision Making

3 credits

This course is an in-depth course applying formal and informal assessment principles and procedures in the general and special education intervention and Individualized Educational Plan (IEP) process. Focus is placed using best practices in assessment for effective collaborative decision making related to the development, implementation, and evaluation of effective educational plans to meet individual student needs. Prerequisite: formal admission to the Teacher Education Program and EDUC 300.

EDUC 352 Instructional Technology

3 credits

This is a course designed for educators to practice the essential technology skills for teaching, learning, and communicating. This course will focus on planning and implementing effective technology integration into course content, using word processing, spreadsheet, database, presentation software, Internet, basic web page design, and assistive/adaptive technology. The course content will be individualized based on student competencies, needs, and interests. Prerequisite: formal admission to the Teacher Education Program and EDUC 300.

EDUC 353 Educational Partnerships

3 credits

This is a course designed to teach and practice the essential educational skills for consultation and collaboration. Focus is placed on communication, interpersonal and intrapersonal intelligences, teaming, involving students in planning and decision making, conferencing techniques, family and community partnerships, professional roles and responsibilities, and integration of regular and special education student needs. Field experiences are required in this course. (This course will be offered on the Internet.) Prerequisite: formal admission to the Teacher Education Program and EDUC 300.

EDUC 354 Educational Approaches for Students with High Incidence Disabilities

3 credits

This course is designed to teach current concepts, trends, issues and specific methodological techniques and practices for students with mild and moderate disabilities including students who need curriculum enrichment. Focus is placed on properly assessing and probing student strengths/needs to develop effective individual education plans which include effective strategies for teaching students literacy and academic content based on the typical school curriculum/standards. The approach used is process based, needs based, balanced and eclectic. Teaching and learning are addressed holistically using many specific and intensive techniques in a variety of groupings and settings. Field experiences are required in this course. (This course will be offered on the Internet.) Prerequisite: formal admission to the Teacher Education Program and EDUC 300.

EDUC 355 Educational Approaches for Students with Low Incidence Disabilities

3 credits

This is a course on education for students with moderate and severe disabilities. Students are required to develop individual educational plans using specific methodological techniques and adaptations for meeting physical, cognitive, communicative, emotional, social and sensory needs of students with low incidence disabilities. Focus is placed on needs based education that supports the typical school curriculum/standards and fosters transition and inclusion within the home, school, and community. Field experiences are required in this course. (This course will be offered on the Internet.) Prerequisite: formal admission to the Teacher Education program and EDUC 300.

EDUC 356 Affective Focus on Individual Needs

3 credits

In this course students study and implement theories and strategies for educating students with emotional, behavioral and social needs. Best practices for intervention, identification, individualized program development and instruction within a variety of settings and groupings are covered. Focus is placed on the team-creating positive learning environments and achieving positive affective goals. Field experiences are required in this course. (This course will be offered on the Internet.) Prerequisite: formal admission to the Teacher Education Program and EDUC 300.

EDUC 371 Classroom Management and Discipline

2 credits

Classroom management and discipline is a study of classroom organization and planning in facilitating student learning. Legal rights and due process of students, parents, teachers, administrators, and school boards are studied in relation to classroom management. Theories of classroom control and discipline and parent/teacher conferencing are reviewed and practiced. Additionally, management and discipline outside of the classroom are reviewed and practiced. Field experiences are required in this course. Prerequisite: formal admission to the Teacher Education Program. Corequisite: EDUC 396 or EDUC 398.

EDUC 380 Oral Language Development and Pedagogies 4 credits

This course will provide students with theory and practice for teaching Linguistically Diverse Education [LDE] students in the classroom, with special emphasis on supporting student progress with oral language. In the context of oral language, students in the course will learn to enhance the educational potential of K-12 students whose progress is "severely restricted because a language other than English is their primary means of communication" (Colorado ELP Act). Instructional and assessment methods will be presented to help students address federal and state requirements. Field experience is required. Prerequisite: Formal admission to the Teacher Education Program or current Colorado teaching license.

EDUC 381 Literacy Development and Pedagogies 4 credits

This course offers students content specific to the challenges of written English. For students whose "educational potential is severely restricted because a language other than English is their primary means of communication" (Colorado ELP Act), the challenges of written English pose special problems. Methods and theory, addressing

federal and state requirements, that help LDE students learn to recognize printed English words, understand written English using a wide variety of text types and structures (including comprehension and vocabulary knowledge), and learn to write with a variety of text types and structures will be examined. Field experience is required. Prerequisite: Formal admission to the Teacher Education Program or current Colorado teaching license.

EDUC 382 Cross-Cultural Communication, Cultural Practices and Pedagogies 4

4 credits

This course will provide students with opportunities to relate types of language discourse to cultural practices, and communication and cultural issues involved in the education of linguistically diverse students. Course topics will include the concept of culture and cultural practices, issues in cross-cultural communication, and respect and advocacy for cultural heritage, examination of federal and state requirements, evaluation of curriculum resources, appropriate pedagogies for cognitive academic language development, and use and reporting of assessment results. Field experience is required. Prerequisite: Formal admission to the Teacher Education Program or current Colorado teaching license.

EDUC 392 Independent Studies

1-3 credits

EDUC 396 Field Experience in Elementary Teaching

1-2 credits

This course provides experiences in an actual teaching setting including general, multi-cultural (e.g. LDE), and special education. Such experiences include observation, planning lessons, implementing lessons, planning and using evaluation techniques, working with individual students and small groups, developing and using media, working with committees for curriculum development, and other experiences unique and appropriate to the student's content area. Ninety hours of field experience are required in this course for elementary education students and forty-five hours of field experience are required for K-12 students in Art, Music and Physical Education as well as some individualized instruction (e.g. LDE), plus participation in arranged seminars. K-12 education students in Art, Music, and Physical Education will complete 1 credit for this course. Elementary education licensure students will earn 2 credits for this course. Prerequisite: formal admission to the Teacher Education Program; EDUC 292 or EDUC 293; and EDUC 300. Corequisite: EDUC 371.

EDUC 397 Special Topics in Education

1-6 credits

EDUC 398 Field Experience in Secondary Teaching

1-2 credits

This course provides experiences in an actual teaching setting including general, multi-cultural (e.g. ELL), and special education. Such experiences include observation, planning lessons, implementing lessons, planning and using evaluation techniques, working with individual students and small groups, developing and using media, working with committees for curriculum development, and other experiences unique and appropriate to the student's content area. Ninety hours of field experience are required in this course for secondary education students and forty-five hours of field experience are required for K-12 education students in Art, Music and Physical Education as well as some individualized instruction (e.g. LDE), plus participation in arranged seminars. K-12 education students in Art, Music and Physical Education will complete 1 credit for this course. Secondary education licensure students will earn 2 credit for this course. Prerequisite: formal admission to the Teacher Education Program, EDUC 293, and EDUC 300. Corequisite: EDUC 371.

EDUC 430 Student Teaching: Elementary

14 credits

Minimum of 640 hours.

EDUC 431 Student Teac	hing: Elementary	(Special)
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Minimum of half of the student teaching experience.

7 credits

EDUC 432 Student Teaching: Secondary

Minimum of 640 hours.

14 credits

EDUC 433 Student Teaching: Secondary (Special) Minimum of half of the student teaching experience.

7 credits

EDUC 434 Student Teaching: Elementary and Special Education

14 credits

Minimum of 640 hours.

EDUC 435 Student Teaching: Elementary (K-12)

and Special Education

7 credits

Minimum of half of the student teaching experience.

EDUC 436 Student Teaching: Secondary and Special Education Minimum of 640 hours.

14 credits

EDUC 437 Student Teaching: Secondary (K-12) and Special Education

7 credits

Minimum of half of the student teaching experience.

EDUC 438 Student Teaching: Elementary and Linguistically **Diverse Endorsement**

14 credits

Minimum of 640 hours.

EDUC 439 Student Teaching: Secondary and Linguistically Diverse Endorsement

14 credits

Minimum of 640 hours.

EDUC 440 Student Teaching: Secondary (K-12) and Linguistically **Diverse Endorsement**

7 credits

Minimum of half the student teaching experience.

EDUC 444 Student Teaching: Elementary (K-12) and Linguistically

Diverse Endorsement

7 credits

Minimum of half the student teaching experience.

EDUC 450 Early Childhood Education

3 credits

This course will cover topics related to principles of developmentally appropriate practices in early childhood education programs serving children ages birth through 3rd grade. The course topics will rotate each semester and the student may repeat the course for credit, when different topics are covered.

EDUC 465 Reading in the Secondary School

3 credits

This course is a study of the organization and management of secondary school reading programs, with responsibilities for reading instruction in support of content areas and the identification of unique reading skills. Special focus will be given to developing strategies for fostering growth in three components of reading: comprehension, word recognition, and engagement. Students will be made aware of and coached to use in field experience various methods for ongoing assessment of literacy levels. In the field experience students will be actively involved in making appropriate choices for secondary students' independent reading material and planning for literary and informational response. These assessments will be used to design instructional plans. The course will focus strongly on the sources of reading difficulties; the use of diagnostic tests, developmental, corrective, and remedial methods and materials; and current standards for teaching and learning reading. Field experiences are required in this course. Prerequisite: formal admission to the Teacher Education Program.

EDUC 480 Essentials for Teaching

3 credits

This course is an overview of the essential knowledge and skills needed to begin teaching. This course will cover in an overview format the K-12 model content standards, standards based lesson planning, various types of formal and informal assessments, using assessment results to guide instruction, classroom management, collaboration strategies, ethical and legal responsibilities, school rules and contacts, electronic inventory overview and an orientation to online learning. Students will also be responsible for gathering specific information from the school in which they are employed. This course will be taught at a central location.

EDUC 481 Preparing Learning Environments

2 credits

This course will prepare students to create appropriate learning environments both inside and outside the classroom. Students will learn to use sound and legal disciplinary practices to create learning environments that are characterized by acceptable student behavior, efficient use of time, and disciplined acquisition of knowledge, skills, and understanding. In addition, students will gain specific knowledge on how to effectively communicate with parents in order to involve them as participants and partners in student learning. This course is taught on the Internet.

EDUC 482 Differentiated Learning Based on Student Need 3 credits

To become effective at working with others there needs to be an understanding of the physical, social, emotional, and cognitive development; cultural, social, emotional, and intellectual differences; learning and problem-solving process; self-esteem, motivation; testing and measurement. In this course students will gain the knowledge to understand the cognitive processes associated with various kinds of learning and ensure attention to these learning processes so that students can master content standards. Additionally, students will learn to employ a wide range of teaching techniques to match the intellectual, emotional, and social level of each student, and choose alternative teaching strategies, materials and technologies to achieve different curricular purposes. Students will also be taught to apply expert content knowledge to enrich and extend student learning and to recognize educational disabilities and their effects of student learning in order to develop and apply individual educational plans. This course is taught on the Internet.

EDUC 483 Assessment Guides Instruction

3 credits

This course encompasses the development and utilization of various types of formative, summative, informal and formal evaluations and assessments in order to accurately document and report ongoing student achievement. Students will learn to use assessment data to drive standards-based curriculum and formulate informed viewpoints regarding issues related to pedagogy and assessment. Technology will be utilized to teach students effective ways to manage and communicate assessment results and their implications to students, parents, professionals, administrators and the community. This course is taught on the Internet.

EDUC 484 Technology Integration

1 credit

This course is designed for students to practice the essential technology skills for teaching, learning, and communicating, specifically within the K-12 curriculum. Students will have the opportunity to learn how to apply technology to the delivery of standards-based instruction, use technology to increase student achievement, utilize technology to manage and communicate information, apply technology to data-driven assessment of learning and/or instruct students in basic technology skills. The use of digital cameras, scanners, spreadsheets, electronic grade books, databases, web design software, publishing software, word processing software, presentation software, assistive technologies, online simulations, and Internet applications will all

be choices provided within this course. The course will be individualized based on the students' teaching assignments and learning needs. This course will be taught at a central location.

EDUC 485 Standards Based Instruction

2 credits

Students will plan short and long range standards-based lessons and units for diverse student populations based on their respective content areas. Additionally, students will be taught to integrate literacy and math into their standards-based instructional plans. Students will learn how to utilize these Colorado model content standards to enhance and ensure student learning. Technology skills will be integrated throughout this course so that students will have an understanding of how to use technology to enhance standards-based instruction and instruct students in basic technology skills. This course will be taught on the Internet.

EDUC 486 Knowledge of Literacy

2 credits

Direct and indirect methods for teaching phonological and linguistic skills, teaching reading comprehension and promotion of independent reading skills, and the support of reading through oral and written language development will be the focus of study within this course. Additionally, this course will address literacy demands on secondary school students by looking at literacy instruction needs in content areas. This course will be taught on the Internet.

EDUC 487 Knowledge of Math

1 credit

This is a theory of arithmetic course and the sequence will cover topics of developing in students an understanding and use of number systems and number sense; geometry, measurement; statistics and probability; functions and use of variables. Additionally, students will be taught to integrate mathematics into their K-12 standards-based instructional plans to enhance and ensure student learning. This course will be taught on the Internet.

EDUC 488 Historical, Legal and Ethical Role of Schools and Teachers

1 credit

This course provides an opportunity for the students to recognize the school's role in teaching and perpetuating our democratic system. The student will learn about the relationships among the various governmental entities that create laws, rules, regulations and policies that determine educational practices. Various career paths in education, including local, state, national, and international options, higher education, public and private education will be explored. This course will be taught on the Internet.

EDUC 492 Independent Study

1-3 credits

EDUC 493 Research Problems

1-4 credits

EDUC 497 Special Topics in Education

1-6 credits



English (ENG)

The English program at Western State College of Colorado 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.
- Understand the use of language from the sub-sentence level to an entire text.
- 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.
- Use the standard program to complement the Elementary Education program and become licensed to teach in elementary schools in Colorado.

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, William E. King, and Mark D. Todd; Assistant Professor Alina M. Luna; Lecturers JoAnn M. Arai-Brown and Courtney Fullmer; Visiting Professor Alicita M. Rodriguez; Emeritus Professor Zelda J. Rouillard.

DESCRIPTION OF THE PROGRAMS

English majors and minors must complete the required course ENG 250 Literature: Studies in ______ (or its equivalent), with a minimum grade of "C" before registering for upper-division courses in English. Transfer students receiving transfer credit for ENG 250 must transfer credit with a grade of "C" or better, or they will need to repeat the course.

English Major: Standard Program

A minimum of 36 credits is required, including three credits of a 200-level or higher literature elective and the following:

rature electiv	e and the following:	
ENG 205 I	Introduction to Writing: Four Genres	3 cr
ENG 250 I	Literature: Studies in	3 cr
ENG 320 7	The English Language: History and Grammar	3 cr
ENG 358 V	World Literature: Studies in	3 cr
ENG 471 I	Literary Theory and Research	3 cr
ENG 494 7	The Capstone Experience	3 cr
One of the j	following:	
ENG 300 (Creative Writing: Fiction	3 cr
ENG 301 (Creative Writing: Poetry	3 cr
	Technical Writing	
ENG 303 V	Writing about Nature	3 cr
ENG 305 (Creative Writing: Non-fiction	3 cr
ENG 306 V	Writing for Stage and Screen	3 cr
Two of the f	following:	
ENG 372 I	British Literature: Medieval and Renaissance Texts	3 cr
ENG 373 I	British Literature: Milton through the Romantics	3 cr

ENG 374 British Literature: The Victorians and the 20th Century3 cr ENG 463 Major British Authors: 3 cr	
Two of the following: ENG 384 American Literature—Early to Civil War	
ENG 464 Major American Authors:	
WRITING EMPHASIS The Writing Emphasis requires a minimum of 54 credit hours, including the 36 credits Standard Major and the following:	S
COTH 241 Media Writing3 cr	
ENG 405 Advanced Writing	
COTH 343 Persuasive and Expressive Writing on Public Issues	
Three credits from the following: COTH 245 Newspaper Production1-2 cr	•
COTH 345 Magazine Production	
ENG 300 Creative Writing: Fiction	•
ENG 301 Creative Writing: Poetry	•
ENG 303 Writing about Nature3 cr	•
ENG 305 Creative Writing: Non-fiction	
SECONDARY LICENSURE EMPHASIS	
The Secondary Licensure Emphasis requires 54 credits, including 6 credits of one modern foreign language or the equivalent (two years of one modern foreign language in high school; students who meet the modern foreign language requirement through an equivalency may add the six credits through English electives). In addition, the student in this Emphasis must fulfill the requirements of the Secondary Licensure Option (see description under Education). The following courses are required:	nt ny e
COTH 225 Art of the Theatre 3 cr COTH 241 Media Writing 3 cr	
ENG 205 Introduction to Writing: Four Genres 3 cr	
ENG 250 Literature: Studies in 3 cr	•
ENG 320 The English Language: History and Grammar3 cr	•
ENG 358 World Literature: Studies in	
ENG 384 American Literature—Early to Civil War	•
ENG 385 American Literature—Civil War to Present	
ENG 450 Literature for Young Adults	
ENG 471 Literary Theory and Research	
One of the following: ENG 300 Creative Writing: Fiction	
Two of the following:	
ENG 231 American Literatures and Ethnicity: Studies in	
ENG 237 Women and Literature	
ENG 238 Literature of the American West	
ENG 337 Women Writers 3 cr	

Two of the following: ENG 372 British Literature: Medieval and Renaissance Texts
English Minor A minimum of 18 credits is required for a Minor in English including two electives, of which one must be upper division, to be determined in consultation with an advisor, and the following: ENG 205 Introduction to Writing: Four Genres
One of the following: ENG 372 British Literature: Medieval and Renaissance Texts
One of the following: ENG 384 American Literature—Early to Civil War
General Education Requirements. The following course in the English Major fulfills the Second Writing Course component of the Essential Skills Requirement: ENG 250 Literature: Studies in
Capstone Course Requirement. The following courses in the English Major fulfill the Capstone Course Requirement: ENG 494 The Capstone Experience. Students completing the Secondary Licensure Emphasis may use student teaching to fulfill this requirement.
English Assessment Program. All English majors and minors are required to participate in and successfully pass skills/knowledge assessment testing in English. Assessment tests will be conducted thus: 1) as a component of the required course ENG 250 Literature: Studies in; 2) as a designated semester project in any one of the junior-level historical periods in British or American literature (Standard Major), or a designated project in ENG 405 (writing emphasis); and 3) a final graduation requirement incorporated into ENG 494 The Capstone Experience.

ENGLISH COURSES

ENG 099 Basic Writing

No Credits

This 12-week course provides students with practice in generating and developing writing about familiar topics, which is pre-college writing. English 099 is for students who do not meet the College Level Entry Standards mandated by the Colorado Commission on Higher Education. Offered through Extended Studies for an additional fee. Graded Satisfactory/Unsatisfactory only.

ENG 102 Academic Writing

3 credits

English 102 gives 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 do this in ENG 102 in two ways. First, they practice strategies for making the writing more comprehensible for readers. Second, they learn to use a wide range of writing processes for getting started, developing, organizing, and polishing writing projects. A grade of at least a "C-" in English 102 is required before students can enroll in the required Second Writing Course in their majors. 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 Verbal score of 440 or higher to demonstrate writing proficiency and SAT Verbal score of 430 or better 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.

ENG 102 Honors Academic Writing

3 credits

English 102 Honors Academic Writing offers students the opportunity to learn how to analyze difficult, theoretical texts through collaborative exercises, presentation, and informal and formal writing. Such in-depth analysis will be the basis for formal writing projects in the course. The challenging course respects students as beginning scholars, who, though not yet experts, can learn to make important contributions. As such, students employ ideas from the course reading and from discussion as opportunities to question and expand their own perspectives. A grade of at least a "C-" in English 102 Honors is required before students can enroll in the required Second Writing Course in their majors. 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 Verbal score of 440 or higher to demonstrate writing proficiency and SAT Verbal score of 430 or better 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.

ENG 150 Introduction to Literature: Studies in 3 credits

An introductory literature course based on a variety of announced themes and topics. The course may be repeated once for credit when taken with a different theme. 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 Verbal score of 440 or higher to demonstrate writing proficiency and SAT Verbal score of 430 or better 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 Writing: Four Genres 3 credits

An introduction to the four basic creative writing genres: poetry, drama, fiction and non-fiction. Models of each are studied, and students write and share pieces in each of these differing literary forms. Required of all English Majors and Minors and of students in the Liberal Arts Core for the Interdisciplinary Studies / Liberal Arts Major: Comprehensive Program. Prerequisite: completion of ENG 102 with a grade of "C-" or better.

ENG 231 American Literatures and Ethnicity: Studies in ______ 3 credits This course focuses on literature traditionally underrepresented in the American canon. While studying formal and thematic characteristics of a specific literature, students consider problematic and enabling aspects of taking courses in and using such terms as "ethnic," "multicultural," "marginal," and "canonical" literatures. A specific focus is announced each time the course is offered. Some examples include Native American, African American, Asian American, and Borderlands literature. Prerequisite: ENG 102 with a grade of "C-" or better.

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 grade of "C-" or better.

ENG 238 Literature of the American West

3 credits

A study of traditional and nontraditional forms of Western literature. Specific titles to be announced each time the course is offered. Prerequisite: ENG 102 with a grade of "C-" or better.

ENG 248 Film Arts: Film as Literature/Literature as Film 3 credits

A course which focuses upon 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 grade of "C-" or better. Course fee: \$10.

ENG 250 Literature: Studies in _____ 3 credits

In this writing course, 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 theme or topic will be announced each semester. Required of all English Majors and Minors and of students in the Liberal Arts Core for the Interdisciplinary Studies / Liberal Arts Major: Comprehensive Program. Prerequisite: ENG 102 with a grade of "C-" or better.

ENG 254 Formula Fiction

3 credits

This course focuses 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 grade of "C-" or better.

ENG 255 Ancient World Literature

3 credi

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 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 grade of "C-" or better.

ENG 270 Folklore 3 credits

A study of folklore with a focus on American folklore. Attention is paid to family folklore—such as proverbs, traditions, beliefs, recipes, tales, and games. Students are encouraged to bring examples of their family's traditions and share them with the class. Collecting is encouraged, and items are contributed to the Western State College Folklore Collection. Prerequisite: ENG 102 with a grade of "C-" or better.

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

credits

A writing course focusing on the fiction genre. Models will be studied, and students

will read and respond to one another's writing. Prerequisite: ENG 205 with a minimum grade of "C."

ENG 301 Creative Writing: Poetry

3 credits

A writing course focusing on poetry. Instruction will be given on the techniques and terminology of poetry writing. Models will be studied, and students will read and respond to one another's writing. Prerequisite: ENG 205 with a minimum grade of "C."

ENG 302 Technical Writing

3 credits

A course in practicing writing strategies that help specialists prepare texts for an audience that lacks specialized background knowledge. Students will write reports, proposals, and instructions as well as give presentations that are appropriate for a general audience. The writers will employ both print and electronic media. Prerequisite: ENG 205 with a minimum grade of "C."

ENG 303 Writing About Nature

3 credits

This course uses a workshop approach to help writers develop a portfolio of essays suitable for publication in outdoor, nature, and other appropriate magazines. To help develop their essays, writers also read and write about theoretical texts and examples of published nature writing. Prerequisite: ENG 205 or ENVS 300 with a minimum grade of "C."

ENG 305 Creative Writing: Non-fiction

3 credits

A writing course focusing on the non-fiction genre. Models will be studied, and students will read and respond to one another's writing. Prerequisite: ENG 205 with a minimum grade of "C."

ENG 306 Writing for the Stage and Screen

3 credits

This course will provide the student with the fundamental tools and skills required to craft a script for performance on the 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 will also be included in the course. Prerequisite: ENG 205 or COTH 222 with a minimum grade of "C."

ENG 320 The English Language: History and Grammar 3 credits

Students can focus on the study of traditional grammar of the English language and Standard Edited English, which is one school of linguistic study. As part of this language study, they will examine the main points in the development of the English language from Old English through Middle English to Modern English. In addition, they will consider applicable elements of linguistics. Required of all English Majors and of students in the Interdisciplinary Studies / Liberal Arts Major: Comprehensive Program with a Humanities Emphasis. Offered each fall semester. Prerequisite: ENG 102 with a grade of "C-" or better.

ENG 330 Literature of the Environment

3 credits

A literature course focusing on literature of the environment. Class members can gain a deeper appreciation of the artistic features of the literature while developing analyses based on contemporary cultural and literary theory. Prerequisites: Eng 250 or ENVS 300 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 course focusing 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 nineteenth-century, twentieth-century, or contemporary writers. Prerequisite: ENG 250 with a minimum grade of "C."

ENG 352 Children's Literature

2 credits

A survey course that examines traditional and modern literature. The course will also provide an opportunity to discuss topics, such as reader-response theories, critical literacy, objective and subjective criticism, censorship, and the use—or misuse—of literature in primary and middle-level education. Required of all students in Elementary Education.

ENG 358 World Literature: Studies in_____ 3 credits

A course studying literature written in Africa, South and East Asia, India, and Central and South America. The course will consider the artistry of the literature and the reflection of the culture and of the political and social conditions of the country in that literature. A specific focus will be announced each time the course is offered. Prerequisite: ENG 250 with a minimum grade of "C."

ENG 366 Methods of Teaching English in the Secondary School 3 credits Students will study and practice multiple strategies for teaching literature, writing, oral communication, listening, and visual communication in the secondary school. In addition, observation in Gunnison secondary schools is required. Note: Before enrolling in ENG 366, students must have been accepted into the Teacher Secondary Education Program at Western and have completed the required Education courses (see the appropriate entry under Education in this catalog). 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 372 British Literature: Medieval and Renaissance Texts 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.-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 and the 20th Century 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 397 Special Topics

3 credits

A study of a particular topic of interest to students of English to be announced each time the course is offered. 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 450 Literature for Young Adults

3 credits

A course which offers prospective teachers an acquaintance with literature suitable for the adolescent reader. Approaches for teaching such literature are studied, and students are given the opportunity to teach small units of long and short fiction, drama, and poetry. Required of all English majors pursuing the Secondary Education Licensure Emphasis and of students in the Interdisciplinary Studies / Liberal Arts Major: Comprehensive Program with a Humanities Emphasis. Offered in alternate years. Prerequisite: ENG 250 with a minimum grade of "C."

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. Prerequisite: ENG 250 with a minimum grade of "C."

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. Prerequisite: ENG 250 with a minimum grade of "C."

ENG 471 Literary Theory and Research

3 credits

The course introduces students to some of the primary conversations structuring debates in literary theory and criticism. Students will learn to identify central questions, assumptions, and conflicts in theoretical and critical texts. They will also gain an understanding of the ways theory and criticism influence their immediate experiences in all English courses. The course includes a research project, informed by theoretical and critical material read throughout the semester. Prerequisites: ENG 250 and two upper-division literature courses with minimum grades of "C."

ENG 475 Theories of Reading and Writing Discourse

3 credits

A course in the differing approaches to texts that are presently used in English studies. Some of the approaches that readers use are studying the text itself closely and studying the contextual forces that help construct the text. Writers' approaches to texts include focusing on the readers' needs and responses as well as the process of composing. English Majors considering graduate school should plan to take this course. Offered alternate spring semesters. Prerequisite: ENG 250 with a minimum grade of "C."

ENG 492 Independent Study

1-3 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. May be taken for a maximum of three credits in one semester. Maximum credit toward bachelor's degree not to exceed six credits. Prerequisites: 12 credits of English and ENG 250 with a minimum grade of "C."

ENG 494 The Capstone Experience

3 credits

English majors in the Standard Program must pass 3 credits of coursework in ENG 494 with a minimum grade of "C." Students are encouraged to enroll for one credit the semester before graduation and 2 credits during their final semester. The Capstone Portfolio and oral presentation should demonstrate all the competencies which are called for in the Major. All other coursework for the Major must be finished or in progress for a student to sign up for the final credit hours of ENG 494. Prerequisite: instructor permission.

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. Prerequisite: ENG 250 with a minimum grade of "C."



Environmental Studies (ENVS)

The Environmental Studies Program focuses on the interactions of humans and the natural environment. Specifically, the Program studies the structure and functioning of natural systems and the ways that human social, political, and economic activity affects those systems.

Goals of the Environmental Studies Program include:

- Developing students' capacities for interdisciplinary critical thinking and problem solving.
- Analyzing and applying the diverse language practices and research methodologies
 of the social sciences and natural sciences in relation to environmental issues and
 public policy.
- Teaching students to communicate and work cooperatively across diverse disciplines and interests on environmental issues and public policy decisions.
- Fostering an understanding of the literature of the natural environment and the ethical questions in environmental decision making.
- Helping students learn to communicate about environmental issues with general audiences.
- Involving students in experiential learning that emphasizes the synthesis and application of knowledge about environmental issues in our rural, mountainous location.
- Enhancing career and graduate study opportunities in environmentally related disciplines.

Students majoring in Environmental Studies may choose the 44-credit Standard Program or a 60-credit Comprehensive Program. This interdisciplinary curriculum provides students with breadth of knowledge through 23 credits of supporting courses in sociology, science, natural science and statistics; and integration through 21 credits of Environmental Studies courses.

Students can choose from four different emphases within the Comprehensive Program: Public Policy, Environmental Writing, Environmental Tourism, and Individualized Contract.

ENVIRONMENTAL STUDIES COUNCIL

Kevin D. Alexander, Biology
Philip L. Crossley, Geography
Matthew H. Ebbott, Recreation
John C. Hausdoerffer, Environmental Studies
Patrick A. Magee, Biology
David J. Plante, Economics
Dale L. Orth, Chemistry
George E. Sibley, Journalism

Sally E. Hays, Economics

DESCRIPTION OF THE PROGRAMS

All Environmental Studies Majors require the 44-credit Environmental Studies Core.

Environmental Studies Core ENVS 100 Introduction to Environmental Studies 3 cr ENVS 300 Resources, Policy, and the Environment 3 cr ENVS 301 Science, Technology, and the Environment 3 cr ENVS 380 Public Lands Management 3 cr ENVS 390 Environmental Applications 4 cr ENVS 400 Field Experience 3 cr ENVS 410 Environmental Ethics 2 cr Social Science courses: ECON 215 Environmental Economics 3 cr POLS 180 American Federal Government 3 cr SOC 100 Environmental Sociology 3 cr

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Natural Science courses: BIOL 130 Environmental Biology
One of the following: CHEM 101 Introduction to Inorganic Chemistry
One of the following: ECON 216 Statistics for Business and Economics
Environmental Studies Major: Standard Program The Standard Program requires the 44-credit Environmental Studies Core.
Environmental Studies Major: Comprehensive Program The Comprehensive Program requires a minimum of 60 credits including the 44- credit Environmental Studies Core and 16 credits specific to each Emphasis.
PUBLIC POLICY EMPHASIS A minimum of 60 credits is required including the 44-credit Environmental Studies Core and the following:
ECON 201 Macroeconomics
POLS 300 Constitutional Law 3 cr SOC 340 Social Movements 3 cr One of the following:
ECON 317 Economics and Public Policy
Environmental Writing Emphasis A minimum of 60 credits is required including the 44-credit Environmental Studies Core and the following:
COTH 241 Media Writing
ENG 303 Writing about Nature
Environmental Tourism Emphasis A minimum of 60 credits is required including the 44-credit Environmental Studies Core and the following courses. Students are admitted to this Emphasis based on
application. BIOL 301 General Ecology
RECR 189 Principles of Outdoor Recreation
One of the following: RECR 392 Teaching Experiential Education in the Outdoors
RECR 396 Outdoor Pursuits Education – Land Based

3 credits

RECR 473	Wilderness Education Association Field Course	3 cr
RECR 474	Colorado Outward Bound School Course	3 cr

Admission to Recreation courses for declared Environmental Tourism Emphasis students will be based on instructor permission and available seats.

INDIVIDUALIZED CONTRACT EMPHASIS

This Emphasis allows students to design a curriculum in consultation with an Environmental Studies advisor and the Environmental Studies Council. A minimum of 60 credits is required including the 44-credit Environmental Studies Core. Consult an Environmental Studies advisor for details.

Environmental Studies Minor

The Environmental Studies Minor requires 21 credits. Choose one of the following tracts.

Society, Policy, and Environment Concentration	
ENVS 100 Introduction to Environmental Studies	
ENVS 300 Resources, Policy, and the Environment3 cr	
ENVS 380 Public Lands Management	
ECON 215 Environmental Economics	
POLS 180 American Federal Government3 cr	
SOC 100 Environmental Sociology3 cr	
One of the following:	
ECON 216 Statistics for Business and Economics	
MATH 213 Probability and Statistics	
,	
Environmental Science Concentration	
ENVS 100 Introduction to Environmental Studies	
ENVS 100 Introduction to Environmental Studies	
ENVS 100 Introduction to Environmental Studies	
ENVS 100 Introduction to Environmental Studies	
ENVS 100 Introduction to Environmental Studies	
ENVS 100 Introduction to Environmental Studies	
ENVS 100 Introduction to Environmental Studies	
ENVS 100 Introduction to Environmental Studies	
ENVS 100 Introduction to Environmental Studies	

General Education Requirements. The following course in the Environmental Studies Major fulfills the Second Writing Course component of the Essential Skills Requirement: ENVS 300 Resources, Policy, and the Environment.

CHEM 111 General Chemistry......3 cr

Capstone Course Requirement. The following course in the Environmental Studies Major fulfills the Capstone Course Requirement: ENVS 400 Field Experience.

ENVIRONMENTAL STUDIES COURSES

ENVS 100 Introduction to Environmental Studies

This interdisciplinary course introduces students to the field of environmental studies by emphasizing connections between person, place, and time. The unique natural and social history of the Southern Rocky Mountains is used to introduce the importance of human relationships to the land. Through readings in the foundational texts of environmental philosophy, exposure to the complexities of "environmentalism," and reflective outdoor experiences, students will begin developing an appreciation for their unique ecological identity, significance in history, and role in their surroundings. Course fee: \$10.

ENVS 197	Special Topics	1-6 credits
ENVS 292	Independent Study	1-3 credits
ENVS 297	Special Topics	1-6 credits

ENVS 300 Resources, Policy, and the Environment

3 credits

This course examines environmental and natural resource use in public policy from a social science perspective. Students are asked to actively engage in environmental and natural resource issues using the analytical methods and theoretical perspectives developed in the social science base curriculum. Prerequisites: ENVS 100, ECON 215, POLS 180, and SOC 100, or instructor permission.

ENVS 301 Science, Technology, and the Environment

3 credits

An interdisciplinary course synthesizing the natural sciences of biology, geology, and chemistry to develop a better understanding of ecosystem principles. Ecosystem principles are then used as the basis for discussions regarding appropriate and alternative technologies. The interactions between scientific advances in the understanding of ecosystems and technological applications are emphasized. Field experiences on campus are used to demonstrate local environmental concerns and social and technological solutions. Prerequisites: ENVS 100, BIOL 130, BIOL 135, GEOL 101, and GEOL 105; and either CHEM 101 or CHEM 111. Course fee: \$20.

ENVS 380 Public Lands Management

3 credits

This management-oriented course explores 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. Prerequisite: ENVS 300 and one of the following: ECON 216, MATH 213 or SOC 211. Course fee: \$10.

ENVS 390 Environmental Applications

4 credits

A field course addressing local (Gunnison Basin) environmental problems. Numerous monitoring techniques are implemented based on principles of biology, chemistry, and geology, and data interpretation will be addressed. The emphasis is on collaborative and integrative group projects dealing directly with real-world environmental problems. Prerequisites: BIOL 130, BIOL 135, ENVS 301, GEOL 101, and GEOL 105: either CHEM 101 or CHEM 111; and one of the following: ECON 216, MATH 213 or SOC 211. Course fee: \$40.

ENVS 392 Independent Study

1-6 credits

ENVS 397 Special Topics

1-6 credits

Course fee: \$0-\$150.

ENVS 400 Field Experience

3 credits

This field-based course provides a small group of students with a collaborative problem-solving experience that addresses a current environmental issue. Students collect information, analyze results, write a report, and present their findings to the public. Reports are at a level of quality that they can be presented to and used by decision-makers. Prerequisites: ENVS 380 and ENVS 390. Course fee: \$50.

ENVS 410 Environmental Ethics

2 credits

This seminar requires students to process 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 380 and ENVS 390.

ENVS 497 Special Topics

1-6 credits

ENVS 499 Environmental Studies Internship

1-6 credits

This internship combines the work in a student's major and work in environmental studies. Prerequisite: approval from an Environmental Studies 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 in fields 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 areas such as physical therapy and other allied health fields, exercise physiology, cardiac rehabilitation, or sport studies.

Admission to the Program. All students who wish to major in Exercise and Sport Science must be formally admitted to the program. For admission, a student must have:

- 1. completed ESS 181 Foundations of Exercise and Sport Science and ESS 185 Lifetime Wellness with a minimum grade of "C";
- 2. completed at least 12 hours of college credit; and,
- 3. submitted a letter of application and portfolio (guidelines available from the departmental administrative assistant).

FACULTY

Professor Kathleen M. Kinkema;

Associate Professor R. Greg Waggoner;

Assistant Professors Scott N. Drum and Kevin L. Ludlum;

Lecturers Christina A. Buchanan and Sheila Young.

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
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, two activities (Lifetime), 7 credits of ESS electives above the 200-level (at least 2 credits must be at the 300-level or higher), 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
SPORT AND FITNESS MANAGEMENT EMPHASISA minimum of 40 credits is required including the 15-credit Exercise and SportScience nucleus, First Aid/CPR competency, and the following:BUAC 201 Introduction to Financial Accounting

146 Exercise and Sport Science

ESS 450 Risk Management in Physical Activity Settings
One of the following: BUAD 220 Computer Applications in Business
Exercise and Sport Science Major: Comprehensive Program
EXERCISE SCIENCE EMPHASIS A minimum of 52 credits is required including the 15-credit Exercise and Sport Science nucleus, the 16 credit Exercise Science Core, First Aid/CPR competency, and completion of either the clinical track or the health fitness track:
Exercise Science Core: ESS 275 Motor Development and Learning
BIOL 300 Basic Nutrition
Clinical Track (27-28 credits)
BIOL 372 Human Anatomy and Physiology I (with laboratory) 4 cr BIOL 373 Human Anatomy and Physiology II (with laboratory) 4 cr CHEM 101 Introduction to Inorganic Chemistry 3 cr CHEM 105 Introduction to Organic Chemistry and Biochemistry 3 cr ESS 430 Topics in Clinical Exercise Physiology 3 cr MATH 140 Algebraic Functions 3 cr PHYS 140 Introductory Physics (with laboratory) 4 cr
One of the following: PSY 345 Biopsychology (with laboratory)
Health Fitness Track (21-22 credits)
ESS 201 Essentials of Human Anatomy and Physiology (with laboratory)4 cr ESS 298 Topics In Fitness Instruction:
ESS 382 Sport and Fitness Facility Management
At least 5 credits from the following: ESS 287 Care and Prevention of Exercise Injuries
K-12 Physical Education Emphasis
This emphasis consists of a minimum of 49 credits 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

	Biomechanics 3 cr
	Curriculum Development and the Learning Environment3 cr
ESS 295	Teaching Wellness Through Physical Activity2 cr
ESS 330	Exercise Physiology
ESS 331	Exercise Physiology Lab1 cr
ESS 350	Instructional Assessment in Physical Education3 cr
ESS 363	Adapted Physical Activity3 cr
	Methods of Secondary Activities
	Methods of Elementary Activities
ESS 396	Methods of Leisure Activities
Students seek	ing Colorado licensure must fulfill the requirements for K-12 Physical
	ensure (see description under Education).
Exercise ar	nd Sport Science Minor
This Minor co	onsists of 18 credits including:
	Foundations of Exercise and Sport Science
ESS 185	Lifetime Wellness3 cr
ESS 201	Essentials of Human Anatomy and Physiology (with laboratory)4 cr
Eight crea	lits from the following:
ESS 2/5	Motor Development and Learning
	Biomechanics
	Curriculum Development and the Learning Environment3 cr
ESS 295	Teaching Wellness through Physical Activity2 cr
ESS 298	Topics In Fitness Instruction: 1 cr
ESS 320	Topics In Fitness Instruction: 1 cr Psychology of Sport and Physical Activity. 3 cr
ESS 330	Exercise Physiology3 cr
	Sport Nutrition and Supplementation3 cr
ESS 363	Adapted Physical Activity3 cr
ESS 382	Sport and Fitness Facility Management3 cr
	Program Design for Physical Activity Settings3 cr
	Methods of Secondary Activities
ESS 395	Methods of Elementary Activities
ESS 396	Methods of Leisure Activities
	Sociology of Sport and Physical Activity
	nd Sport Science Minor: Coaching Concentration
This minor c	onsists of 22 credits including competencies in nutrition and First
Aid/CPR, and	the following:
ESS 201	Essentials of Human Anatomy and Physiology (with laboratory)4 cr
	Motor Development and Learning
	Care and Prevention of Exercise Injuries
	Exercise Physiology
	Risk Management in Physical Activity Settings
	e following:
	Psychology of Sport and Physical Activity
ESS 490	Sociology of Sport and Physical Activity3 cr
Two of the	e following:
ESS 321	Methods of Coaching Football
	Methods of Coaching Basketball
	Methods of Coaching Wrestling
ESS 327	Methods of Coaching Track and Field
	Methods of Coaching Volleyball
Students must	also have 50 documented hours of supervised coaching experience.

General Education Requirement: The following courses in the Exercise Sport and Science Major fulfill the Second Writing Course component of the Essential Skills Requirement: ESS 275 Motor Development and Learning or ESS 282 Principles of Sport and Fitness Management.

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 Activities (Advanced)

1 credit

Basketball (Men-Women), Cross-Country (Men-Women), Football (Men), Indoor Track (Men-Women), Skiing (Men-Women), Track (Men-Women), Volleyball (Women), or Wrestling (Men).

ESS 106 Exercise for Special Populations

1 credit

A course which provides evaluation and exercise prescription for students with a documented short-term or long-term physical disability and determination of individual activity experiences. Medical approval/cooperation where required. Offered when qualified instructor is available. Prerequisite: instructor permission.

ESS 112 Selected Activities in Recreation and Exercise and Sport Science

1 credit

A specific activity is offered as student interest, facilities, faculty, and equipment are available. Course fee: \$0-\$13.

ESS 114 Fly Fishing

1 credit

A course designed to give general knowledge of the activity, equipment, safety procedures, and terminology and to develop proficiency in the fundamental skills of fly fishing. Course fee: \$20.

ESS 121 Badminton

1 credit

A course designed to develop understanding, skill, and appreciation for the sport of badminton.

ESS 122 Bowling

1 credit

A course designed to develop understanding, skill, and appreciation for the sport of bowling. Course fee: \$13.

ESS 126 Tennis 1 credit

This course provides the novice the opportunity to develop basic tennis skills. Particular emphasis is placed on the forehand and backhand strokes and the service. Students will be introduced to singles and doubles play and court etiquette. Provide one can of tennis balls.

ESS 131 Physical Conditioning

1 credit

A class designed to provide knowledge of how to improve cardiovascular endurance, strength, and flexibility in a natural outdoor setting. Students learn to plan and carry out activities without dependency on others.

ESS 132 Weight Training

1 credit

A course dealing with 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. Course fee:\$10.

ESS 134 Ski Conditioning

1 credit

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.

ESS 135 Mountain Bike Riding

1 credit

A course designed to give general knowledge of and develop proficiency in the activity, equipment, safety procedures, and terminology of the fundamental skills of mountain bike riding.

ESS 137 Triathlon Training

1 credit

A course designed to familiarize students with the components of a successful triathlon training program. Students are taught to maximize their potential in swimming, biking, and running and will be taught to rotate these sports to maximize their time and energy.

ESS 141 Soccer

1 credit

A course designed to acquaint the students with soccer techniques and strategies.

ESS 143 Volleyball

1 credit

This course will introduce and test the five basic volleyball skills: serve, pass, set, block, and spike. Basic offensive and defensive sets will be taught, including service reception and service alignment.

ESS 144 Basketball

1 credit

A lecture and laboratory course to acquaint the student with the theory, fundamentals, skills, and equipment pertaining to basketball.

ESS 145 Softball

1 credit

A course designed for skill development; offensive and defensive strategies are covered.

ESS 160 Swimming (Beginning)

1 credit

An introduction to swimming designed to equip the students with the basic watersafety skills and knowledge needed to be reasonably safe while in, on, or about the water. Course fee: \$8.

ESS 161 Swimming (Intermediate)

1 credit

A satisfactory completion of these skills will lead to the Red Cross Intermediate and Swimmer's Certificate. Course fee: \$8.

ESS 170 Lifeguard Training

2 credits

A course designed to provide 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. Course fee: \$25.

ESS 172 Water Safety Instruction

3 credits

A satisfactory completion of these skills will lead to the Red Cross WSI Certificate. Course fee: \$8.

ESS 181 Foundations of Exercise and Sport Science

3 credits

Course designed to introduce students 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

A course with conceptual and experiential components designed to provide a basis for developing a healthier lifestyle. Course fee: \$25.

ESS 197 Special Topics

1-6 credits

ESS 201 Essentials of Human Anatomy and Physiology (with laboratory)

4 credits

A one semester class introducing basic anatomy and physiology of all human systems. Lab and lecture are integrated. Required as minimal anatomy and physiology course for ESS K-12 / Standard Majors and Biology Secondary Education Majors. Course fee: \$40.

ESS 275 Motor Development and Learning

3 credits

A course designed to apply 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.

ESS 276 Emergency Response

3 credits

A course designed to provide essential knowledge and skills needed to develop CPR and advanced first-aid capabilities. This is a course for students who might be required to provide first aid frequently and for special interest groups. ESS majors have first option for this course. Course fee: \$25.

ESS 280 Biomechanics

3 credits

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 201 or BIOL 372; admission to major or instructor permission.

ESS 282 Principles of Sport and Fitness Management

3 credits

A course focusing 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, ESS 181 or Instructor permission.

ESS 287 Care and Prevention of Exercise Injuries

2 credits

This course addresses the prevention, recognition, and treatment of basic injuries and problems that are commonly associated with exercise. Laboratory sessions are included with the course. Prerequisite: ESS 201 or BIOL 372. Course fee: \$10.00.

ESS 290 Curriculum Development and the Learning Environment 3 credits A course designed to provide a comprehensive overview of materials, suggested teaching methods, procedures, techniques, well-directed and well-selected activities, and also to present ways of evaluating physical education in K-12 schools.

ESS 295 Teaching Wellness Through Physical Activity

2 credits

This course provides students with current curriculum content, related assessment tools, teaching strategies, and professional resources for an integrated presentation of wellness through physical activity. Prerequisites: admission to the Major or instructor permission; ESS 290. Course fee: \$20.

ESS 297 Special Topics

1-6 credits

ESS 298 Topics in Fitness Instruction:

1 credit

A course based on a variety of announced topics within the area of fitness instruction. Students are provided with current instructional techniques, related assessment tools, and professional resources for an integrated presentation of the announced topic. The course may be repeated three times for credit if a different topic is selected. Topics might include: aquatic exercise, resistance training, cardio respiratory exercises, flexibility training, core stability. Prerequisite: ESS 201 or BIOL 372.

ESS 320 Psychology of Sport and Physical Activity

3 credits

A lecture/discussion course that addresses a variety of issues and research areas in the psychology of sport and physical activity. 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 321 Methods of Coaching Football

2 credits

A course dealing with the fundamental principles and play of football, including a basic defensive and offensive 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 323 Methods of Coaching Basketball

2 credits

A study of individual fundamentals and techniques, as well as team offensive and defensive patterns and strategies involved in coaching basketball.

ESS 325 Methods of Coaching Wrestling

2 credits

A lecture and laboratory course designed to introduce all phases of wrestling. Fundamental movements and techniques, rule interpretations, and approved coaching ethics are covered.

ESS 327 Methods of Coaching Track and Field

2 credits

A theory course which covers the techniques and fundamentals of each track and field event. Also includes the important phase of practical track meet management.

ESS 329 Methods of Coaching Volleyball

2 credits

This course combines lecture/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 expected.

ESS 330 Exercise Physiology

3 credits

A basic course emphasizing the theory of the 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

An introduction to 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: General Education Math Competency; Corequisite: ESS 330. Course fee: \$40.

ESS 340 Mental Training for Peak Performance

3 credits

This course allows students to apply 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 350 Instructional Assessment in Physical Education 3 credits

A course in 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 performance objectives to match specific learning outcomes in the K-12 physical education curriculum. Prerequisites: General Education Math Course requirement; admission to the Major and ESS 290. Course fee: \$15.

ESS 360 Sport Nutrition and Supplementation

3 credits

This course focuses 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: ESS 330 & ESS 331.

ESS 363 Adapted Physical Activity

3 credits

A course designed to 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 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 282 or instructor permission.

ESS 385 Program Design for Physical Activity Settings

3 credits

The course focuses 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: admission to major or permission of instructor.

ESS 392 Methods of Secondary Activities

3 credits

This is a methods course 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: ESS 290; minimum junior standing; admission to the Major or instructor permission. Prerequisite or corequisite: ESS 350. Course fee: \$20.

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 Major or instructor permission. Prerequisite or corequisite: ESS 350. Course fee: \$20.

ESS 396 Methods of Leisure Activities

3 credits

Units covered may be skiing, rock climbing, orienteering, camping 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 and minimum junior standing; admission to Major or instructor permission. Course fee:\$20-\$70.

ESS 397 Special Topics

1-6 credits

ESS 405 Practicum in Exercise and Sport Science

cre

This course provides 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. All practicums are graded satisfactory/ unsatisfactory. May be repeated once for credit (in a different setting). Prerequisites: junior or senior standing and admission to major.

ESS 410 Assessment and Exercise Prescription

3 credits

Students work with assessment formats, appraisal techniques, and metabolic calculations to gain information needed to then construct exercise prescriptions designed to

meet individual needs for different segments of the population. Prerequisite: ESS 331. Course fee: \$40.

ESS 430 Topics in Clinical Exercise Physiology 3 credit

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 course focused 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 standing.

ESS 453 Health and Physical Education in the Elementary School 2 credits A course covering recommended curricular content in the areas of health and physical education at the elementary-school level. Includes such topics as methodology, evaluation techniques, and classroom management skills. This class does not apply to the Exercise and Sport Science Major. Prerequisite: EDUC 292. Course fee: \$15.

ESS 490 Sociology of Sport and Physical Activity 3 credits

The general focus of this course is 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

A course open to 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: senior standing and admission to major. Students are encouraged to take this course during their final semester.

ESS 496 Field Experiences

1-6 credits

A course designed to provide students with 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

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 College. Prerequisites: Satisfactory grade in ESS 405, 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 with a minor 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 Study1-	6	cr
	Contemporary French Life		
	Workshop in France		

FRENCH COURSES

FREN 101 Elementary French I

3 credits

A beginning course in understanding, speaking, writing and reading French. Reserved for students with fewer than two years of high-school French. Course fee: \$15.

FREN 102 Elementary French II

3 credits

A continuation of FREN 101. Prerequisite: FREN 101 or equivalent. Course fee: \$15.

FREN 110 French Language and Culture

2 credits

An introduction to various aspects of French culture with some practical experience in basic standard French. Conducted in English.

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). Course fee: \$15.

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.

FREN 256 French Literature in Translation

3 credits

This course introduces students to 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.

FREN 264 French Conversation and Composition I

3 credits

Intensive conversation and composition to achieve competency in the target language. Prerequisite: FREN 254 or equivalent.

FREN 297 Special Topics

1-6 credits

FREN 380 History of French Civilization

3 credits

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.

FREN 392 Independent Study

1-6 credits

An opportunity for individual research on topics of interest to students (literature, business, education, media), studied from the French perspective. Prerequisite: FREN 254.

FREN 397 Special Topics

1-6 credits

FREN 432 Contemporary French Life

3 credits

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.

FREN 490 Workshop in France

1-8 credits

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.

FREN 492 Independent Study

1-4 credits

A special study in areas of student interest. May be taken for a maximum of four credits.

FREN 497 Special Topics

1-6 credits



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 College of Colorado 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 will complement a major in many other disciplines including Biology, Business Administration, Economics, English, Environmental Studies, Geology, History, Political Science, Psychology, and Sociology.

FACULTY

Associate Professor Philip L. Crossley.

DESCRIPTION OF THE PROGRAM

Geograp	hv	Minor
CICUPIAN	11 V	TATITLAT

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	
GEOG 250 Geography of North America	
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:	
ENVS 300 Resources, Policy, and the Environment	3 cr
GEOG 330 Urban Geography	
GEOG 340 Introduction to Geographic Information Systems	
GEOG 351 Geography of Latin America and the Caribbean	
GEOG 499 Internship in Geography	

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.

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. Course fee: \$12.50.

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.

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; MATH 131 or MATH 141; junior standing or instructor permission. Course fee: \$30.

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

1-3 credits

An internship provides the opportunity for advanced students to apply skills and knowledge gained from coursework 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 College of Colorado 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 adequately prepared to enter graduate programs in Geology. The program meets or exceeds American Geological Institute standards.

FACULTY

Professor Allen L. Stork; Associate Professor Robert P. Fillmore; Rady Chair in Petroleum Geology James C. Coogan; Visiting Professor John M. Fletcher.

DESCRIPTION OF THE PROGRAMS

The Geology program provides a Comprehensive Major Program, with an area of emphasis selected according to the interests and career goals of the student. These Emphases are: geology, geoarchaeology, elementary licensure in environmental Earth science, petroleum geology, and secondary licensure in earth-space science. The program requirements for the various emphases range from 58 to 74 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.

Elementary Licensure in Environmental Earth Science is designed for students seeking a State of Colorado License in Elementary Education. The emphasis is designed to prepare future teachers in a broad range of physical and environmental sciences. All Majors require a Capstone Course.

Geology Major: Comprehensive Program

GEOLOGY EMPHASIS

The Standard Geology Emphasis requires a minimum of 64 credits, 39 of which are in Geology.

Geology requirements:				
GEOL 101	Physical Geology3 cr			
GEOL 105	Physical Geology Laboratory1 cr			
	Historical Geology (with laboratory)4 cr			
	Geoscience Writing			
	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			
	Field Geology4 cr			
GEOL 495	Research Seminar in Geology (must be repeated for 2 credits)2 cr			
One of the f	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 Chemistry3 cr
CHEM 112 General Chemistry Laboratory I1 cr
CHEM 113 General Chemistry3 cr
CHEM 114 General Chemistry Laboratory II1 cr
MATH 161 Calculus I
MATH 162 Calculus II
One of the following:
GEOG 340 Introduction to Geographic Information Systems
MATH 261 Calculus III
CIS 190 Computer Science I
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)5 cr
PHYS 201 General Physics II (with laboratory)5 cr
GEOARCHAEOLOGY EMPHASIS
The Geoarchaeology Emphasis requires a minimum of 60 credits, 30 of which are in
Geology and 30 which are in supporting courses.
Geology requirements:
GEOL 101 Physical Geology3 cr
GEOL 105 Physical Geology Laboratory1 cr
GEOL 201 Historical Geology (with laboratory)4 cr
GEOL 302 Geoscience Writing
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
GEOL 495 Research Seminar in Geology
- -
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
ANTH 218 Physical Anthropology (with laboratory)4 cr
ANTH 219 Archaeology (with laboratory)4 cr
ANTH 465 Advanced Methods and Theory in Anthropology3 cr
MATH 213 Probability and Statistics
Three of the following:
ANTH 319 Paleolithic Archaeology
ANTH 322 Analysis of Material Culture (with laboratory)4 cr
ANTH 333 Archaeology of Colorado
ANTH 469 Anthropology Field School
· •
Either: CHEM 101 Introduction to Inorganic Chemistry3 cr
•
or both of the following:
CHEM 111 General Chemistry3 cr
CHEM 112 General Chemistry Laboratory I1 cr

PETROLEUM GEOLOGY EMPHASIS A minimum of 67 credits is required, 45 of which are in Geology.
Geology requirements:
GEOL 101 Physical Geology3 cr
GEOL 105 Physical Geology Laboratory
GEOL 201 Historical Geology (with laboratory)4 cr
GEOL 302 Geoscience Writing
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 (with laboratory)4 cr
GEOL 450 Field Geology
GEOL 455 Petroleum Geology (with laboratory)
GEOL 465 Research in Basin Analysis (with laboratory)3 cr
Required supporting courses:
CHEM 111 General Chemistry
CHEM 112 General Chemistry Laboratory I
CHEM 113 General Chemistry
CHEM 114 General Chemistry Laboratory II
MATH 161 Calculus I
PHYS 170 Principles of Physics I (with laboratory) 4 cr
PHYS 171 Principles of Physics II (with laboratory)
ELEMENTARY LICENSURE IN ENVIRONMENTAL EARTH SCIENCE EMPHASIS A minimum of 46 credits is required. In addition, the student must fulfill the requirements of the Elementary Licensure Program (see description under Education).
Geology requirements:
GEOL 101 Physical Geology
GEOL 105 Physical Geology Laboratory
GEOL 201 Historical Geology (with laboratory)
GEOL 310 Stratigraphy/Sedimentation (with laboratory)4 cr
(iEO), 370 (ieomorphology 4 cr
GEOL 320 Geomorphology
GEOL 345 Structural Geology4 cr
GEOL 345 Structural Geology
GEOL 345 Structural Geology4 cr
GEOL 345 Structural Geology

GEOL 201 Historical Geology (with laboratory)4 c
GEOL 302 Geoscience Writing
GEOL 305 Mineralogy (with laboratory)4 c
GEOL 310 Stratigraphy/Sedimentation (with laboratory)4 c
GEOL 320 Geomorphology (with laboratory)4 c
GEOL 345 Structural Geology (with laboratory)4 c
GEOL 450 Field Geology4 c
GEOL 495 Research Seminar in Geology1 c
Required supporting courses:
BIOL 130 Environmental Biology3 c
BIOL 135 Environmental Biology Laboratory1 c
CHEM 111 General Chemistry3 c
CHEM 112 General Chemistry Laboratory I1 c
CHEM 113 General Chemistry3 c
CHEM 114 General Chemistry Laboratory II1 c
PHYS 120 Meteorology
PHYS 170 Principles of Physics I (with laboratory)4 c
PHYS 171 Principles of Physics II (with laboratory)4 c
PHYS 310 Astronomy I
PHYS 311 Astronomy II
SCI 366 Methods of Teaching Secondary Science
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One of the following: MATH 141 Transcendental Functions3 c
MATH 161 Calculus I3 c
Geology Minor
A minimum of 18 credits including:
GEOL 101 Physical Geology3 c
GEOL 105 Physical Geology Laboratory1 c
GEOL 201 Historical Geology (with laboratory)4 c
Ten credits from the following:
GEOL 220 Field Geology of Western North America1 c
Or Geology courses numbered 300 or above

General Education Requirements. The following courses fulfill the Second Writing Course component of the Essential Skills Requirement: GEOL 310 Stratigraphy and Sedimentation or EDUC 292 Instructional Design and Assessment for Elementary Preservice Teachers (Elementary Licensure in Environmental Earth Science Emphasis).

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 Depositional Systems (Geology Emphasis); GEOL 420 Research in Quaternary Geology or GEOL 465 Research in Basin Analysis (Geology Emphasis); EDUC 432 Student Teaching: Secondary (Secondary Licensure in Earth-Space Science Emphasis); EDUC 430 Student Teaching: Elementary (Elementary Licensure in Environmental Earth 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.

GEOL 105 Physical Geology Laboratory

1 credit

This laboratory course begins with the identification of minerals and rocks and a discussion of their genesis. This is 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. Course fee: \$35.

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 geologic 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. Course fee: \$35.

GEOL 220 Field Geology of Western North America

1 credit

A class that illustrates basic geologic principles by 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. Course fee: \$70-\$300.

GEOL 297 Special Topics

1-6 credits

GEOL 300 Geology Field Trip

1-6 credits

A course designed to give exposure to varied geologic terranes and settings. It normally consists of preparatory lectures and the actual field trip, followed by a paper, talk, or examination. A student may earn a maximum of six credits under this course title. Prerequisite: GEOL 201. Course fee: \$70-\$300.

GEOL 302 Geoscience Writing

2 credits

This course introduces students to the proper methods and accepted formats of written, graphical and oral communication in the geological sciences. These skills will be 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 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 will be 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, CHEM 113 and MATH 141. Corequisite: CHEM 114. Course fee: \$35.

GEOL 310 Stratigraphy and Sedimentation (with laboratory) 4 credits

A course stressing 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. Prerequisite: GEOL 201. Course fee: \$40.

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: GEOL 305. Course fee: \$35.

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 including 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. Course fee: \$40.

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. Course fee: \$40.

GEOL 346 Subsurface Geology (with laboratory)

4 credits

An advanced undergraduate course in subsurface structural and stratigraphic methods pertinent to petroleum, groundwater, environmental, and tectonics investigations. 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. Course fee: \$40.

GEOL 351 Geochemistry

3 credits

A study of the distribution and movement of chemical elements and isotopes in the geologic environment. Topics include the structural, thermodynamic, and kinetic controls of element distribution. Examples illustrate the origin of economic mineral deposits, geochemical exploration, and the transport of material from mineral deposits and hazardous waste sites by natural waters. Prerequisite: GEOL 305.

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: PHYS 170, GEOL 345. Course fee: \$40.

GEOL 397 Special Topics

1-6 credits

GEOL 411 Research in Volcanology and Petrology (with laboratory) 3 credits This course examines 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. Course fee: \$50.

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. Course fee: \$50.

GEOL 430 Hydrogeology (with laboratory)

4 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 water chemistry. Laboratory exercises focus on quantitative analysis and modeling of groundwater data. Prerequisites: GEOL 310, CHEM 111, and MATH 161; Prerequisite or corequisite: PHYS 170 or PHYS 200. Course Fee: \$40.

GEOL 450 Field Geology

4 credits

A course which emphasizes 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 GEOL345 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. Course fee: \$40.

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. Course fee: \$50.

GEOL 493 Independent Study in Geology

1-4 credits

A course where 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.

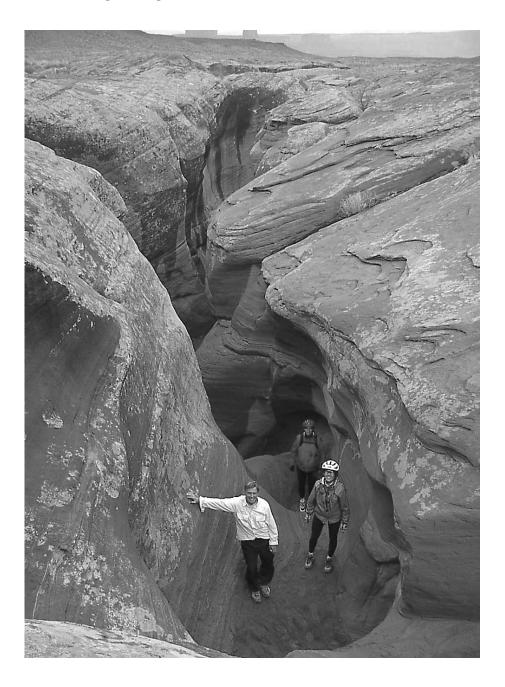
GEOL 495 Research Seminar in Geology

1 credit

A seminar where advanced undergraduate students can engage in and report on independent or group research projects. Topics will be chosen from the current research literature. This course provides the Capstone Experience for students majoring in Geology. A student may earn a maximum of four credits under this course title. Prerequisite: instructor permission.

GEOL 497 Special Topics

1-6 credits



Headwaters Regional Studies (HWTR)

Western State College of Colorado 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. As the "headwaters college of the Southwest," Western is uniquely situated for using "place" as a medium for integrating learning. This Headwaters Region surrounding the college is one of the most geographically, ecologically and culturally diverse regions on the continent; few colleges have such close access to a diverse "living laboratory" of learning opportunities.

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 College.

HEADWATERS COURSES

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 college, 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 two-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, and write a paper about the experience in the context of their own lives and future plans.



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 international 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

Vorld History to 1650	3 cr
Vorld History Since 1650	3 cr
merican History to 1865	3 cr
merican History Since 1865	3 cr
listoriography	3 cr
eminar in History (Capstone)	
r: Standard Program 9 credits is required including the 18 credit History N	ucleus and the
tives at either the 300 level or higher	15 cr
ollowing courses in Regional History:	
introduction to the Middle East	3 cr
History of Africa	
History of East Asia	3 cr
	Vorld History to 1650

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.

HIST 260 Introduction to Latin American History......3 cr

SECONDARY LICENSURE EMPHASIS

This emphasis qualifies students for the State of Colorado License in Social Science Education. A minimum of 93 credits is required including the 18-credit History Nucleus, 33 credits in Secondary Licensure, and the following:

ECON 201 Macroeconomics	
GEOG 110 World Regional Geography3 cr	
HIST 327 Colorado History3 cr	

POLS 180 American Federal Government	3 cr
SOSC 366 Methods for Teaching Secondary Social Studies	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	
HIST 348 History of the Trans-Mississippi West	3 cr
Two of the following:	5 01
HIST 310 Ancient History	3 cr
HIST 311 Medieval History	
HIST 312 Renaissance and Reformation Era, 1350-1600	3 cr
HIST 315 The Old Regime and the French Revolution	
HIST 316 19th Century Europe	
HIST 318 20th Century Europe	3 cr
HIST 360 Mexico	3 cr
HIST 361 Andean Nations	
HIST 362 Southern Cone	
HIST 364 Women in Latin American History	
One of the following:	5 (1
HIST 250 Introduction to the Middle East	3 or
HIST 254 History of Africa	3 CI
HIST 257 History of East Asia	3 (1
HIST 260 Introduction to Latin American History	3 C1
Three of the following:	5 (1
ECON 202 Microeconomics	2 00
GEOG 120 Human Geography	3 CI
POLS 255 Introduction to Comparative Government	3 CI
POLS 376 American Political Thought I	3 cr
History Minor	
A minimum of 21 credits is required including 12 credits of upper-division	ı History
electives, 3 credits in Regional History, and the following:	
One of the following:	
HIST 101 World History to 1650	3 cr
HIST 102 World History Since 1650	3 cr
One of the following:	5 01
HIST 126 American History to 1865	3 cr
HIST 127 American History Since 1865	3 cr
No more than 3 credits of HIST 492 Independent Study may be used to sati	efy the
upper-division electives.	siy tiic
	C 1C11
General Education Requirements. The following course in the History Major	or fulfills
the Second Writing Course component of the Essential Skills Requirement: Historical Research	1181 200
HISTOTIOUTANNY AND IMPLINOUOUV OF HISTOTICAL RESPARCE	

G th Historiography and Methodology of Historical Research.

Capstone Course Requirement. The following course in the History Major fulfills the Capstone Course Requirement: HIST 402 Seminar in History.

HISTORY COURSES

World History to 1650

3 credits

A course which surveys the cultural, political, religious, artistic, technological and philosophical journey of man from his beginnings through the Thirty Years' War.

HIST 102 World History Since 1650

A continuation of HIST 101. Such phenomena as Global expansion, the emergence

of political ideologies, industrialism, imperialism, revolution and the impact of technology on human development, are treated as important points in modern progress.

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.

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.

HIST 197 Special Topics

1-6 credits

HIST 200 Historiography and Methodology of Historical Research 3 credits A study of schools of historical thought and philosophies of history, designed to train the student in theory, research techniques and writing skills required for the understanding of history. The course also fulfills the General Education Second Writing Course requirement for History majors.

HIST 201 English History

3 credits

A survey of political, social, and constitutional history from the late 17th century to the modern era.

HIST 250 Introduction to the Middle East

3 credits

The purpose of this course is to introduce the student to some of the major historical events and patterns of the Middle East and to relate that history to the politics of what we refer to as 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 Zionism and the politics of the Modern Middle East crisis.

HIST 254 A 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 257 History of East Asia

3 credits

A study of the civilization of China and Japan. The course offers a survey covering ancient, medieval, and modern developments, including cultural, religious, political, military, and economic factors.

HIST 260 Introduction to Latin American History

3 credits

This broad survey covers the major events, issues and themes of Latin American History from pre-Columbian times to the modern era, providing students with the opportunity to gain an understanding of the societies, peoples and institutions of Latin America.

HIST 297 Special Topics

1-6 credits

HIST 309 The History of Modern Germany 1871-1945

3 credits

This course 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.

HIST 310 Ancient History

3 credits

A study of Classical and Hellenistic civilization followed by a study of the development of Rome from a city/state to an empire. Prerequisite: minimum sophomore standing or instructor permission.

HIST 311 Medieval History

3 credits

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.

HIST 312 Renaissance and Reformation Era, 1350-1600

credits

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.

HIST 315 The Old Regime and the French Revolution

credi

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.

HIST 316 19th Century European History

3 credits

A study of Europe from the Congress of Vienna to the outbreak of World War I. Prerequisite: minimum sophomore standing or instructor permission.

HIST 318 20th Century European History

3 credits

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.

HIST 327 Colorado History

3 credits

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.

HIST 330 Colonial American History

3 credits

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 This course examines 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

This course seeks to discover 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 American and Spaniard 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 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 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 361 Andean Nations

3 credits

A broad survey of Bolivian and Peruvian history from pre-Columbian times to the modern era with particular emphasis on social, cultural, political, and economic themes. The course also examines issues of ethnicity, race and nationalism in the post-colonial evolution of these two Andean nations. Prerequisite: minimum sophomore standing or instructor permission.

HIST 362 Southern Cone

3 credits

A broad survey of Argentine and Chilean history from pre-Columbian times to the modern era. Students have the opportunity to gain a basic understanding of the societies of the Southern Cone of Latin America with particular emphasis on cultural, political and economic issues of the colonial and modern periods. 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 397 Special Topics

1-6 credits

HIST 402 Seminar in History

3 credits

This course is 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 the course during or after their second semester junior year. Prerequisite: junior or senior standing and instructor permission. Students in the Secondary Licensure program must complete a comparative history topic for completion of this course.

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 who have performed well academically in high school or at Western.

Small class size, extensive interaction among peers and teachers, experiences outside the traditional classroom, and interdisciplinary approaches to education are all features of the program.

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 and Computer Lab in Crawford Hall, participation in Honors activities, priority registration and special recognition at graduation.

Admission Requirements. Students qualified to become a part of the Western Honors Program are invited to apply for membership in their first or second year of study at Western (transfer and upper-division students are considered on an individual basis). Admission is based on the evaluation of the student's portfolio which will include transcripts, test scores (ACT/SAT), two letters of recommendation, a biographical profile and an essay for review. Applicants also are strongly encouraged to submit as part of their portfolio additional material that demonstrates other unique qualities or achievements.

Program Requirements. Honors students are expected to complete a minimum of 21 credit hours of Honors courses and to maintain an overall cumulative 3.500 grade point average in order to remain in the program. Students also must take a minimum of one honors course per academic year to remain in good standing.

DESCRIPTION OF THE PROGRAM

Honors students are expected to complete a minimum of 21 credits of Honors courses and to maintain an overall cumulative 3.500 grade point average in order to remain in the program. Students also must take a minimum of one Honors course per academic year to remain in good standing.

Required Courses:

HNRS 100 The Gateway Course	3 cr
ENG 102 Honors Academic Writing.	3 cr
COTH 200 Public Speaking and Advocacy: Honors	3 cr
HNRS 300 The Honors Forum (repeated 3 times, 3 credits total)	l cr
Nine additional credits of Honors coursework are required, six of which mus	t be
upper division (a maximum of four of the upper-division credits may be fulfilled	
completing HNRS 495 or an approved Capstone Course in the student's mag	jor.)
Upper-division and transfer students joining the program may petition to be exempt	pted
from the English 102 and COTH 200 requirements.	

HONORS COURSES

HNRS 100 The Gateway Course

3 credits

Gateway cultivates an awareness of the various methods of intellectual inquiry. Various perspectives on methods of inquiry are discussed and evaluated so that students develop an understanding of the conventions, advantages, disadvantages and ethics of those methods.

HNRS 101 Honors Colloquium

1 credit

The Honors Colloquium complements courses offered only in large section format. Through formal arrangement between the instructor and the Honors Program, the instructor meets with honors students enrolled in the class to provide additional inter-

action on the subject. Honors students who successfully complete both the Colloquium and the course to which it is linked will receive Honors credit for both. Students may take the Honors Colloquium more than once.

HNRS 197 Special Topics

1-6 credits

HNRS 201 Honors Colloquium

1 credit

The Honors Colloquium complements courses offered only in large section format. Through formal arrangement between the instructor and the Honors Program, the instructor meets with Honors students enrolled in the class to provide additional interaction on the subject material. Honors students who successfully complete both the Colloquium and the course to which it is linked will receive Honors credit for both. Students may take the Honors Colloquium more than once.

HNRS 240 Writing Center Workshop

2 credits

An advanced course that investigates methods of the writing processes and study personal communications of tutoring. Workshop strategies include studying the learning styles of all students. Prerequisites: instructor recommendation and interview with the Writing Center Director.

HNRS 297 Special Topics

1-6 credits

HNRS 300 Honors Forum

1 credit

This course cultivates the ability to engage in an active and intellectual exchange of ideas and information in various public formats. Within these formats, including the Honors Website, the Honors Newsletter and specially scheduled Honors Forum events, students discuss, debate and explore a variety of issues related to the various fields of academic study. All Honors students are required to take Honors Forum three times. Prerequisite: HNRS 100.

HNRS 301 Honors Colloquium

1 credit

The Honors Colloquium complements courses offered only in large section format. Through formal arrangement between the instructor and the Honors Program, the instructor meets with Honors students enrolled in the class to provide additional interaction on the subject material. Honors students who successfully complete both the Colloquium and the course to which it is linked will receive Honors credit for both. Students may take the Honors Colloquium more than once.

HNRS 396 Field Experience

1-3 credits

A course designed to provide students with directed field experiences in Writing Center tutoring. Prerequisite: completion of HNRS 240.

HNRS 397 Special Topics

1-6 credits

HNRS 401 Honors Colloquium

1 credit

The Honors Colloquium complements courses offered only in large section format. Through formal arrangement between the instructor and the Honors Program, the instructor meets with Honors students enrolled in the class to provide additional interaction on the subject material. Honors students who successfully complete both the Colloquium and the course to which it is linked will receive Honors credit for both. Students may take the Honors Colloquium more than once.

HNRS 495 Thesis 1-4 credits

The student is required to complete a written thesis based on advanced study in a self-designed research project. The student also must make a presentation connected to the thesis in an Honors Forum presentation to the campus. 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.

HNRS 497 Special Topics

Interdisciplinary Studies / Liberal Arts (IDLA)

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 of the Interdisciplinary Studies / Liberal Arts Major curriculum prepares students to successfully teach in a Colorado standards-based classroom or be prepared to enter other education and training job opportunities.

FACULTY

Professor Terri L. Wenzlaff:

Associate Professors Nella B. Anderson, James A. Erekson, and Katherine C. Wieseman; Assistant Professor Christine L. Purkiss:

Lecturers Sandra Anderson-O'Banion, Anne B. Hausler, and Marta J. Smith.

DESCRIPTION OF THE PROGRAMS

Interdisciplinary Studies/Liberal Arts Major: Comprehensive Program

The Interdisciplinary Studies / Liberal Arts Major has two emphases from which a student may choose: science/math and humanities. Both emphases require students to complete the requirements of the Elementary Education Licensure Program, including 49 credits of coursework. These requirements are described under the Education Program description in this catalog. The Major consists of a 44- or 45-credit Liberal Arts Core, 49 credits of teacher education coursework, and a choice of a 21-credit Emphasis in Humanities or a 20- to 23-credit Emphasis in Science/Math. Both emphases require the 44- or 45-credit Liberal Arts Core.

Liberal Arts Core

CHEM 101 Introduction to Inorganic Chemistry	3 cr
ENG 205 Introduction to Writing: Four Genres	3 cr
ENG 250 Literature: Studies in	
GEOG 120 Human Geography	3 cr
GEOG 250 Geography of North America	3 cr
GEOL 101 Physical Geology	3 cr
GEOL 105 Physical Geology Laboratory	
HIST 126 American History to 1865	
HIST 127 American History from 1865	3 cr
HIST 327 Colorado History	3 cr
PHYS 140 Introductory Physics (with laboratory)	
POLS 180 American Federal Government	
One of the following:	
BIOL 130 Environmental Science	3 cr
BIOL 150 Biological Principles (with laboratory)	
(Students choosing the Science/Math Emphasis must choose BIOL 150)	
Two of the following:	
MUS 140 Introduction to Music	3 cr
ART 105 Introduction to Art	3 cr
COTH 225 Art of the Theatre	3 cr
ENCE/MATH EMPHASIS	

The Science/Math Emphasis requires a minimum of 120-123 credits including the 44or 45-credit Liberal Arts Core, 49 credits of teacher education coursework, and the following 20-23 credits.

BIOL 300	Basic Nutrition	3 cr
MATH 140	Algebraic Function3	3 cr

MATH 141 Transcendental Functions
PHYS 480 Observational Astronomy
Option 3: PHYS 170 Principles of Physics I (with laboratory)
If a student tests out of MATH 140 and/or MATH 141, then the student will take either one math course or a sequence of two math courses to fulfill the 9 credit hours of math courses. These courses will be selected with the help of a math and/or teacher education advisor.
Humanities Emphasis requires a minimum of 120-121 credits including the 44- or 45-credit Liberal Arts Core, 49 credits of teacher education coursework, and the following 21 credits: COTH 241 Media Writing
COTH 225 Art of the Theatre
COTH 271 Small Group Communication3 cr

Mathematics (MATH)

Western State College of Colorado 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 education 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 will have opportunities to develop abstract reasoning skills and problem-solving skills to a high level.

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. Western's Mathematics programs are demanding majors, but those who succeed will reap the benefits of rewarding careers.

FACULTY

Professors John W. Brown and Daniel L. Schuster; Associate Professors Andrew G. Keck and Heidi L. Keck; Assistant Professor Leila M. Calkins; Visiting Professor Harry S. Mills.

DESCRIPTION OF THE PROGRAMS

Each Mathematics Major requires the 35-credit Mathematics Core.

Mathematics Core

CIS 190 Computer Science I	3	cr
MATH 161 Calculus I	3	cr
MATH 162 Calculus II	3	cr
MATH 220 Introduction to Advanced Mathematics	3	cr
MATH 261 Calculus III	3	cr
MATH 262 Calculus IV	3	cr
MATH 300 Introduction to Mathematical Modeling		
MATH 360 Linear Algebra		
MATH 451 Analysis I	3	cr
MATH 471 Abstract Algebra I		
MATH 495 Senior Seminar	2	cr
One of the following:		
ENG 302 Technical Writing	3	cr
SCI 202 Scientific Writing		

Mathematics Major: Standard Program

A minimum of 41 credits is required including the 35-credit Mathematics Core and the following:

Two of the following:

CIS 191 Computer Science II	cr
MATH 213 Probability and Statistics	cr
MATH 354 Differential Equations	
MATH 456 Introduction to Complex Analysis	cr

Mathematics Major: Comprehensive Programs

COMPUTER INFORMATION SCIENCE EMPHASIS

A minimum of 53 credits is required including the 35-credit Mathematics Core, and the following courses:

CIS 375 Numerical Methods
MATH 213 Probability and Statistics
MATH 354 Differential Equations
PHYS 200 General Physics I (with laboratory)
SECONDARY LICENSURE EMPHASIS This emphasis qualifies students for the State of Colorado License to teach Mathematics in junior high, middle school or high school. A minimum of 53 credits is required including the 35-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 213 Probability and Statistics
MATH 366 Methods of Teaching Secondary Mathematics
One of the following sequences: PHYS 170 Principles of Physics I (with laboratory)
PHYS 200 General Physics I (with laboratory)
CHEM 111 General Chemistry
Mathematics Minor
The Mathematics Minor requires a minimum of 18 credits including 9 credits of Mathematics electives (numbered 213 or above, excluding 232) and the following: MATH 161 Calculus I
General Education Requirements. The following courses fulfill the Second Writing

General Education Requirements. The following courses fulfill the Second Writing Course component of the Essential Skills Requirement for the Mathematics Major: SCI 202 Scientific Writing or ENG 302 Technical Writing.

Capstone Course Requirement. The following course fulfills the Capstone Course Requirement: MATH 495 Senior Seminar.

Assessment. Each Mathematics Major is required to complete an exit assessment examination in his/her final Spring semester of residency. The examination is used for departmental self-assessment only.

MATHEMATICS COURSES

(**NOTE:** Students must earn a minimum grade of "C-" in a prerequisite Mathematics course to advance to the next course.)

MATH 099 Basic Algebra Review

No credit

A course which reviews 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 required mathematics courses such as MATH 131, MATH 140, or MATH 209. MATH 099 is offered through Extended Studies and a fee is assessed. Graded Satisfactory/Unsatisfactory only.

MATH 105 Mathematics for the Liberal Arts

3 credits

This course investigates a number of 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 (one of the following): ACT math score of 19 or above, SAT math score of 460 or above, MATH 099, or score of 85 or above on the Accuplacer Elementary Algebra test.

MATH 131 Mathematics for the Managerial and Social Sciences 3 credits

A course for the student majoring in Business, Accounting, or 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. Many of the concepts will be explored in the context of spreadsheets. Prerequisite (one of the following): ACT math score of 19 or above, SAT math score of 460 or above, MATH 099, or score of 85 or above on the Accuplacer Elementary Algebra test.

MATH 140 Algebraic Functions

3 credits

A course which integrates the essential algebraic manipulations, solving equations and inequalities, polynomial functions, rational functions, and techniques of graphing. Prerequisite (one of the following): ACT math score of 19 or above, SAT math score of 460 or above, MATH 099, or score of 85 or above on the Accuplacer Elementary Algebra test.

MATH 141 Transcendental Functions

3 credits

A study of exponential, logarithmic, and trigonometric functions and relations. The course emphasis is on the characteristics, properties, graphs, and applications involving these functions. Prerequisite: MATH 140 or pass Accuplacer College-Level Mathematics test with a score of 75 or above or instructor permission.

MATH 161 Calculus I

3 credits

An introductory course in calculus. The topics include functions, limits, continuity, differential calculus of a single variable, and applications of the derivative. Prerequisite: MATH 141, pass Accuplacer College-Level Mathematics test with a score of 95 or above, or score 3 or above on AP Calculus.

MATH 162 Calculus II

3 credits

The second course in calculus. The topics include the definite integral, applications of the integral, inverse functions, and techniques of integration. Prerequisite: MATH 161.

MATH 197 Special Topics

1-6 credits

MATH 200 Discrete Mathematics

3 credits

A course designed to provide some of the mathematical background necessary for advanced work in computer science. Some of the 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. Prerequisites: CIS 190 and MATH 140.

MATH 209 Theory of Arithmetic and Geometry I

3 credits

A course in theory of arithmetic exclusively for students in Elementary Education. The sequence covers topics of set theory, arithmetic operations, functions and variables, numeration systems, informal geometry, measurement, and basic probability and statistics. Students learn to use many of the manipulatives that are utilized in the elementary classroom. Prerequisite (one of the following): ACT math score of 19 or above, SAT math score of 460 or above, MATH 099, or score of 85 or above on the Accuplacer Elementary Algebra test, or instructor permission.

MATH 210 Theory of Arithmetic and Geometry II 3 credits A continuation of MATH 209. Prerequisite: MATH 209.

MATH 213 Probability and Statistics

3 credits

An introductory course in descriptive statistics, probability concepts, and inferential statistics. The topics for the course include presentation of data, counting principles, probability rules, discrete and continuous probability distributions. Prerequisite: MATH 141 or pass Accuplacer College-Level Mathematics test with a score of 85 or above.

MATH 220 Introduction to Advanced Mathematics

3 credits

A course which develops and uses 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 161.

MATH 232 Applied Calculus for the Managerial & Social Sciences 3 credits A course for the student majoring in Business, Accounting or the Social Sciences, which will introduce both differential and integral calculus. 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, MATH 140, or pass Accuplacer College-Level Mathematics test with a score of 75 or above.

MATH 261 Calculus III

3 credits

The third calculus course. The topics include infinite sequences and infinite series, power series, vectors, and elementary differential equations. Prerequisite: MATH 162.

MATH 262 Calculus IV

omodita

The fourth calculus course. The topics include partial derivatives, multiple integrals, and vector calculus. Prerequisite: MATH 261.

MATH 275 Scientific Programming, Modeling and Simulation 3 credits

A course designed to develop programming skills appropriate for scientific and industrial applications. Emphasis is placed on problem modeling, algorithm development and data visualization. Standard techniques such as linear and non-linear equation solving, discrete difference equations and curve fitting are applied to typical industrial problems to give dynamic simulations. The use of a standard programming language, currently FORTRAN, and ancillary applications such as Maple, or a spreadsheet, allow the rapid prototyping required of industrial development. Prerequisites: CIS 190 and MATH 161.

MATH 297 Special Topics

1-6 credits

MATH 300 Introduction to Mathematical Modeling

3 credits

A course 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 162 and MATH 213.

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.

MATH 354 Differential Equations

3 credits

A course dealing with the theory and methods for solving ordinary differential equations. Prerequisite: MATH 162.

MATH 360 Linear Algebra

3 credits

A first course in linear algebra. Topics include systems of linear equations, matrix operations, vector spaces, properties of determinants, eigenvalues, and orthogonality and least-squares. Prerequisite: MATH 220.

MATH 366 Methods of Teaching Secondary Mathematics

3 credits

A course designed to help Secondary Education Emphasis majors 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. Prerequisite: MATH 220.

MATH 370 History of Mathematics

3 credits

A course designed to acquaint the student with the historical development of mathematics. Prerequisites: MATH 220 and MATH 162.

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 162 and either CIS 275 or CIS 310.

MATH 390 Mathematics Lab Practicum

2 credits

A course designed to train Secondary Education Emphasis majors to coordinate and run a mathematics laboratory. Students coordinate and run the tutoring laboratory for students enrolled in freshman-level Mathematics courses. Prerequisite: MATH 162 and permission of the department.

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 262.

MATH 452 Analysis II

2 credits

This second course of the analysis sequence continues 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.

MATH 456 Introduction to Complex Analysis

3 credits

An introductory course in the theory and applications of complex variables. Topics

include analytic and elementary functions, integrals, series, residues and conformal mapping. Prerequisite: MATH 262 and MATH 220.

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.

MATH 472 Abstract Algebra II

2 credits

The second course in 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.

MATH 490 Workshop

2 credits

A course which involves 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 Education 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. Prerequisite: senior status.

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 Program 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 the degree 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 Program 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 College to provide an awareness of Music and its importance to all cultures. Free concerts by faculty, students, and guests are performed for the College and the Gunnison community.

Three Comprehensive Program Emphases are available for students who wish to major in Music: Music Emphasis, Music Education Emphasis, and the Music-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 Comprehensive Program in Music: 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 Program.

Western State College of Colorado is an accredited institutional member of the National Association of Schools of Music.

FACULTY

Professors Robert H. Barrett and Martha Watson Violett; Assistant Professors Harvey L. Harriman and John M. Wacker; Visiting Professor Kenneth W. Todd.

DESCRIPTION OF THE PROGRAM

All Music majors require the 25-credit Musicianship Core, 14 or 21 credits from the Performance Curriculum (depending upon the emphasis), the 3- or 4-credit Supporting Course, 6 credits (or the equivalent) of foreign language, 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 129	Theory of Music I	.3	cr
MUS 130	Theory of Music Lab I	.1	cr
	Theory of Music II		
	Introduction to Music		
	Theory of Music III		

MUS 255	Theory of Music Lab II1 cr
MUS 256	Theory of Music IV3 cr
	History of Music3 cr
	History of Music
MUS 491	Seminar in Research
	Curriculum. The Performance Curriculum consists of courses in
	Major Performing Organizations, Small Ensembles, and Private
_	viajor Performing Organizations, Small Ensembles, and Private
Lessons.	
Conducting:	
MUS 250	Beginning Conducting: Choral and Instrumental2 cr
Major Perform	nance Organizations: (courses may be repeated) The specific major
performing org	anization required is determined by major instrument or voice.
	Orchestra1 cr
	Band
	Chorus
	Orchestra1 cr
	Band
	Chorus
Small Ensemb	eles: (courses may be repeated)
	Instrumental and Vocal Chamber Music
	Instrumental and Vocal Chamber Music
	Opera
	Opera1 cr
	ns: (courses may be repeated)
MUS 180	Piano1-2 cr
MUS 181	Organ1-2 cr
MUS 182	Voice
MUS 183	Violin1-2 cr
MUS 184	Viola1-2 cr
MUS 185	Cello1-2 cr
MUS 186	Contra Bass1-2 cr
MUS 187	Flute
	Oboe1-2 cr
	Clarinet 1-2 cr
MUS 190	Bassoon
MUS 191	Saxophone1-2 cr
	Trumpet1-2 cr
	French Horn
MUS 194	Trombone
	Baritone1-2 cr
	Tuba1-2 cr
MUS 198	Percussion
	Piano1-2 cr
	Organ1-2 cr
	Voice1-2 cr
	Violin 1-2 cr
	Viola
	Cello
	Contra Bass
	Flute
	Oboe 1-2 cr
	Clarinet 1-2 cr
	Bassoon 1-2 cr

MUS 391	Saxophone	1-2 cr
	Trumpet	
MUS 393	French Horn	1-2 cr
MUS 394	Trombone	1-2 cr
MUS 395	Baritone	1-2 cr
MUS 396	Tuba	1-2 cr
MUS 398	Percussion	1-2 cr
	ourse: One of the following:	
COTH 219	Visual Communication	3 cr
COTH 222	Analysis and Interpretation in Communication	3 cr
EDUC 293	Instructional Design and Assessment for Secondary	
	Preservice Teachers	4 cr

Foreign Language. Six credits of foreign language are required in the Music Emphasis and Music-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 Music-Business Emphasis may elect MUS 400 Senior Recital/Senior Project or MUS 499 Internship. Please contact the Music Program for exact requirements.

Piano Proficiency. All students with a Music Major or Minor must pass the piano proficiency examination before graduation, or before student teaching if the student is in Music Education. 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 Program for exact requirements.

Music Major: Comprehensive Programs

MUSIC EMPHASIS

A minimum of 60 credits are required, including the 25-credit Musicianship Core, 21 credits from the Performance Curriculum (7 credits in Major Performance Organizations, 4 credits in Small Ensembles, 8 credits in Private Lessons, 2 credits MUS 250; students must be registered for a major performing organization every semester in residence), 5 credits of Music electives, the 3- or 4-credit Supporting Course, Concert and Convocation Attendance, 6 credits of foreign language, Performance Requirement (MUS 400 or MUS 499) and Piano Proficiency.

MUSIC EDUCATION EMPHASIS

This program prepares students for the State of Colorado License in Music Education. A minimum of 64 credits are required, including the 25-credit Musicianship Core, 21 credits from the Performance Curriculum (7 credits in Major Performance Organizations, 4 credits in Small Ensembles, 8 credits in Private Lessons, 2 credits MUS 250; students must be registered for a major performing organization every semester in residence), the 3-or 4-credit Supporting Course, Concert and Convocation Attendance, the Performance Requirement (MUS 400), Piano Proficiency and the following:

MUS 213	Woodwind Methods	cr
MUS 214	Brass Methods	cr

	String Methods
	Percussion Methods
	Voice Methods
	Introduction to Improvisation
	Advanced Conducting: Choral and Instrumental
	Teaching General Music in Elementary Schools1 cr
MUS 365	Methods and Philosophy of Teaching and Supervising
	Instrumental Music in the Public Schools: K-123 cr
MUS 370	Methods and Philosophy of Teaching and Supervising
	Vocal and General Music in the Public Schools: K-123 cr
	ust also fulfill the requirements of either the Secondary Licensure
	K-12 Music Licensure Program (see description under Education) to
	Colorado License in Music Education. Please contact the Director of
	gram or the Director of the Teacher Education Program for exact
required course	ework in Education.
MUSIC-BUSINE	SS EMPHASIS
A total of 66 cr	redits are required including the 25-credit Musicianship Core, 14 cred-
its in Musical I	Performance (7 credits from Major Performing Organizations or Small
Ensembles and	7 credits from Private Lessons), Performance Requirement (MUS 400
or MUS 499), I	Piano Proficiency, the 6-credit Foreign Language requirement, the 3- or
4-credit Suppor	rting Course, Concert and Convocation Attendance, and the following:
BUAC 201	Introduction to Financial Accounting3 cr
	O Legal Environment of Business
BUAD 27	O Principles of Marketing
One of the	following:
	nformation Management and Analysis3 cr
	O Computer Applications in Business3 cr
	following:
ECON 20	Macroeconomics
	2 Microeconomics
	following:
	O Principles of Management3 cr
	O Human Resource Management
Music Mino	_
	f 23 credits are required. The Piano Proficiency is required of Music
Minore A mini	imum grade of "C" is required in all music courses counted toward the
Music Minor.	initialit grade of C is required in all music courses counted toward the
Required cours	vac'
MIIS 120	Theory of Music I3 cr
	Theory of Music Lab I
	Theory of Music II
	Introduction to Music
	Theory of Music III
	History of Music
MUS 353	History of Music 3 cr
	tives
	ation Requirements. The following courses in the Music Major fulfill the groups component of the Essential Skills Requirement: COTH 219
second writing	g Course component of the Essential Skills Requirement: COTH 219

Second Writing Course component of the Essential Skills Requirement: COTH 219 Visual Communication, COTH 222 Analysis and Interpretation in Communication, or EDUC 293 Instructional Design and Assessment for Secondary Preservice Teachers. Students are encouraged to take courses in Art and Communication and Theatre to fulfill Liberal Arts Area III.

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% of the posted events in each semester (as either listener or performer) qualifies as a "Satisfactory" grade; six semesters of MUS 000 with a grade of "S" are required of all Music majors prior to graduation. Graded Satisfactory/ Unsatisfactory only.

MUS 100 Fundamentals of Music

3 credits

An introductory course in music literacy and theory. Students will acquire basic skills of reading, writing, and performing music and will gain an understanding of scales, intervals, chords, and transposition. The course is open to students with little or no musical background. It may be required of Music majors as a prerequisite to MUS 129; it is a recommended background course for MUS 337.

MUS 101 Orchestra

1 credit

A lower-division course 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

Credit is determined by the type of ensemble and amount of rehearsal time. A lowerdivision course 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.

MUS 104 Chorus 1/2-1 credit

Credit is determined by the type of ensemble and amount of rehearsal time. A lower-division course offering all 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 College-Community Choir. Membership is open to Music majors and non-Music majors by audition.

MUS 105 Opera 1 credit

A lower-division course designed to provide experience in musical-dramatic activities. May be taken two times for credit. Prerequisite: admission by campus-wide audition.

MUS 121 Instrumental and Vocal Chamber Music 1/2-1 credit

Credit is determined by the type of ensemble and amount of rehearsal time. A lower-division course 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.

MUS 129 Theory of Music I

3 credits

A study of how the sounds of music are notated on paper. This course concentrates on rudiments such as scales, meter, rhythm, pitch intervals, key signatures, simple chord building, and voice leading. (Fall) Prerequisite: MUS 100 or the equivalent. Course fee: \$40.

MUS 130 Theory of Music Lab I

1 credit

This course is designed to enhance and build on the musical skills and knowledge learned in MUS 129. Students will learn to perform music at sight. Students learn to

sight-sing, play the recorder, and develop harmonic patterns at the piano keyboard. (Spring) Prerequisite: MUS 129 with minimum grade of "C." Corequisite: MUS 131. Course fee: \$40.

MUS 131 Theory of Music II

3 credits

A study of how the sounds of music are notated on paper. This course builds on knowledge gained in MUS 129 and takes students into non-chord tones; cadences, phrases, and periods; and tonicization and rudimentary counterpoint. (Spring) Prerequisite: MUS 129 with minimum grade of "C." Corequisite: MUS 130. Course fee: \$40.

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.

MUS 173 Piano Class

1 credit

A class in beginning piano.

MUS 174 Piano Class

1 credit

A continuation of MUS 173.

MUS 180 Piano

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 181 Organ

1-2 credits

A course of lower-division private instruction. Prerequisite: at least four years of private piano study. Course fee: \$50 per credit.

MUS 182 Voice

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 183 Violin

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 184 Viola

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 185 Cello

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 186 Contra Bass

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 187 Flute

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 188 Oboe

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 189 Clarinet

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 190 Bassoon

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 191 Saxophone

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 192 Trumpet

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 193 French Horn

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 194 Trombone

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 195 Baritone

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 196 Tuba

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 197 Special Topics

1-6 credits

MUS 198 Percussion

1-2 credits

A course of lower-division private instruction. Course fee: \$50 per credit.

MUS 213 Woodwind Methods (with laboratory)

1 credit

A course 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 2006).

MUS 214 Brass Methods (with laboratory)

1 credit

A course 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 2005).

MUS 215 String Methods (with laboratory)

1 credit

A class of 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 2006).

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 2007).

MUS 217 Voice Methods (with laboratory)

1 credit

A course studying 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 (Fall 2005).

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. Its relationship to other aspects of musical culture, as well as to historical, sociological, and multicultural influences and implications, will be considered. The course may be taken two times (with different titles) for credit.

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 College ensembles. Offered in alternate years (Fall 2006). Prerequisites: MUS 130 and MUS 131 with minimum grade of "C."

MUS 254 Theory of Music III

3 credits

A study of how the sounds of music are notated on paper. This course builds on knowledge gained in MUS 131 and takes students into modulation, chromaticism, and extension of tertian harmony. Offered in Fall semesters, Prerequisites: MUS 130 and MUS 131 with minimum grade of "C."

Theory of Music Lab II

This course includes further development of skills as practical applications of material studied in MUS 131 and 254: aural skills, sight-singing, playing the recorder, and developing harmonic patterns at the piano keyboard in both electronic and acoustic labs. Offered in Spring semesters. Prerequisite: MUS 254 with minimum grade of "C." Corequisite: MUS 256.

MUS 256 Theory of Music IV

3 credits

A study of how the sounds of music are notated on paper. This course builds on knowledge gained in MUS 254 and takes students into the practices of 20th-century music. Offered in Spring semesters. Prerequisite: MUS 254 with minimum grade 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.

Pedagogy for the Applied Instrument or Voice

2 credits A course designed to acquaint the student with the methods and materials to be used in the teaching of music students, in both private and class situations.

Introduction to Improvisation MUS 290

1 credit

This course is an introduction to improvisation for singers and instrumentalists. It will include 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 2006). Prerequisites: MUS 130 and MUS 131 with a minimum grade of "C" or instructor permission.

MUS 292 Independent Study

1-3 credits

MUS 297 Special Topics

1-6 credits

MUS 301 Orchestra

1 credit

An upper-division course 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

Credit is determined by the type of ensemble and amount of rehearsal time. An upperdivision course 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. Prerequisites: junior or senior standing; minimum of one semester of MUS 102; instructor permission.

MUS 304 Chorus

1/2-1 credit

Credit is determined by the type of ensemble and amount of rehearsal time. An upperdivision course offering all 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 College-Community Choir. Membership is open to Music majors and non-Music majors by audition. Prerequisites: junior or senior standing; minimum of one semester of MUS 104; instructor permission. MUS 305 Opera 1 credit

An upper-division course 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

A course designed to acquaint the piano student with ensemble repertoire and performance traditions. Prerequisite: four credits of 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 grade of "C."

MUS 312 Introduction to Music Technology

1 credits

The course is designed to acquaint students with music technology hardware (including MIDI—Musical Instrument Digital Interface) and a variety of software programs that are available 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 2005). Prerequisite: MUS 254 or instructor permission. Course fee: \$5.

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

Credit is determined by the type of ensemble and amount of rehearsal time. An upperdivision course 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. Prerequisites: junior or senior standing; minimum of one semester of MUS 121; instructor permission.

MUS 337 Integrating Music into the Elementary Classroom (with laboratory)

1 credit

A study of the teaching and integration of music in the elementary school classroom. This course is required of Elementary Education Minors and for the Elementary Licensure Program. It is designed to acquaint students with the materials, techniques, and philosophy of music instruction in elementary general music classes. Recommended: MUS 100, MUS 140, MUS 240, or equivalent music background.

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 College ensembles. Offered in alternate years (Spring 2007). Prerequisites: MUS 130, MUS 131, and MUS 250 with minimum grade of "C."

MUS 352 History of Music

credi

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 2005). 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 2006). 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 grade of "C."

MUS 360 Teaching General Music in Elementary Schools 1 credit A study of the teaching of general music in the elementary classroom. The course is required of Music Education Majors and is designed to acquaint them with methods of teaching the elements of music, working with children's voices, using instruments, and developing listening skills. It also addresses current approaches such as Dalcroze, Orff, Kodaly, and Suzuki. Students will also survey elementary music texts and learn how to develop and plan a music program. Offered in alternate years (Fall 2006). Prerequisites: MUS 130, MUS 131, and MUS 250 with minimum grade of "C."

MUS 365 Methods and Philosophy of Teaching and Supervising Instrumental Music in the Public Schools: K-12 3 credits

A course which teaches the supervision, organization, and administration of instrumental music in the public schools, K-12. It provides 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 2006). Prerequisites: MUS 130, MUS 131, and MUS 250 with a minimum grade of "C."

MUS 370 Methods and Philosophy of Teaching and Supervising Vocal and General Music in the Public Schools: K-12 3 credits

A methods course for Music Education students. Includes intensive study of materials and methods for teaching vocal and general music in the elementary and secondary school, plus objectives, organization, administration, curriculum content, guidance for student teachers, and background in contemporary trends in music education for all age levels, K-12. Offered in alternate years (Spring 2007). Prerequisites: MUS 130, MUS 131, and MUS 250 with a minimum grade of "C."

MUS 380 Piano 1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 180; instructor permission. Course fee: \$50 per credit.

MUS 381 Organ 1-2 credits

A course of upper-division private instruction. Prerequisite: at least four years of piano study; junior or senior standing; minimum of one semester of MUS 181; instructor permission. Course fee: \$50 per credit.

MUS 382 Voice 1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 182; instructor permission. Course fee: \$50 per credit.

MUS 383 Violin 1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 183; instructor permission. Course fee: \$50 per credit.

MUS 384 Viola 1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 184; instructor permission. Course fee: \$50 per credit.

MUS 385 Cello 1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 185; instructor permission. Course fee: \$50 per credit

MUS 386 Contra Bass 1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 186; instructor permission. Course fee: \$50 per credit.

MUS 387 Flute 1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 187; instructor permission. Course fee: \$50 per credit.

MUS 388 Oboe 1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 188; instructor permission. Course fee: \$50 per credit.

MUS 389 Clarinet 1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 189; instructor permission. Course fee: \$50 per credit.

MUS 390 Bassoon 1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 190; instructor permission. Course fee: \$50 per credit.

MUS 391 Saxophone

1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 191; instructor permission. Course fee: \$50 per credit.

MUS 392 Trumpet

1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 192; instructor permission. Course fee: \$50 per credit.

MUS 393 French Horn

1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 193; instructor permission. Course fee: \$50 per credit.

MUS 394 Trombone

1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 194; instructor permission. Course fee: \$50 per credit.

MUS 395 Baritone

1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 195; instructor permission. Course fee: \$50 per credit.

MUS 396 Tuba 1-2 credits

A course of upper-division private instruction. Prerequisites: junior or senior standing; minimum of one semester of MUS 196; instructor permission. Course fee: \$50 per credit.

MUS 397 Special Topics

1-6 credits

MUS 398 Percussion

A course of upper-division private instruction. Prerequisites: junior or senior standing;

minimum of one semester of MUS 198; instructor permission. Course fee: \$50 per credit.

MUS 400 Senior Recital / Senior Project

0 credits

A course designed to demonstrate competency in an area of performance, research, composition, music technology, etc. Senior Projects may include a research project, composition, music technology project, or non-credit internship. A completed application form must be presented to the Music faculty for Music Program records prior to receiving permission to register for the course and no later than the Add deadline of the semester in which the requirement will be completed. 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 will be studied in selected vocal repertoire.

MUS 488 Composition

3 credits

A course designed to 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

A course in which senior students research and write papers in the area of music appropriate to their courses of study. Offered in alternate years (Spring 2006).

MUS 492 Independent Study

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A special study in areas of student interest. May be taken for a maximum of four credits.

MUS 497 Special Topics

MUS 499 Internship

1-6 credits
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 within that major or minor. Consult your advisor for details.



Philosophy (PHIL)

The coursework in Philosophy is intended primarily to provide an introduction to philosophy as a field of study and to support students' coursework in other disciplines.

FACULTY

Assistant Professor John C. Hausdoerffer.

PHILOSOPHY COURSES

PHIL 101 Introduction to Philosophy

3 credits

This course is 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.

PHIL 197 Special Topics

1-6 credits

PHIL 297 Special Topics

1-6 credits

PHIL 311 Analysis of Inductive Arguments

2 credits

This course explores problems encountered in identifying, analyzing, and evaluating inductive arguments within a slightly broader logical context. Aspects of informal logic, such as fallacy theory and the technique of reasoning to the best explanation are used to emphasize the evaluation of arguments in ordinary language. Prerequisite: minimum sophomore standing.

PHIL 312 Analysis of Deductive Arguments

2 credits

This course explores problems encountered in identifying, analyzing, and evaluating deductive arguments within a slightly broader logical context. Formal evaluation techniques are developed, but emphasis is also placed on the relations between logical form and arguments as they occur in ordinary language. It is preferable for students to have previously taken PHIL 311, but the courses are independent. Prerequisite: minimum sophomore standing.

PHIL 335 Ethics 3 credits

An analytical and critical introduction to issues in moral philosophy and to the impact of those issues and the various ethical theories that have been developed about them on practical moral problems. Prerequisite: minimum sophomore standing.

PHIL 345 Philosophy of Religion

3 credits

An introduction to philosophical problems concerning the nature of religion and religious beliefs, but not a survey of world religions. Significant emphasis is placed upon problems and concepts of Christian thought because, culturally and philosophically, the Christian tradition has had the greatest influence upon and is more familiar to students. Prerequisite: minimum sophomore standing.

PHIL 380 Greek and Roman Philosophy

3 credits

A detailed philosophical study, analysis, and criticism of the problems and approaches of ancient philosophy, emphasizing the views of Pre-Socratic Greek thinkers and the systems of Plato and Aristotle. Prerequisites: minimum sophomore standing and 3 credits of Philosophy.

PHIL 397 Special Topics

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

Professor Theodore D. Violett; Visiting Professor Dustin A. Hite.

DESCRIPTION OF THE PROGRAM

Physics Minor

The Physics Minor consists of a minimum of 18 credits, including 8 to 10 credits chosen from Physics courses numbered 330 or higher and the following:

PHYS 170 Principles of Physics I (with laboratory)

4 cr

PHYS 1/0	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)5 cr
PHYS 201	General Physics II (with laboratory)

PHYSICS COURSES

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.

PHYS 140 Introductory Physics (with laboratory)

4 credits

A semi-quantitative introduction to the fundamental concepts of physical science, particularly the laws of physics as they relate to the structure of matter. Laboratory experiences will play an important role in the investigations. This course may not be taken for credit toward the Physics Minor. Prerequisite (one of the following): ACT math score of 19 or above, SAT math score of 460 or above, MATH 099, or score of 85 or above on the Accuplacer Elementary Algebra test. Course fee: \$35.

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 college algebra is recommended. Prerequisites: PHYS 140 or one year of high-school physics and pass Accuplacer College-Level Mathematics test with a score of 95 or above, or MATH 141. Course fee: \$35.

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. Course fee: \$35.

PHYS 200 General Physics I (with laboratory)

5 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 200. Prerequisites: PHYS 140 or one year of high-school physics, CIS 120, and completion of MATH 161 preferred but may be taken concurrently. Course fee: \$35.

PHYS 201 General Physics II (with laboratory)

5 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 201. Prerequisite: PHYS 200. Course fee: \$35.

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. Descriptions of the objects comprising the solar system and their motions. Prerequisite (one of the following): ACT math score of 19 or above, SAT math score of 460 or above, MATH 099, or score of 85 or above on the Accuplacer Elementary Algebra test.

PHYS 311 Astronomy II

2 credits

A discussion of the techniques used to study and classify stars. A qualitative study of 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 162.

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. Offered in alternate years, 2006-2007. Prerequisites: PHYS 171 or PHYS 201; MATH 261.

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. Offered in alternate years, 2006-2007. 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. Offered in alternate years, 2005-2006. Prerequisites: PHYS 171 or PHYS 201; Corequisite: MATH 261.

PHYS 452 Quantum Theory

4 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 261.

PHYS 460 Theory and Application of Radioisotopes (with laboratory) 3 credits A course intended to familiarize 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)

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 pass Accuplacer College-Level Mathematics test with a score of 95 or above, or score 3 or above on AP Calculus.

PHYS 480 Observational Astronomy

4 credits

3 credits

A course which presents 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 (one of the following): ACT math score of 19 or above, SAT math score of 460 or above, MATH 099, or score of 85 or above on the Accuplacer Elementary Algebra test.

PHYS 490 Geophysics I (with laboratory)

4 credits

A course which emphasizes, through lecture and field experiences, the seismic techniques of geophysical exploration. Prerequisites: GEOL 201, PHYS 200, and CIS 190; Corequisite: MATH 261.

PHYS 491 Geophysics II (with laboratory)

4 credits

A course in which lecture and field experiences are used to introduce gravity, magnetics, and electrical methods of geophysical exploration. Prerequisites: GEOL 201, MATH 261, PHYS 201, and CIS 190.

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



Political Science (POLS)

Political Science students at Western State College of Colorado are acquainted with the tradition of thought about the just society and provided opportunities to apply this tradition to problems of our own time. In an age of global democratization and increased participatory democracy at home, knowledge of the political process is more vital to skilled citizenship than ever. Whether the Political Science graduate enters one of the millions of public sector jobs or not, the goal is that he or she will be prepared and willing to play an effective part in the pageant of our times.

Students majoring in Political Science may select the Standard Program, requiring 36 credits, or one of the three emphases in the Comprehensive Program.

FACULTY

Professor William L. Niemi; Assistant Professor Christopher M. Stadler; Lecturer Shane J. Ralston.

DESCRIPTION OF THE PROGRAMS

Political Scient	ence Major: Standard Program
	36 credits is required including the following:
	Introduction to Political Ideas
POLS 180	American Federal Government
	Introduction to Public Policy3 cr
	International Relations
POLS 309	Political Theory I - Ancient to Early Modern3 cr
	Political Theory II - Late Modern and Contemporary3 cr
POLS 498	Capstone Experience3 cr
POLS 492 Inde 498 with adviso	pendent Study or POLS 499 Internship may be substituted for POLS or and instructor permission.
	olitical Science electives chosen from the following. At least three earned in each of the following four areas.
AREA I Politic	al Theory
	American Political Thought I - From Puritans to Slaveholders3 cr
POLS 453	Contemporary Political Thought3 cr
POLS 476	American Political Thought II - American Capitalism
	and Democracy3 cr
AREA II Ameri	can Government and Politics
	American State and Local Government
	Constitutional Law I
	Constitutional Law II
	Political Parties and Elections 3 cr
ARFA III Intern	national Relations / Comparative Government
	Introduction to Comparative Government3 cr
POLS 360	American Foreign Policy
HIST 351	A History of Russia and the Soviet Union
	c Administration / Public Policy Issues in Public Policy
	Introduction to Public Administration
	Research Design 3 cr
	Statistics for Business and Economics 3 cr
	Fearmings of the Public Sector 3 or

POLS 297, POLS 397, and POLS 497 Special Topics, or POLS 499 Internship may be applied to any of the four areas, depending on the nature of the course.

Political Science Major: Comprehensive Program

SECONDARY LICENSURE EMPHASIS

This emphasis qualifies students for State of Colorado Licensure in Social Science Education. A minimum of 66 credits in social and behavioral sciences is required. In addition, students must fulfill the requirements for the Secondary Licensure Option described under Education.

Required courses:

1
ANTH 107 Introduction to General Anthropology3 cr
ECON 201 Macroeconomics
ECON 202 Microeconomics
ECON 476 American Economic Development3 cr
GEOG 110 World Regional Geography3 cr
GEOG 120 Human Geography3 cr
HIST 102 World History Since 1650
HIST 126 American History to 18653 cr
HIST 127 American History Since 1865
POLS 117 Introduction to Political Ideas
POLS 180 American Federal Government
POLS 182 American State and Local Government3 cr
POLS 217 Introduction to Public Policy
POLS 255 Introduction to Comparative Government3 cr
POLS 260 International Relations
POLS 309 Political Theory I
POLS 376 American Political Thought I
POLS 476 American Political Thought II3 cr
POLS Upper Division Elective
PSY 100 General Psychology3 cr
SOC 201 The Sociological Imagination3 cr
SOSC 366 Methods for Teaching Secondary Social Studies3 cr
Pre-Law Emphasis
A minimum of 60 credits is required including the 36-credit Standard Program, an
additional six credits in Area II American Government, and 18 credits chosen from
the following courses in at least three disciplines:
BUAD 210 Legal Environment of Business
BUAD 315 Business Law3 cr
BUAD 487 Government Regulation of Business3 cr
COTH 271 Small Group Communication
COTH 371 Argument and Conflict Management
COTH 372 Issues Management
ECON 361 Money, Banking and Financial Markets3 cr
ECON 476 American Economic Development3 cr
HIST 330 Colonial American History
HIST 333 The Revolutionary Era and Early National Period3 cr
HIST 336 Antebellum, Civil War and Reconstruction, 1830-18773 cr
HIST 340 Reform and Reorganization in American Society3 cr
HIST 343 Depression and World War II
HIST 346 Recent American History3 cr
PHIL 312 Analysis of Deductive Arguments2 cr

\mathbf{p}_0	litical	Science	Minor

A minimum of 18 credits is required including 6 credits of Political Science electives (selected with the approval of the student's advisor) and the following:

POLS 180	American Federal Government	3 1	cr
POLS 217	Introduction to Public Policy	3 1	cr
POLS 260	International Relations	3 (cr
POLS 309	Political Theory	3 (cr

Political Science Pre-Law Minor

A Pre-Law Minor, utilizing courses from a number of discipline areas, is designed to prepare students for entry into law school after the completion of the bachelor's degree. At least 21 credits are required to complete the Minor:

ce. 11 least 21 creates are required to complete the willor.	
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 Federal Government	3 cr
POLS 300 Constitutional Law I	3 cr
POLS 301 Constitutional Law II.	3 cr
One of the following:	
BUAC 201 Introduction to Financial Accounting	3 cr
BUAC 350 Income Tax	3 cr
BUAD 300 Social Responsibility of Business	3 cr
BUAD 487 Government Regulation of Business	3 cr
ECON 317 Public Policy	
POLS 217 Introduction to Public Policy	
SOC 359 Criminal Justice System	

General Education Requirements. The following courses in the Political Science Major fulfill the Second Writing Course component of the Essential Skills Requirement: POLS 217 Introduction to Public Policy or EDUC 293 Instructional Design and Assessment for Secondary Preservice Teachers (Secondary Licensure Emphasis).

Capstone Course Requirement. The following courses in the Political Science Major fulfill the Capstone Course Requirement: POLS 498 Capstone Experience, POLS 492 Independent Study, POLS 499 Internship (with advisor and instructor permission), or POLS 498 Capstone Experience or student teaching (Secondary Licensure Emphasis).

POLITICAL SCIENCE COURSES

POLS 117 Introduction to Political Ideas

3 credits

A survey of the aims and character of political science and its relation to the world at large. Students become acquainted with the various approaches to politics throughout history, with a view to discovering the basic elements—such as justice, politics, and the individual—with which the political scientist has to deal.

POLS 180 American Federal Government

3 credits

A study of the political system of the United States, with particular emphasis on: the Constitution; civil liberties; and the federal government and its founding; present structure and organization of the legislative, executive, and judicial branches; and the operation of political parties and interest groups.

POLS 182 American State and Local Government

3 credits

A study of federalism in the United States, emphasizing state and local governments and their relationships to the national government. Students are introduced to the unique and representative qualities of Colorado government, including local practices.

POLS 217 Introduction to Public Policy

3 credits

A survey of the major policy areas and policy making processes of the national government. The study of these policy areas and processes involves students in the current practices of interest groups and political parties advocacy, lawmaking in Congress, the creation of regulations and implementation strategies in the executive branch, and the assessment of government programs. Recommended: POLS 180.

POLS 255 Introduction to Comparative Government

3 credits

A comparative study of selected world governments, their political processes, how they approach unique and common problems and how governments, as governments, behave.

POLS 260 International Relations

3 credits

A study of international relations, including the nature of the modern nation-state system, the nature of state interests and the processes through which they pursue such interests, the role and operation of power in the political relations of states, and the organization and structure of the international community of states, which form the context of interstate relations.

POLS 297 Special Topics

1-6 credits

POLS 300 **Constitutional Law I**

3 credits

A study of the Constitution and of constitutional principles as developed by the U.S. Supreme Court in the areas of: jurisdiction of the courts, separation of powers, war powers and powers of the president, federalism, the commerce power, and tax power.

POLS 301 Constitutional Law II

3 credits

A continuation of POLS 300, with emphasis on civil rights, citizenship, due process, and equal protection of the law. Prerequisite: POLS 180. Recommended: POLS 300.

POLS 309 Political Theory I—Ancient to Early Modern

3 credits A study of ancient political theory, with emphasis on the political philosophies of Plato and Aristotle to the early modern period.

Political Theory II—Late Modern and Contemporary **POLS 310** 3 credits A study of modern and contemporary political theories including issues such as the rise of modern liberalism and its critics, and the impact of the industrial revolution and technological change on politics of the modern world.

POLS 317 Issues in Public Policy

3 credits

An in-depth look at the laws, cases, regulations, politics, and surrounding forces of a public policy field. The course focuses on a different policy area each time it is taught and includes an individual research project. Prerequisites: POLS 180 and POLS 217.

Introduction to Public Administration

3 credits

An introduction to the principles, practices, and organization of public administration in the United States. Topics include implementation of public policy, administrative law, budgeting and budgetary politics, human resources management, bureaucratic politics, and organizational behavior. Exercises and simulations are frequently used to illustrate principles of public administration.

POLS 360 American Foreign Policy

3 credits

A study of policy shifts and shifting realities since World War II. Topics include realism and idealism as foreign policy principles, problems of the Cold War and problems of the end of the Cold War, nuclear proliferation, foreign aid, economic relations, and the U.S. role in the United Nations.

POLS 376 American Political Thought I — From Puritans to Slaveholders

3 credits

A study of early American political thought. The focus is on themes which endure in American political thought as well as challenges to the accepted political order.

POLS 397 Special Topics

1-6 credits

POLS 453 Contemporary Political Thought

3 credits

A seminar dealing with such contemporary topics as Marxism, existentialism, nihilism, historicism, technocracy, and education theories. Prerequisite: POLS 117.

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. The course 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 480 Political Parties and Elections

3 credits

A course which combines in-class study of American political parties and the electoral process with out-of-class, direct experience with an election or ballot-issue campaign during the Fall semester of election years. Following the November election, students analyze election results and assess their consequences for political alignments and future public policy.

POLS 492 Independent Study

1-3 credits

POLS 497 Special Topics

1-6 credits

POLS 498 Capstone Experience

3 credits

This is an interdisciplinary course which is firmly based on the foundations of economics, sociology, and political science and which provides practical assistance to decision makers in rural Colorado communities. Prerequisite: senior standing and instructor permission.

POLS 499 Internship

1-12 credits

Credit earned in an internship may be applied to the Major or Minor with faculty approval within that Major or Minor. Consult your advisor for details.



Psychology (PSY)

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 will 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 violence advocacy, at the local probation departments, and in other social service agencies statewide and nationally.

Many careers in psychology require a graduate degree. The Psychology Major at Western provides excellent preparation for graduate study. Students interested in applied psychological careers are encouraged to pursue the Clinical, Counseling and School Psychology Emphasis, while those interested in research, teaching or experimental psychology careers should complete the General Psychology or Biopsychology Emphases. The Personnel Management Emphasis and the Law Enforcement Emphasis are appropriate for those who expect to begin their careers directly after graduation from Western.

All emphases except Biopsychology require a minor in another discipline. Both the Law Enforcement Emphasis and the Personnel Management Emphasis are interdisciplinary programs consisting of 39 credits. The Biopsychology Emphasis is designed for the student who is interested in a comprehensive understanding of the biological aspects of behavior and who intends to pursue the study of neuroscience at the graduate level. It is an interdisciplinary approach, consisting of a minimum of 59 credits.

FACULTY

Professors Susan J. Coykendall and Roger A. Drake; Assistant Professors Carole S. Dlugasch and C. Patrick Stark.

DESCRIPTION OF THE PROGRAMS

Psychology Major: Standard Programs

·	•		
GENERAL PSY	CHOLOGY EMPHASIS		
A minimum o	of 36 credits is required:		
PSY 100	General Psychology	3 cı	r
PSY 200	Statistics and Data Analysis	3 cı	r
PSY 210	History of Psychology	3 cı	r
PSY 301	Research Methods	3 cı	r
Psycholo	gy electives	21 cı	r
A minimi	um of 3 credits from the following	7	
		y3 ci	r
PSY 499	Internship in Psychology	1-12 cı	r
CLINICAL, CO	DUNSELING, AND SCHOOL PSYCHO	DLOGY EMPHASIS	
A minimum c	of 36 credits is required:		
		3 cı	r
		3 cı	

204 Psychology

PSY 210 History of Psychology
PSY 258 Introduction to Personality3 cr
PSY 270 Developmental Psychology3 cr
PSY 301 Research Methods3 cr
PSY 345 Biopsychology (with laboratory)4 cr
PSY 460 Psychological Testing3 cr
PSY 468 Abnormal Psychology
PSY 475 Clinical Psychology
Psychology electives
A minimum of 2 credits from the following:
PSY 498 Capstone Seminar in Psychology
PSY 499 Internship in Psychology1-12 cr
LAW ENFORCEMENT EMPHASIS
A minimum of 39 credits is required:
COTH 371 Argument and Conflict Management3 cr
POLS 301 Constitutional Law II3 cr
PSY 100 General Psychology3 cr
PSY 200 Statistics and Data Analysis
PSY 210 History of Psychology3 cr
PSY 336 Psychology of Motivation3 cr
PSY 457 Social Psychology
PSY 468 Abnormal Psychology
PSY 475 Clinical Psychology
SOC 201 The Sociological Imagination 3 cr
Two of the following:
PSY 397 Forensic Psychology
SOC 351 Juvenile Delinquency3 cr
SOC 359 Criminal Justice System
SOC 367 Corrections
A minimum of 3 credits from the following:
PSY 498 Capstone Seminar in Psychology3 cr
PSY 499 Internship in Psychology1-12 cr
Recommended electives:
POLS 180 American Federal Government
POLS 301 Constitutional Law II
PERSONNEL MANAGEMENT EMPHASIS
A minimum of 39 credits is required:
BUAD 250 Principles of Management
BUAD 350 Human Resource Management
BUAD 450 Organizational Behavior
PSY 100 General Psychology 3 cr
PSY 200 Statistics and Data Analysis
PSY 210 History of Psychology
PSY 336 Psychology of Motivation
PSY 361 Industrial and Applied Psychology
PSY 457 Social Psychology
PSY 460 Psychological Testing
PSY 475 Clinical Psychology
Psychology electives
A minimum of 3 credits from the following:
PSY 498 Capstone Seminar in Psychology3 cr
PSV 499 Internship in Psychology 1-12 cr

PSY 301 Research Methods and PSY 468 Abnormal Psychology are recommended electives.

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rsychology Major: Comprehensive Program
BIOPSYCHOLOGY EMPHASIS
A minimum of 59 credits is required:
BIOL 150 Biological Principles (with laboratory)4 cr
BIOL 251 General Zoology (with laboratory)4 cr
BIOL 372 Human Anatomy and Physiology I (with laboratory)4 cr
BIOL 373 Human Anatomy and Physiology II (with laboratory)4 cr
BIOL 330 Cell Biology3 cr
PSY 100 General Psychology3 cr
PSY 200 Statistics and Data Analysis3 cr
PSY 210 History of Psychology3 cr
PSY 301 Research Methods
PSY 345 Biopsychology (with laboratory)4 cr
PSY 492 Independent Study (senior paper in Biopsychology)1-4 cr
One of the following sequences:
CHEM 111 General Chemistry3 cr
CHEM 112 General Chemistry Lab I
CHEM 113 General Chemistry3 cr
CHEM 114 General Chemistry Lab II1 cr
OF .
CHEM 101 Introduction to Inorganic Chemistry3 cr
CHEM 105 Introduction to Organic Chemistry and Biochemistry3 cr
CHEM 109 Introductory Organic and Biochemistry Laboratory1 cr
Two of the following:
BIOL 360 Genetics4 cr
BIOL 362 Evolutionary Biology3 cr
BIOL 446 Mammalian Physiology with laboratory4 cr
BIOL 450 Histology4 cr
BIOL 454 Vertebrate Embryology with laboratory4 cr
BIOL 474 Comparative Animal Physiology with laboratory4 cr
BIOL 484 Advanced Human Anatomy with laboratory4 cr
A minimum of 3 credits from the following:
PSY 498 Capstone Seminar in Psychology3 cr
PSY 499 Internship in Psychology1-12 cr
Plus 1-6 credits of Psychology electives to meet the minimum requirements.
This I o creates of I sychology electives to meet the minimum requirements.
Psychology Minor
The Psychology Minor consists of a minimum of 18 credits:
PSY 100 General Psychology
Psychology electives

General Education Requirements. The following course in the Psychology Major fulfills the Second Writing Course component of the Essential Skills Requirement: PSY 210 History of Psychology.

Capstone Course Requirement. The following courses in the Psychology Major fulfill the Capstone Course Requirement: PSY 498 Capstone Seminar in Psychology or PSY 499 Internship in Psychology (with a grade of "C" or higher).

PSYCHOLOGY COURSES

PSY 100 General Psychology

3 credits

A general 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.

PSY 197 Special Topics

1-6 credits

PSY 200 Statistics and Data Analysis

3 credits

A first course in the 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 and ENG 102; MATH 105, MATH 131 or MATH 140.

PSY 210 History of Psychology

3 credits

A course designed to introduce psychology majors to the philosophical underpinnings and historical context underlying the development of the discipline. This course is designated as the second writing requirement in the major. Prerequisites: ENG 102 and 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 psycho-social realms of human development. Current research findings are emphasized.

PSY 297 Special Topics

1-6 credits

PSY 301 Research Methods

3 credits

This course covers 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 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 337 Psychology of Perception and Cognition (with laboratory) 3 credits A laboratory course which considers the sensory and perceptual foundations of behavior, as well as theory and research related to such cognitive processes as concept attainment, problem solving, memory, and language behavior. Prerequisite: PSY 200.

PSY 345 Biopsychology (with laboratory)

4 credits

An investigation of the neurology and physiology of behavior. The functioning of biological systems in relation to observable behavior are emphasized in the study of such topics as sexual behavior, drug effects, psychosurgery, sleep, etc. Course fee: \$40.

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 369 Health Psychology

3 credits

The course provides 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 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 will have the opportunity to take, score, administer and interpret several common assessment instruments. Ethics and limitations of testing are emphasized. Prerequisite: PSY 200.

PSY 468 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.

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.

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 Internship in Psychology

1-12 credits

An opportunity for Psychology majors to gain experience through direct, supervised involvement with professionals in psychology. This course may fulfill the Capstone Course Requirement.

Recreation (RECR)

A student who successfully completes a Recreation Major has participated in exemplary training in both the fundamental concepts involved in the recreation field and their practical applications. Principles include philosophy, basic psychomotor skills, leadership, environmental ethics, ecosystem management, entrepreneurship, program planning, facility and personnel management, and internship experience. In addition, the student is encouraged to gain specialized knowledge in either ski and resort management or outdoor leadership and instruction.

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 the wilderness environment. Recreation majors can individualize their studies by articulating with other fields, such as biology, economics, environmental studies, sociology, and business administration. In addition to the traditional competencies and critical thinking skills expected of all liberal arts students, those majoring in Recreation learn how the overall quality of life can be enhanced by the integration of appropriate leisure activities.

Recreation majors have pursued careers in many different areas. Options include commercial resorts, retail business, municipal park and recreation departments, social services, military programs, outdoor and environmental education centers, specialty outdoor training schools, student services in higher education, and commercial guiding operations. With additional graduate work, even more options are available. A successful Western graduate has the knowledge, critical thinking skills, confidence, leadership ability, environmental responsibility, and global awareness that make a variety of pursuits accessible.

Admission to the Program. All students who wish to major or minor in Recreation must be formally admitted to the program. Students must be accepted in the program before registering for upper-division Recreation courses.

To apply to the program, a student must:

- 1. have demonstrated a minimum competency by completing RECR 182 Introduction to Leisure and Recreation, RECR 189 Principles of Outdoor Recreation, RECR 220 Computer Applications in Recreation, RECR 283 Recreation Leadership, and ENG 102 Academic Writing, each with a "C" or better;
- 2. submit a letter of application, portfolio, and current transcript (see advisor for details).

FACULTY

Associate Professor Kevin A. Nelson:

Assistant Professors Mark A. Gibson, Daniel T. McCole and M. Brooke Moran; Lecturers Matthew H. Ebbott and Paul G. M. Tame.

DESCRIPTION OF THE PROGRAMS

All Recreation majors require the 20-credit Recreation Core.

Recreation Core

DECD 100	The state of the s	_	
RECR 182	Introduction to Leisure and Recreation	3	cr
RECR 189	Principles of Outdoor Recreation	2	cr
RECR 220	Computer Applications in Recreation	3	cr
	Recreation Leadership		
RECR 352	Ecosystem Management and Interpretation	3	cr
	Recreation Program Planning with lab		
	Management of Recreation Facilities		

All Recreation Majors and the Recreation Minor require competency in swimming and must complete this requirement prior to taking RECR 400. All

Recreation Majors and the Recreation Minor require the emergency response competency to be completed by graduation.

The swimming competency may be obtained by one of the following methods:

- Pass a college-sponsored swim test, offered Fall and Spring semester
- ESS 161 Swimming (Intermediate)......1 cr
- Complete the American Red Cross swim test, level 6 or higher.

The emergency response competency may be obtained by one of the following methods:

- ESS 276 Emergency Response 3 cr
- American Red Cross Emergency Response certification course or any higher emergency medicine certification such as a Wilderness First Responder.

Recreation Major: Standard Program

The Standard Major consists of 33 credits including the 20-credit Recreation Core and the following courses. The Standard Recreation Major requires a minor in a supporting discipline. Students should consult with their advisor for selection of an appropriate minor.

RECR 364 Entrepreneurship and Commercial Recreation 3 cr
RECR 400 Internship and Career Orientation 1 cr
RECR 499 Internship in Recreation 6-9 cr
Recreation electives 3 cr

Recreation and Business Administration Coordinated Double Major. If a student elects to complete a Recreation Major: Standard Program and the coordinated Business Administration Major: Standard Program, no minor is required. RECR 330 Hotel and Resort Management must be taken as the 3-credit elective; the following substitutions are allowed: BUAD 220 Computer Applications in Business or CIS Information Management and Analysis for RECR 220 Computer Applications in Recreation; BUAD 375 Entrepreneurship and Business Planning for RECR 364 Entrepreneurship and Commercial Recreation. One of the following must also be completed: RECR 331 Food and Beverage Management or RECR 332 Rental and Retail Management.

Recreation Major: Comprehensive Programs

If students wish to take full advantage of the recreational resources in the Gunnison area and strengthen their undergraduate preparation in Recreation, they may elect to complete an emphasis in Outdoor Leadership and Instruction or Ski and Resort Management. While no minor is required for these programs, it is suggested that students complete a minor in an area that would complement the emphasis area.

OUTDOOR LEADERSHIP AND INSTRUCTION EMPHASIS

A minimum of 51 credits is required including the 20-credit Recreation Core and the following:

RECR 364	Entrepreneurship and Commercial Recreation3 cr
RECR 392	Teaching Experiential Education in the Outdoors3 cr
RECR 400	Internship and Career Orientation1 cr
RECR 454	Psychology and Counseling for Outdoor Leaders2 cr
RECR 468	Leadership and Administration of Outdoor Pursuits3 cr
RECR 496	Field Experiences1-6 cr
RECR 499	Internship in Recreation6-9 cr
One of the f	following:
BIOL 130	Environmental Biology3 cr
	Introduction to Environmental Studies
Three of the	following for a total of nine credits:
RECR 393	Outdoor Pursuits Education - Water Based3 cr
RECR 395	Outdoor Pursuits Education - Snow Based3 cr

RECR 396 Outdoor Pursuits Education - Land Based
SKI AND RESORT MANAGEMENT EMPHASIS
A minimum of 49 credits is required including the 20-credit Recreation Core and the
following:
BUAC 201 Introduction to Financial Accounting3 cr
RECR 330 Hotel and Resort Management3 cr
RECR 364 Entrepreneurship and Commercial Recreation3 cr
RECR 400 Internship and Career Orientation
RECR 499 Internship in Recreation6-9 cr
Recreation Skill Courses (chosen in consultation with advisor)6 cr
Three of the following:
RECR 331 Food and Beverage Management with lab2 cr
RECR 332 Rental and Retail Management with lab2 cr
RECR 333 Recreation and Sport Marketing3 cr
RECR 464 Travel and Tourism3 cr
RECR 468 Leadership and Administration of Outdoor Pursuits3 cr
CONTRACTUAL EMPHASIS
The Contractual Emphasis supports a liberal arts study that is both in-depth and
flexible. It can also be very interdisciplinary in nature. It is intended to provide
self-directed students with an option to the traditional Major or Minor. Students must
be able to articulate and justify their particular course selections as a coherent plan
toward their unique interest or career goal. This individualized course of study is
negotiated with, and must have the approval of the Recreation Coordinator.
Admission to this program is similar to the Standard Major: the letter of application

The Contractual Emphasis must include a minimum of 55 credits including the 20-credit Recreation Core, a minimum of 3 credits of RECR 494 Research, 9 additional Recreation credits, and 26 credits taken from outside the discipline.

should explain the student's position, intended goal, and plan of study.

Recreation Minor

Minors must be formally admitted to the program and fulfill the swimming and emergency response competencies. This Minor consists of 20 credits including:

RECR 182 Introduction to Leisure and Recreation	3 cr
RECR 189 Principles of Outdoor Recreation	2 cr
RECR 220 Computer Applications in Recreation	3 cr
RECR 283 Recreation Leadership	
RECR 352 Ecosystem Management and Interpretation	3 cr
RECR 398 Recreation Program Planning (with laboratory)	3 cr
Recreation electives (selected with the approval of an advisor)	3 cr

General Education Requirement: The following course in the Recreation Major fulfills the Second Writing Course component of the Essential Skills Requirement: RECR 352 Ecosystem Management and Interpretation.

Capstone Course Requirement: The following course in the Recreation Major fulfills the Capstone Course Requirement: RECR 499 Internship in Recreation or RECR 494 Research (Contractual Major).

RECREATION COURSES

RECR 182 Introduction to Leisure and Recreation

3 credits

An introduction to the history, philosophy, and principles of recreation and leisure, the agencies providing programs, and an investigation of professional employment opportunities in recreation.

RECR 189 Principles of Outdoor Recreation

2 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 prepare students for the outdoor pursuits program and to enhance their knowledge of and appreciation for the natural environment so that safe, responsible, and enjoyable outdoor adventures are possible. Prerequisite: RECR 182 or instructor permission. Course fee: \$20-\$70.

RECR 197 Special Topics

1-6 credits

RECR 220 Computer Applications in Recreation

3 credits

A course designed to give students the ability to use technology and computer applications in academic and professional settings. Topics include word processing, spreadsheets, databases, web design, Sabre and other programs with applications specific to the recreation field. A minimum skill in typing is required. Course fee: \$30.

RECR 283 Recreation Leadership

3 credits

A study of recreation leadership, including leading activities and managerial leadership. Emphasis is placed upon appropriate theories and techniques for specific clientele and the different populations that are encountered as a recreation professional. Prerequisite: RECR 182.

RECR 297 Special Topics

1-6 credits

Course fee: \$0-\$300.

RECR 330 Hotel and Resort Management

3 credits

This course investigates the growth and development of the hotel industry as it relates to ski resorts. Aspects of management are addressed, including personnel, accounting, sales, and tourism. Information is given on careers and the importance of a service industry. Fall offering only. Prerequisite: admission to the program or instructor permission.

RECR 331 Food and Beverage Management (with laboratory) 2 credits

A course designed to prepare the student for management of sales, food cost controls, beverage cost controls, labor, personnel, sanitation and market analysis as they relate to the ski industry. Spring offering only. Prerequisite: admission to the program or instructor permission. Course fee: \$70.

RECR 332 Rental and Retail Management (with laboratory) 2 credits

A course addressing operating rental and retail-profit centers as part of a corporation involved in the ski industry. Includes managing personnel, equipment, training, traffic flow, buying, forecasting, and accounting. Spring offering only. Prerequisite: admission to the program or instructor permission.

RECR 333 Recreation and Sport Marketing

3 credits

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. Prerequisite: admission to the Exercise and Sport Science program, the Recreation program or instructor permission.

RECR 334 Ski Patrol / Avalanche / Snow Safety/Mountain Planning (with laboratory)

3 credits

This course addresses ski-patrol techniques, mountain planning, ski-patrol management, risk management, and public relations. A ski proficiency test is required for entry into this course. Not offered every year. Prerequisites: admission to the program or instructor permission, 21 years of age, and ski proficiency test.

RECR 335 Alpine Skiing, Beginner to Advanced (with laboratory) 2 credits This course addresses the American Ski Technique with theory and practice in alpine skiing. Ski mechanics, courtesy codes, progressions, bio-mechanics, and international

differences are also included. Not offered every year. Prerequisite: admission to the program or instructor permission.

RECR 336 Ski Instructor Training, Adults/Children/Handicapped (with laboratory) 2 credits

This course includes theory and application in the instruction of adults, children, and special populations. A ski proficiency test is required for entry into this course. Not offered every year. Prerequisite: admission to the program or instructor permission.

RECR 352 Ecosystem Management and Interpretation 3 credits

This course emphasizes an understanding of the ecosystem as a dynamic and interrelated system. Emphasis will be placed on federal land management in the United States, natural resource economics, the fundamentals of environmental law and policy, and wilderness management. Applied projects will be an integral aspect of the course, and a field trip may be required. Prerequisites: ENG 102; admission to the program or instructor permission. Course fee: \$4-\$14.

RECR 364 Entrepreneurship and Commercial Recreation 3 credits

This course offers 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. Prerequisite: admission to the program or instructor permission.

RECR 392 Teaching Experiential Education in the Outdoors 3 credits

This course introduces experiential education and techniques as they apply to the outdoors, including the experiential learning cycle, focusing, feedback, support, processing, and effective communication techniques. Fall offering only. Prerequisite: minimum junior standing; admission to the program or instructor permission. Course fee: \$30-\$80.

RECR 393 Outdoor Pursuits Education—Water Based (with laboratory)

3 credits

Water-based outdoor leadership, skill development, and rescue techniques in rafting and kayaking. Field trips required. Summer offering only. Prerequisites: admission to the program, swimming competency, and instructor permission. Consult with instructor prior to registration week. Course fee: \$130-\$190.

RECR 395 Outdoor Pursuits Education—Snow Based (with laboratory)

3 credits

Snow-based outdoor leadership, skill development, and rescue techniques in winter mountaineering, backcountry skiing, and winter camping. Field trips required. Spring offering only. Prerequisites: admission to the program and instructor permission. Consult with instructor prior to registration week. Course fee: \$130-\$190.

RECR 396 Outdoor Pursuits Education—Land Based (with laboratory)

3 credits

Land-based outdoor leadership, skill development, and rescue techniques in mountaineering, rock climbing, backpacking, and caving. Field trips required. Fall and summer offering only. Prerequisites: admission to the program and instructor permission. Consult with instructor prior to registration week. Course fee: \$130-\$190.

RECR 397 Special Topics

1-6 credits

Course fee: \$0-\$300.

RECR 398 Recreation Program Planning (with laboratory) 3 credits

This course is designed to equip 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: admission to the program or instructor permission.

RECR 400 Internship and Career Orientation

1 credit

Focus is on the preparation, requirements, and selection of a meaningful internship and internship project. Students should be evaluating their career goals and refining their professional skills and senior portfolios. Prerequisites: admission to the program, swimming competency, and 15 credits of Recreation. Graded Satisfactory/Unsatisfactory only.

RECR 454 Psychology and Counseling for Outdoor Leaders 2 credits

This course is conducted in seminar format, covering psychological theories to enable students to better understand their own motives in outdoor pursuits and allow them to cope more effectively with those needing special treatment. Spring offering only. Prerequisite: senior standing; admission to the program or instructor permission.

RECR 464 Travel and Tourism

3 credits

This course introduces trends of travel and tourism, with specific emphasis on the western United States and the international market. Topics include travel motivations, tourism development, travel research, adventure travel, group travel operations, and careers in tourism. Field visits are required. Spring offering only. Prerequisite: admission to the program or instructor permission.

RECR 466 Management of Recreation Facilities

3 credits

This course covers 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. Prerequisite: admission to the program or instructor permission. Course fee \$5.

RECR 468 Leadership and Administration of Outdoor Pursuits 3 credits

This course addresses 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. Spring offering only. Prerequisites: admission to the program, RECR 392 and RECR 398; RECR 393, RECR 395, or RECR 396. Course fee: \$10.

RECR 473 Wilderness Education Association Expedition Leadership/ Steward Course 1-5 credits

The purpose of the Wilderness Education Association (WEA) is to certify graduates of the National Standard Program for Outdoor Leadership and the Steward Program. The course is an expedition (approximately three-and-a-half weeks) and is experiential in nature, taught in a wilderness environment. Expedition skills are taught to enable students to lead others safely, using minimum impact techniques to preserve the environment. Summer offering only. Prerequisite: instructor permission. Graded Satisfactory/Unsatisfactory only.

RECR 474 Outward Bound School Course

1-12 credits

The purpose of OBS is to enhance students' personal qualities through wilderness adventure. Courses vary in length and are offered at various Outward Bound schools around the country. Registration and credit for these courses are offered through the Extended Studies office. Graded Satisfactory/Unsatisfactory only.

RECR 475 National Outdoor Leadership School Course 1-12 credits

The purpose of the National Outdoor Leadership School (NOLS) is to enhance students' outdoor leadership skills and technical knowledge through wilderness adventure. Courses vary in length and are offered through NOLS. Registration and credit for these courses are offered through Extended Studies.

RECR 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: admission to the program.

RECR 494 Research 1-4 credits

A course designed to provide students the opportunity to pursue research in the field of recreation. A minimum of three credits is needed to fulfill the Capstone Course Requirement for the Contractual Emphasis. Prerequisite: admission to the program.

RECR 496 Field Experiences

1-6 credits

A course designed to provide 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. Prerequisite: admission to the program. Graded Satisfactory/Unsatisfactory only.

RECR 497 Special Topics

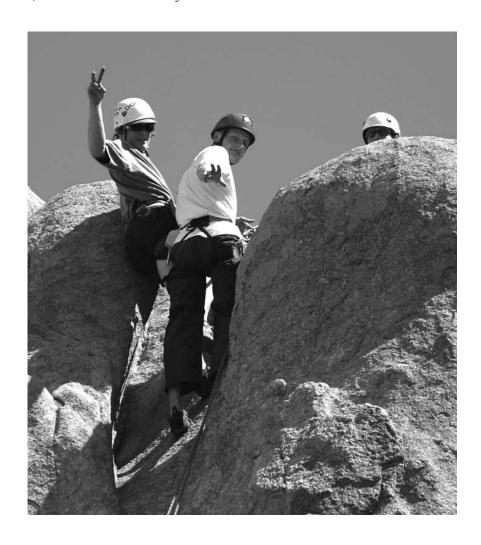
1-6 credits

Course fee: \$0-\$300.

RECR 499 Internship in Recreation

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, completion of all required RECR courses, 600 hours of pre-internship experience, cumulative GPA of 2.2, and GPA of 2.5 in the major.



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 are appropriate supporting courses for many of the disciplines within the sciences.

SCIENCE COURSES

SCI 197 Special Topics

1-6 credits

SCI 202 Scientific Writing

3 credits

A course to introduce students 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, Chemistry, Computer Information Science, Geology, or Mathematics.

SCI 297 Special Topics

1-6 credits

SCI 366 Methods of Teaching Secondary Science

3 credits

This course provides secondary science education students with opportunities to develop and apply their understandings of secondary science teaching and learning. Colorado standards for teacher education will serve as a foundation for students' demonstration of their science content knowledge and pedagogy. Students design and teach lessons appropriate for secondary school science. Tenets of standards-based science education, including a constructivist orientation, use of Colorado Model Content Standards, nature of science and scientific inquiry and performance-based assessment are emphasized. Students also design long and short range standards-based lesson plans and assessments for diverse learners, and become informed about the crucial role of assessment informing teaching and learning. Offered in alternate years, 2005-2006. Prerequisite: formal admission into the Teacher Education Program. Prerequisite or corequisite: EDUC 293.

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 the student to gain experience through direct involvement with professionals in various fields of science.



Social Sciences (SOSC)

Social Science courses support Economics, History, and Political Science programs leading to secondary licensure in social sciences. Degrees leading to secondary licensure in social sciences are described in the Economics, History, and Political Science sections of this catalog.

SOCIAL SCIENCES COURSES

SOSC 197 Special Topics

1-6 credits

SOSC 366 Methods for Teaching Secondary Social Studies 3 credits

This course deals with the techniques of teaching in the field of social studies. It emphasizes a study of the subject matter in each discipline, the accepted and new techniques of teaching in the respective disciplines, and the integration of the seven social sciences in the classroom. Prerequisites: the successful completion of admission requirements for the Teacher Education Program and EDUC 293.



Sociology (SOC)

The sociological imagination emerges as students begin to understand the relationship between their individual life experiences, their culture, social institutions, and the historical events that connect them to the national and global community.

The Sociology curriculum consists of three general education courses, Environmental Sociology, American Social Problems, and Global Social Problems, and courses designed for students pursuing a major, minor, or a more in-depth understanding of the field. The first course in the sequence, SOC 201 The Sociological Imagination is a prerequisite for all upper-division courses (those offered at the 300- and 400-levels). Students must pass SOC 201 with at least a "C" in order to major or minor in Sociology.

The faculty in Sociology believe that majors, minors, and others should develop a basic understanding of the fundamental methods of social science research design and analysis in order to think critically about the social world and what others have written about it. Thus SOC 210 Qualitative Research Methods and SOC 211 Quantitative Research Methods are strongly recommended prior to taking upperdivision courses. Students majoring in Sociology are encouraged to take MATH 131 Mathematics for the Managerial and Social Sciences in order to fulfill the General Education Mathematics competency requirement.

Courses at the 300-level focus on developing an understanding of social institutions (the family, education, religion, etc.) that socialize people in their various social roles and forms of social inequality (racism, sexism, poverty, etc.). Specific topics are offered on a rotating basis throughout the academic year. Four-hundred-level courses are designed to enable students to integrate various aspects of the discipline. They include courses in sociological theory and capstone courses (including internships and independent studies). Graduates from the Sociology program typically find employment in social services and law enforcement or enter careers in research and teaching. Several emphases have been developed to prepare students for these occupations.

FACULTY

Professors Daniel M. Cress and Greg P. Haase; Assistant Professor Caroline G. Mitchell.

DESCRIPTION OF THE PROGRAMS

Sociology Major: Standard Program A minimum of 39 credits is required:

-				
	SOC 201	The Sociological Imagination	.3	cr
	SOC 210	Qualitative Research Methods	.3	cr
		Race, Class and Gender		
		The Capstone Experience		
	One of the	e following:		
	PSY 200	Statistical Analysis and Experimental Methodology I	.3	cr
	SOC 211	Quantitative Research Methods	.3	cr
	Six of the	following:		
	SOC 320	The Family	.3	cr
	SOC 321	Religion	.3	cr
		Medical Sociology		
		Cultural Studies		

218 Sociology

SOC 340	Social Movements3 cr
SOC 350	Deviance
SOC 359	Criminal Justice System3 cr
SOC 367	Corrections
SOC 397	Special Topics
SOC 399	Internship
SOC 492	Independent Study
	Sociology of Sport and Physical Activity
	• • • • • • • • • • • • • • • • • • • •
	following:
	Interpretive Theory
SOC 402	Classical Theory
SOC 403	Contemporary Theory
CRIMINAL JUST	TICE/SOCIAL SERVICE EMPHASIS
	f 42 credits is required including one 300- or 400-level Sociology
	dits) and the following:
	American Federal Government3 cr
	Constitutional Law II
SOC 201	The Sociology Imagination
SOC 210	Qualitative Research Methods3 cr
SOC 350	Deviance
SOC 351	Juvenile Delinquency
SOC 359	Criminal Justice System
SOC 367	Corrections
SOC 380	Race, Class and Gender
One of the	following:
	Statistical Analysis and Experimental Methodology I3 cr
SOC 211	Quantitative Research Methods
	following:
	Interpretive Theory3 cr
SOC 402	Classical Theory
SOC 403	Contemporary Theory3 cr
One of the	following:
SOC 320	The Family3 cr
SOC 321	Religion3 cr
SOC 322	Medical Sociology
SOC 323	Cultural Studies 3 cr
SOC 340	Social Movements
SOC 397	Special Topics
SOC 492	Independent Study
	Sociology of Sport and Physical Activity
	following:
	Internship3 cr
SOC 498	Capstone Experience
~	
Sociology M	
	f 18 credits is required including two 300-level Sociology electives (3
credits each), a	400-level Sociology elective (3 credits), and the following:
SOC 201	The Sociology Imagination
SOC 211	Quantitative Research Methods
	Race, Class and Gender3 cr

General Education Requirement. The following course in the Sociology Major fulfills the Second Writing Course component of the Essential Skills Requirement: SOC 210 Qualitative Research Methods.

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).

SOCIOLOGY COURSES

SOC 100 Environmental Sociology

3 credits

This course utilizes the sociological perspective to examine a variety of issues addressing the human-environment interface. By the end of the semester, students are able to apply fundamental sociological concepts to an array of environmental issues. As a result, they acquire a solid grounding in the current environmental sociology literature and an ability to apply sociological theory to emerging trends.

SOC 168 American Social Problems

3 credits

An introduction to the field of sociology through an analysis of social problems in the United States. This course focuses on a variety of topics, such as substance abuse, violence in the home and on the streets, health and illness, and other problems associated with everyday life. Does not fulfill Sociology Major or Minor requirements.

SOC 169 Global Social Problems

3 credits

An introduction to the field of sociology through an analysis of global social problems. This course focuses on a variety of topics, such as worldwide environmental problems, economic development and North/South relations, hunger and poverty, and other problems associated with the world system. Does not fulfill Sociology Major or Minor requirements.

SOC 197 Special Topics

1-6 credits

SOC 201 The Sociological Imagination

3 credits

An introduction to the discipline of sociology with special emphasis on the unique perspective this social science utilizes to examine the social world. This course serves as a "gateway" course for all Sociology Majors and Minors, and must be passed with at least a "C" to continue into upper-level classes. Prerequisite for all 300- and 400-level Sociology courses.

SOC 210 Qualitative Research Methods

3 credits

This course examines qualitative approaches to understanding social life. In particular, it 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: SOC 201 with at least a "C."

SOC 211 Quantitative Research Methods

3 credits

This course introduces 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. Prerequisite: SOC 201 with at least a "C."

SOC 297 Special Topics

1-6 credits

SOC 320 The Family

3 credits

This course presents an analysis of the family as a social group and institution. Students will 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 201 with at least a "C."

SOC 321 Sociology of Religion

3 credits

The course presents 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 201 with at least a "C."

SOC 322 Medical Sociology

3 credits

This course examines the United States Health Care System and compares 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 201 with at least a "C."

SOC 323 Cultural Studies

3 credits

This course provides students with 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 201 with at least a "C."

SOC 340 Social Movements

3 credits

This course introduces students to the study of social movements with two goals in mind. First, it 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 201 or ENVS 100 with at least a "C."

SOC 350 Deviance

In this course, 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 201 with at least a "C."

SOC 351 Juvenile Delinquency

3 credits

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 201 with at least a "C."

SOC 359 Criminal Justice System

3 credits

This course offers an introduction to the progress and problems of the criminal justice system (law enforcement, courts, and corrections) in the United States. Topics surveyed include the system's history, its constitutional limitations, its philosophical background, and the process used to achieve its goals. Prerequisite: SOC 201 with at least a "C."

SOC 367 Corrections

3 credits

This course offers 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, and special inmate population. Prerequisite: SOC 201 with at least a "C."

SOC 380 Race, Class & Gender

3 credits

The course describes 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 of the course 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. Prerequisites: SOC 201 with at least a "C."

SOC 397 Special Topics

1-6 credits

SOC 399 Internship

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 College and by the sociology faculty. Up to three hours of internship credit may be counted toward the major. Graded Satisfactory/Unsatisfactory only.

SOC 401 Interpretive Theory

3 credits

This course begins with the premise that the reality each of us experiences is but a "version" of reality that has been created as we interact with others. From this perspective, the world is not merely "out there" waiting to be experienced; rather, we each play a very active role in creating and sustaining our view of reality. The implications for this position for our sense of self, as well as for our relationships with others, and society at large will be explored in this course. Prerequisite: SOC 201 with at least a "C."

SOC 402 Classical Theory

3 credits

The course presents a formal introduction to classical sociological theories. Students will learn about the history of the discipline, are able to 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 everyday life. Prerequisite: SOC 201 with at least a "C."

SOC 403 Contemporary Theory

3 credits

The course presents a formal introduction to contemporary sociological theories. Students are be 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 201 with at least a "C."

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 3.5 in Sociology courses or instructor permission.

SOC 497 Special Topics

1-6 credits

SOC 498 The Capstone Experience

3 credits

The objective of this course is to provide 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.

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 translators, interpreters, and hotel managers in resort areas.

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

FACULTY

Lecturers Marjie B. Foster and Kelly D. Noe.

DESCRIPTION OF THE PROGRAMS

All Majors require the 12-credit Spanish Core to be completed prior to enrollment in 300-level courses.

Spanish Core			
SPAN 254	Intermediate Spanish I	3	cr
SPAN 255	Intermediate Spanish II	3	cr
SPAN 270	Spanish Conversation	3	cr
SPAN 271	Spanish Composition	3	cr

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

The Spanish Major Standard Program requires 36 credits including the 12-credit Spanish Core, 12 credits of Spanish electives (beyond SPAN 101 and SPAN 102, selected in consultation with an advisor) and the following:

ENG 250 Literature: Studies in3 cr SPAN 366 Methods of Teaching a Foreign Language......3 cr

SPAN 380	Advanced Spanish Grammar	3 cr
	Introduction to Hispanic Literature	
	Capstone Experience	
Two of the	following literature courses:	
SPAN 460	Hispanic Novel	3 cr
	Hispanic Short Story and Essay	
	Hispanic Poetry and Drama	
	Chicano Literature	

Spanish Minor

A minimum of 18 credits beyond SPAN 101 and SPAN 102 (Elementary Spanish I and II) including the 12-credit Spanish Core and 6 hours of Spanish electives chosen in consultation with an advisor.

General Education Requirement. The following course in the Spanish Major fulfills the Second Writing Course component of the Essential Skills Requirement: ENG 250 Literature: Studies in_____.

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

3 credits

A beginning Spanish course. Essentials of the language: comprehension, speaking, reading, and writing. Reserved for students with less than two years of high-school Spanish. Course fee: \$15.

SPAN 102 Elementary Spanish II

3 credits

A continuation of SPAN 101. Prerequisite: SPAN 101 or equivalent. Course fee: \$15.

SPAN 110 Spanish Language and Culture

2 credits

An introductory course on various aspects of Spanish culture with special emphasis on basic survival Spanish.

SPAN 197 Special Topics

1-6 credits

SPAN 240 Spanish for the Professions

3 credits

A course which allows Spanish students to focus on language likely to be encountered in their occupation — business, social service, law enforcement, teaching, etc. The content of this course varies and the course is offered on demand. Prerequisite: SPAN 102 or equivalent.

SPAN 254 Intermediate Spanish I

3 credits

A continuation of SPAN 102. A grammar review and extensive practice in conversation, reading, and writing. Prerequisite: SPAN 101 and 102 or equivalent (two years or more of high-school Spanish).

SPAN 255 Intermediate Spanish II

3 credits

A continuation of SPAN 254. Further practice and development of speaking, reading, and writing skills. Prerequisite: SPAN 254 or equivalent. Course fee: \$15.

SPAN 256 Hispanic Literature and Film in Translation

3 credits

This course introduces students to a survey of well-known and respected works of Spanish-language literature and film which have been translated into English. All class discussion and writing assignments are in English. Prior courses in Spanish are not required. This course does not meet requirements for a Spanish major or minor.

SPAN 270 Spanish Conversation

3 credits

A course to develop oral proficiency in Spanish. This course focuses on structure and vocabulary, emphasizing both speaking and listening, while helping the student develop a sense of security when speaking Spanish. Prerequisite: SPAN 255 or equivalent.

SPAN 271 Spanish Composition

3 credits

This course develops writing skills using composition tasks that reflect the type of writing generally asked of Spanish majors and minors—analysis and classification, argumentation, definition, exposition, comparison and contrast, cause and effect, etc. Prerequisite: SPAN 255 or equivalent.

SPAN 297 Special Topics

1-6 credits

SPAN 320 Spanish Linguistics

3 credits

A course in Spanish phonetics and phonology aimed at improving students' pronunciation. The course offers intensive practice in pronunciation and phonetic transcription. Prerequisite: SPAN 255 or equivalent.

SPAN 340 Spanish Civilization and Culture

3 credits

A course that acquaints students with 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.

SPAN 341 Latin American Civilization and Culture

3 credits

A course that acquaints students with 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.

SPAN 342 Mexican Civilization and Culture

3 credits

A course that acquaints students with the general trends of Mexican civilization and culture and the national character as expressed in everyday life. Includes Mexican development from pre-Columbian to present. Conducted in Spanish. Prerequisite: SPAN 255 or equivalent.

SPAN 366 Methods of Teaching a Foreign Language

3 credits

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.

SPAN 370 Advanced Spanish Conversation

3 credits

A course designed to give students the opportunity to continue to develop their oral proficiency through discussion and presentations. Emphasis will be on structure and building vocabulary, focusing on both speaking and listening. Students will serve as conversation leaders for small group discussions. Prerequisite: SPAN 270.

SPAN 371 Advanced Spanish Composition

3 credits

This course will give students the opportunity to continue to develop their writing skills by writing their own compositions as well as working as peer editors and helping the students in SPAN 271 to improve their compositions. Students will also explore creative writing — prose and poetry. Prerequisite: SPAN 271.

SPAN 380 Advanced Spanish Grammar

3 credits

A course that will provide students the opportunity to review easier aspects of grammar while concentrating on specific problem areas — past tense, compound tenses, subjunctive, etc. Prerequisite: SPAN 270 and SPAN 271.

SPAN 385 Introduction to Hispanic Literature

3 credits

A course to give students the opportunity to read authentic Hispanic literature, concentrating on details, such as style, point of view, theme, symbolism, etc., rather than simply reading for comprehension. Students will read works by authors from Spain and Latin America with emphasis on works from major literary movements and styles. This course will be conducted in Spanish. Prerequisite: SPAN 270 and SPAN 271.

SPAN 392 Directed Study in Spanish

1-4 credits

A course of individual research and study about topics in Spanish. Prerequisite: six credits of Spanish beyond SPAN 102.

SPAN 397 Special Topics

1-6 credits

SPAN 460 Hispanic Novel

3 credits

A course to give students the opportunity to read and analyze works by major Hispanic novelists. The content of the course varies and the course is offered on a rotating basis with other literature courses. This course may be taken for credit more than once. This course will be conducted in Spanish. Prerequisite: SPAN 385.

SPAN 461 Hispanic Short Story and Essay

3 credits

A course which allows students to explore the important genres of short story and essay in Hispanic literature. The content of this course varies and the course is offered on a rotating basis with other literature courses. This course may be taken for credit more than once. This course will be conducted in Spanish. Prerequisite: SPAN 385.

SPAN 462 Hispanic Poetry and Drama

3 credits

A course to allow students to focus on masterpieces of Hispanic poetry and drama. The content of this course varies and the course is offered on a rotating basis with other literature courses. This course may be taken for credit more than once. This course will be conducted in Spanish. Prerequisite: SPAN 385.

SPAN 463 Chicano Literature

3 credits

A study of the literature by Chicano authors. Works will include the novel, poetry, short story, drama, and essay. This class is conducted in Spanish, although some of the works may be written in English or a combination of English and Spanish. This class is offered on a rotating basis with other literature courses. This course may be taken for credit once. Prerequisite: SPAN 385.

SPAN 490 Workshop in Mexico

1-8 credits

A series of workshops to study various aspects of contemporary issues in Mexico. 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

This course is a research project written by the Spanish major in an area of Spanish language and culture and that is appropriate for his/her undergraduate experience. This course will be offered yearly. Prerequisite: 24 credits in Spanish beyond SPAN 101 and SPAN 102.



Technology (TECH)

The courses in Technology provide an introduction to technology and its societal implications and support student's coursework in other disciplines.

TECHNOLOGY COURSES

TECH 340 Alternate Energy, Materials and Resources 3 credits

A course designed to bring about an understanding of energy, new materials, and resources in a global context. The limitations and potential of alternatives to conventional systems are set in the context of "appropriate technology." The impacts of today's technologies are analyzed relative to various options for meeting tomorrow's needs. The emphasis of this course is placed within the context of designing sustainable societies. Prerequisite: minimum junior standing.

TECH 360 Technology: Its Impact

3 credits

A study of technology: its history, capabilities, future implications, and impact on humans. Emphasis is placed on humankind's understanding of the technical means undertaken in all cultures and the control of technology







Personnel (As of June 1, 2005)

Faculty

- **Kevin D. Alexander** (2000) Associate Professor of Biology. B.A., University of Texas-Austin; Ph.D., University of North Texas.
- **Nella B. Anderson** (1998) Associate Professor of Education; Director of the Teacher Education Program. B.S., Texas Tech University; M.Ed., University of Texas-Austin; Ph.D., University of Houston.
- **Robert H. Barrett** (1993) Professor of Music. B.M., Brigham Young University; M.M., University of North Texas; D.M.A., University of Oklahoma-Norman.
- **Robin A. Bingham** (1997) Associate Professor of Biology. B.A., University of Vermont; M.A., Ph.D., University of Colorado.
- **Michael R. Brooks** (1987) Professor of Communication & Theatre. A.B., University of California-Santa Cruz; M.F.A., University of Montana.
- **John W. Brown** (1981) Professor of Mathematics; Chair, Department of Mathematics and Computer Information Science. B.S., M.S., Kearney State College; Ph.D., University of Northern Colorado.
- **Leila M. Calkins** (1987) Assistant Professor of Mathematics. B.S., M.A., Northeast Missouri State University.
- **Albert R. Caniff, Jr.** (1994) Professor of Art; Chair, Department of Art. B.F.A., M.A., M.F.A., Western Michigan University; Ed.M., Nazareth College.
- **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) Associate Professor of Geography, Director, Environmental Studies. B.A., Trinity Western University; M.A., Ph.D., University of Texas-Austin.
- **Carole S. Dlugasch** (2000) Assistant Professor of Psychology. B.A., Rutgers University; M.A., Kean University; Ph.D., St. John's University.
- **Roger A. Drake** (1969) Professor of Psychology. B.A., Western Washington University; M.A., University of Iowa; Ph.D., University of Tennessee.
- **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.
- **Scott N. Drum** (2004) Assistant Professor of Exercise and Sport Science, B.S., University of Wisconsin; M.S., Wake Forest University.

- **Paul A. Edwards** (1987) Professor of Communication and Theatre; Chair, Department of Communication Arts, Languages and Literature. B.A., St. Michael's College; M.A., State University of New York-Albany; Ph.D., University of Colorado.
- **James A. Erekson** (1999) Associate Professor of Teacher Education. B.A., Brigham Young University; Ph.D., Michigan State University.
- **Robert P. Fillmore** (1997) Associate Professor of Geology. B.A., Western State College of Colorado; M.S., Northern Arizona University; Ph.D., University of Kansas.
- **Peter H. Gauss** (1990) Professor of Biology; B.S., St. Joseph's University; Ph.D., Johns Hopkins University.
- **Mark A. Gibson** (2000) Assistant Professor of Recreation. B.A., Eastern Washington University; M.S., Colorado State University; Ed.D., University of Northern Colorado.
- **David W. Glascoff** (2003) Professor of Business Administration, B.A., Vanderbilt University; M.B.A., Murray State University; M.P.H., University of North Carolina-Chapel Hill; D.B.A., Mississippi State University.
- **Curtis J. Gravis** (1983) Professor of Biology. B.S., Utah State University; Ph.D., Tulane University.
- **Greg P. Haase** (1988) Professor of Sociology; B.A., M.A., Louisiana State University; Ph.D., Colorado State University.
- **F. James Hahn** (1969) Professor of Business Administration. B.S., University of Colorado; J.D., University of Wisconsin, School of Law.
- **Helynne H. Hansen** (1988) Professor of Modern Languages. B.A., M.A., Ph.D., University of Utah.
- **Harvey L. Harriman** (1969) Assistant Professor of Music. B.S., Livingston University; M.M., Emporia State University.
- **John C. Hausdoerffer** (2005) Assistant Professor of Environmental Studies. B.A., Western State College of Colorado; M.A., St. John's College; Ph.D., Washington State University.
- **Sally E. Hays** (2004) Assistant Professor of Economics. B.A., University of Colorado; Ph.D., University of Oregon.
- Harry E. Heil (1970) Professor of Art. B.F.A., M.A., Brigham Young University.
- **Jay W. Helman** (1989) President; Associate Professor of Exercise and Sport Science. B.A., University of Santa Clara; M.A., California State University-Sonoma; Ph.D., Pennsylvania State University.
- **Roger L. Hudson** (2000) Professor of Business Administration. B.S., M.B.A., Ph.D., University of Minnesota.
- **T. Christine Jespersen** (1998) Professor of English. B.A., University of Colorado-Boulder; M.A., Ph.D., Rutgers University.

Andrew G. Keck (1997) Associate Professor of Mathematics and Computer Information Science. B.A., DePauw University; M.Phil., University of Utah; Ph.D., University of Montana.

Heidi L. Keck (1997) Associate Professor of Mathematics. B.S., Bemidji State University; M.S., University of Utah; Ph.D., University of Montana.

William King (1996) Professor of English. B.S., Memphis State University; M.A., University of Washington; Ph.D., University of North Carolina.

Kathleen M. Kinkema (1998) Professor of Exercise and Sport Science. B.A., Grand Valley State University; M.S., Ph.D., University of North Carolina-Greensboro.

Jerry J. Kowal (1974) Professor of Art. B.S.Ed., Chicago State University; M.Ed., DePaul University; Ph.D., Ohio State University.

Scott Lazerus (2000) Associate Professor of Economics. B.A., Ph.D., University of Utah.

Terri J. Lennon (1990) Professor of Art. B.A., Colorado State University; M.A., Adams State College; M.F.A., Kansas State University.

Wallace G. Lewis (1991) Professor of History. B.A., M.A., Ph.D., University of Idaho.

Kevin L. Ludlum (2000) Assistant Professor of Exercise and Sport Science. B.S., Baylor University; M.Ed., Texas Tech University; Ph.D., University of Idaho.

Alina M. Luna (2005) Assistant Professor of English. B.A., Russell Sage College; Ph.D., State University of New York at Albany.

Christopher Mausolff (2005) Associate Professor of Business Administration. B.A., University of Colorado; Ph.D., University of Pittsburgh.

Daniel T. McCole (2005) Assistant Professor of Recreation. A.A., University of Maryland; B.A., University of Massachusetts Boston; M.B.A., Michigan State University; Ph.D., University of Minnesota.

Caroline G. Mitchell (2004) Assistant Professor of Sociology. B.A., LeMoyne College; M.S., Ph.D., South Dakota State University.

M. Brooke Moran (2003) Assistant Professor of Recreation. B.S., University of New Hampshire; M.A., Harvard Graduate School of Education.

Terry L. Mullen (1982) Professor of Biology. A.A., Skagit Valley College; B.A., M.S., Central Washington State University; Ph.D., Oregon State University.

Kevin A. Nelson (1999) Associate Professor of Recreation; Chair, Department of Recreation and Exercise and Sport Science. B.A., Brigham Young University; M.A., Ph.D., Michigan State University.

Monica D. Newman (1990) Professor of Accounting; Chair, 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 Political Science. 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. B.A., M.A., University of Victoria; Ph.D., University of Texas-Austin.
- **Dale L. Orth** (2001) Professor of Chemistry. B.A., The Colorado College; Ph.D., University of Wisconsin-Madison.
- **John C. Peterson** (2005) Associate Professor of Computer Information Science. B.S., University of Denver; M.S., University of Colorado; Ph.D., University of Utah.
- **David J. Plante** (1999) Associate Professor of Economics. B.A., Boston University; Ph.D., University of Utah.
- **Christine L. Purkiss** (2002) Assistant Professor of Teacher Education. B.S., McMurry College; M.Ed., Ed.D., Texas Tech University.
- **Anne W. Ryter** (1996) Associate 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-Boulder; B.S., M.S., Eastern Washington University; Ph.D., University of Texas-Austin.
- **Don E. Seastrum** (1999) Associate Professor of Art. B.A., Western State College of Colorado; M.L.S., University of Denver; Ph.D., The Union Institute.
- **John B. Sowell** (1991) Vice President for Academic Affairs; Professor of Biology. B.S., University of California–Davis; Ph.D., University of Idaho.
- **Christopher M. Stadler** (2005) Assistant Professor of Political Science. B.S., Embry-Riddle Aeronautical University; M.A., University of Southern California; M.A., Ph.D., New York University.
- **Charles P. Stark** (2003) Assistant Professor of Psychology. B.A., M.A., Ph.D., University of Colorado.
- **James M. Stewart** (1988) Professor of History; Chair, Department of Behavioral and Social Sciences. B.A., University of Northern Colorado; M.A., Ph.D. University of Colorado-Boulder.
- Mark A. Stiger (1989) 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.
- **Ludwig J. Stromayer** (1979) Professor of Art. B.A., M.A., Ed.D., Wayne State University.

- **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.
- **Mark D. Todd** (1988) Professor of English. B.A., M.A., Eastern New Mexico University; Ph.D., Texas Tech. University.
- **Duane L. Vandenbusche** (1962) Professor of History; Head Cross-Country Coach. B.S., Northern Michigan University; M.A., Ed.D., Oklahoma State University.
- **Frank A. Venturo** (1974) Professor of Communications. B.A., Western State College of Colorado; M.A., Ph.D., University of Colorado.
- **Martha W. Violett** (1972) Professor of Music; Director of the Music Program. B.M.E., Illinois Wesleyan University; M.A., M.F.A., D.M.A., University of Iowa.
- **Theodore D. Violett** (1959) Professor of Physics. B.S., M.A., University of Missouri; Ph.D., University of Colorado.
- **John M. Wacker** (2005) Assistant Professor of Music. B.M.Ed., University of Northern Colorado; J.D., University of Wyoming; M.M., Indiana University of Pennsylvania.
- **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.
- **Karin A. Waidley** (2005) Assistant Professor of Communication and Theatre. B.A., University of California-Berkeley; M.A., Northwestern University; Ph.D., University of Washington.
- **Terri L. Wenzlaff** (1996) Associate Vice President for Academic Affairs; Professor of Teacher Education. B.A., Dakota State University; M.A., Ed.D., University of South Dakota.
- **Katherine C. Wieseman** (1998) Associate Professor of Teacher Education. B.S., College of William & Mary; M.A., University of New Mexico; Ph.D., University of Georgia.
- **Jessica R. Young** (1995) Associate Vice President for Academic Affairs; Associate Professor of Biology. B.A., University of California-San Diego; Ph.D., Purdue University.
- **Justin C. Zimmerman** (2004) Assistant Professor of Communication. B.A., Ohio State University; M.F.A., Ohio University.
- NOTE: Dates indicate first year of employment at Western State College of Colorado.

Administration

Jay W. Helman (1989) President; Associate Professor of Exercise and Sport Science. B.A., University of Santa Clara; M.A., California State University-Sonoma; Ph.D., Pennsylvania State University.

W. Bradley Baca (2002) Vice President of Finance and Administration. B.A., Dartmouth College; M.A., University of Colorado-Boulder.

Thomas F. Burggraf (1997) Executive Director of Development and Executive Director of WSC Foundation. B.F.A., Tulane University.

Sherryl Hall-Peterson (1985) Vice President for Student Affairs and Dean of Students. B.A., Oklahoma City University; M.A., Western State College of Colorado.

John B. Sowell (1991) Vice President for Academic Affairs; Professor of Biology. B.S., University of California–Davis; Ph.D., University of Idaho.

Timothy L. Albers (2000) Assistant Vice President for Enrollment Services. B.S., Colorado School of Mines.

Mary E. Allen (1981) Assistant Director of Admissions. B.A., Western State College of Colorado.

Elizabeth A. Avery (2000) Director of Library Services. A.B., College of William & Mary; M.S., Drexel University.

Shawn M. Back (1997) Head Volleyball Coach. B.A., Western State College of Colorado.

Sherry L. Barnes (2004) Graduation Analyst. B.A., Prescott College.

Jennifer M. Bjornstad (1998) Financial Aid Counselor. B.A., Western State College of Colorado.

Melanie K. Bollig (2003) Graphic Arts Designer. B.S., Kentucky Christian College.

Renee M. Brekke (2003) Assistant to the Grants Administrator. B.A., Western State College of Colorado; M.A., University of Colorado.

Carrie L. Buchanan (1998) Associate Director of Residence Life. B.A., University of California-Riverside.

Angela K. Camp (1998) Assistant Director of Student Financial Aid. B.B.A., Kennesaw State University; MPA, University of Colorado, Denver.

Suzanne M. Channell (2004) Interim Academic Advisor. B.F.A., North Texas University.

Tamara L. Coleman (2004) Residence Hall Director. B.A., Bloomsburg University of Pennsylvania.

Jesse B. Crandall (2004) Interim Assistant Ski Coach / Head NOrdic Coach. M.A., B.A., Macalester College.

Sandra L. Dowis (1976). Staff Assistant to the Vice President for Student Affairs. B.A., Western State College of Colorado.

Carolyn R. Esquibel (1992) Assistant Director of Admissions/Special Projects. B.A., Western State College of Colorado.

Matthew R. Estrada (2003) Admissions Counselor. B.A., University of Northern Colorado.

Josh A. Fetter (2001) Interim Assistant Football Coach. B.S., University of Idaho.

Ashley V. Froehlich (2004) Career and Conference Services Program Coordinator. B.A., California State Polytechnic University; M.A., National University-San Diego.

Kimberly E. Gailey (2003). Director of Human Resources. A.A., Northeastern Oklahoma A&M College; B.S., University of Oklahoma.

Nancy V. Gauss (1992) Public Services/Instruction Librarian. B.A., Goucher College; M.A., University of Denver.

C. Scott Groom (1989) NCAA Compliance Coordinator / Assistant Athletic Director; Instructor of Exercise and Sport Science. B.A., Eastern Illinois University; M.A., Western State College of Colorado.

Jack P. Harbottle (2002) Head Ski Coach / Head Alpine Ski Coach. B.A., Western State College of Colorado.

Teri Sue Haus (1998) Bookstore Manager. B.A., Western State College of Colorado.

Robert O. Heiken III (2002) Sports Information Director. A.A., College of the Siskiyous; B.S., Southern Oregon University.

Celeste M. Helminski (2004) Executive Assistant to the President. B.A., Indiana University.

Tara L. Holmes (2004) Interim Admissions Counselor. B.A., Western State College of Colorado.

Deborah L. Hoskins (1998) Director of Annual and Special Gifts. B.A., University of Houston.

Shelley C. Jansen (1999) Director of Campus Life and Orientation. B.A., M.S., University of Wisconsin-LaCrosse.

Jake S. Jones (2004) Director of Wilderness Pursuits and Escalante Fitness Center. B.A., Western State College of Colorado.

Julie E. Luekenga (2005) Interim Director of Disability Services. B.A., Anderson University; M.A., Denver University.

Janice L. R. Lung (2005) Director of Residence Life. B.A., Washington State University; M.A., Eastern New Mexico University; Ed.D., Idaho State University.

Angela J. Marino (2001) Admissions Counselor. B.A., Western State College of Colorado.

Larry K. Meredith (1998) Director of Public Relations. B.A., Kansas State University; M.A., Emporia State University.

Sandee L. Mott (2000) Head Women's Basketball Coach. B.A., Friends University; M.A., Fort Hays State University.

Patrick J. Muckleroy (1982) Public Services Librarian. B.A., Western State College of Colorado; M.L.S., North Texas State University.

Don L. Mundell (1991) Head Athletic Trainer. B.A., University of Northern Colorado; M.Ed., Colorado State University.

Charles A. Nagel (2004) Assistant Bookstore Manager. B.A., Western State College of Colorado.

Layne M. Nelson (1992) Director of Extended Studies. B.S., Miami University; M.B.A., University of Southern California.

Alice Bickerstaff Pierotti (2001) Academic Advisor. B.A., Western State College of Colorado.

Gary C. Pierson (1998) Associate Vice President for Student Affairs. B.A., M.A., Adams State College.

Kevin E. Propernick (1995) Assistant Football Coach. B.A., Western State College of Colorado.

Maryette H. Rogers (1998) Registrar. B.A., Georgia Southern College.

Stephen M. Rogers (2001) Director of Campus Security Services. B.S., Memphis State University.

Sally Jo Romero (1996) Coordinator of Multicultural Affairs. B.A., Western State College of Colorado.

Anthony R. Rosso (2004) Assistant Football Coach. B.A., Western State College of Colorado; M.A., Adams State College; M.A., West Texas A&M University.

Jarral W. Ryter (1996) Interim Laboratory Instructor / Science Stockroom Coordinator. B.S., Ft. Lewis College; M.S., University of Colorado.

George E. Sibley (1988) Coordinator of Special Projects and Lecturer in Communication Arts. B.A., University of Pittsburgh.

Al J. Sokaitis (2004) Head Men's Basketball Coach. A.A., Mitchell College; B.A., North Adams State College; M.A., Connecticut College.

Marty G. Somero (1992) Assistant Dean/Director of Financial Aid. B.A., Michigan State University; M.A., Central Michigan University.

Kevin A. Taylor (2004) Residence Hall Director. B.A., Western State College of Colorado.

Janet Thurling (2004) Interim Admissions Counselor.

Richard S. Tonnessen (1992) Associate Vice President for Facilities Services. A.A., Wentworth Institute.

- **Miles C. Van Hee** (1993) Head Wrestling Coach. B.A., Western State College of Colorado; M.A., University of Northern Colorado.
- **Tonya Z. Van Hee** (1991) Director of Alumni Relations. B.A., Western State College of Colorado.
- **J. Scott Wadsworth** (1993) Assistant Director of Admissions/Denver Area. B.A., Western State College of Colorado.
- **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.
- William L. Wegert (1988) Mail Center Manager. B.A., Fort Lewis College; M.A., Western State College of Colorado.
- **Janice Welborn-Downing** (1997) Director of Sponsored Programs and Grants. B.A., Long Beach State University.
- **Terri L. Wenzlaff** (1996) Associate Vice President for Academic Affairs; Professor of Teacher Education. B.A., Dakota State University; M.A., Ed.D., University of South Dakota.
- **Svea E. Whiting** (1999) Director of Career and Conference Services. B.S., Colorado State University.
- **Jennifer L. Wickenhauser** (2004) Interim Financial Aid Counselor. B.A., Western State College of Colorado.
- **Tricia C. Winslow** (2001) Interim Circulation / Public Services Librarian. B.A., Western State College of Colorado.
- **Lorie H. Wylie** (2002) Public Services / Government Documents Librarian. B.A., Auburn University; MLIS, University of Oklahoma.
- **Jessica R. Young** (1995) Associate Vice President for Academic Affairs; Associate Professor of Biology. B.A., University of California-San Diego; Ph.D., Purdue University.
- **Natalie N. Zaelit** (2004) Interim Financial Aid Counselor. B.A., Western State College of Colorado.
- **Jeffrey A. Zenisek** (2001) Head Football Coach. A.A., Wenatchee Valley College; B.A.Ed., M.A.Ed., Central Washington University.

Emeritus Faculty and Staff

Seth Adams, Jr. (1968-1998) Professor of Biology. B.A., Eastern New Mexico University; M.S., Ed.D., Oklahoma State University.

Eugene P. Anderson (1961-1987) Professor of Physical Education. B.A., Yankton College; Ed.M., University of South Dakota.

Norman A. Anderson (1963-1977) Assistant Professor of Economics. B.S., University of Oklahoma; M.B.A., University of Denver.

Martyn L. Apley (1978-1998) Professor of Zoology. B.S., Kansas State University; M.S., Ph.D., Syracuse University.

Robert D. Arnold (1954-1985) Director of Publications; Professor of Mathematics. B.A., M.A., Western State College of Colorado.

David J. Axelson (1982-2000) Professor of Economics. B.A., M.A., University of Northern Colorado; Ed.D., University of Colorado.

James R. Baril (1967-1997) Professor of English. B.S., Bemidji State College; M.A., Washington State University; Ph.D., University of Colorado.

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Glossary

The following glossary of terms commonly used at Western State College of Colorado may help clarify policies and program descriptions.

ACADEMIC AMNESTY—an opportunity for students who have previously attended Western to have poor academic work forgiven. See Academic Policies for details.

ACADEMIC MAJOR—the particular discipline chosen as each student's focus of study toward the bachelor's degree.

ADVISOR—the faculty member assigned to each student to assist with all academic decisions, such as choosing a Major or Minor, working out an individual schedule, etc.

BA (Bachelor of Arts degree)—the basic degree offered by Western State College of Colorado to those students who successfully complete all requirements. Differs from the BS (Bachelor of Science) degree offered by some colleges and universities, primarily in its emphasis on liberal arts and sciences.

BFA (Bachelor of Fine Arts degree) — is designed for the qualified student intending to become a professional artist or to pursue graduate study in art. It differs from the bachelor of arts degree in that it places an emphasis on studio art classes.

COMPREHENSIVE PROGRAM— Fulfills requirements of both the Major and the Minor. A Major requiring 48 or more hours is considered a Comprehensive Program.

CONCENTRATION—a term designating the particular focus of a Minor Program.

COREQUISITES—Courses that must be taken concurrently when enrolling in a specified course.

COURSE-REFERENCE NUMBERS (CRN) —special five-digit numbers assigned in schedule booklets to each section of classes offered by the College each session. Used to communicate essential information to the computer.

CREDITS (or credit hours or academic credit)—the number recorded on each student's transcript indicating the award granted for each course completed. Also the total of such awards. For a more detailed explanation, see "Unit of Credit" in the Academic Policies section.

DISCIPLINE—a term generally used to designate certain areas of study, such as History or Chemistry. Often corresponds to major.

DUE PROCESS—the process provided to students who feel a need to appeal any academic decision. Always starts with the advisor.

ELECTIVES—courses chosen to complete the total number of credits needed to graduate or to pursue individual interests, in addition to those selected to meet requirements of the academic Major or Minor.

EMPHASIS—a term designating the particular focus of a Major Program.

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EXTENDED STUDIES—a special service of the College designed to extend educational opportunities beyond the campus or normal course offerings. Operates under the policies and procedures set by the Colorado Commission on Higher Education. Both credit and non-credit courses are offered.

FEES—special charges paid by all students to support College activities; also sometimes paid to meet special costs of particular courses.

FULL-TIME STUDENT—For calculation of tuition costs, a student who is enrolled in 10 or more credit hours. Full-time status for enrollment verification for Veteran Benefits, athletics, loans, insurance, financial aid, etc., is usually 12 credits per semester.

GENERAL EDUCATION—courses required of all students. An academic program designed by the faculty to assist students in achieving breadth and depth in their progress toward a liberal arts education.

GRADE POINT—a numerical value assigned to the different grades earned for performance in a class: an "A" equals 4 points, a "B" equals 3, etc. Also known as quality points.

GRADE-POINT AVERAGE (GPA)—the calculation used to measure the quality of a student's academic performance. Determined by dividing the total grade points received by the number of credit hours attempted.

INDEPENDENT STUDY—a special opportunity for students to pursue questions or projects of interest outside of the normal curriculum. Always developed in consultation with the student's advisor or a sponsoring faculty member.

INTERNSHIP—a special activity course for advanced students who wish to gain academic credit and practical experience while applying concepts they have gained through their more academic courses. Usually involves coordination between a member of the College faculty and a supervisor in the particular business or governmental agency providing the experience.

LABORATORY COURSE—a course in which class lectures and discussions are supplemented by supervised practical application.

LICENSURE—most commonly refers to the process by which the State of Colorado authorizes qualified persons to teach in public schools.

LOWER DIVISION—those classes designed primarily for freshmen and sophomores. Numbered 100 through 299.

MAJOR—see "Academic Major" above.

MINOR—a set of supporting courses within a single discipline chosen to supplement the academic Major.

PLAGIARISM—the act of presenting the words or ideas of another writer as one's own. Such dishonest failure to give proper credit through citation of sources is universally condemned in academic circles. Plagiarism (or other academic dishonesty) may result in consequences including an "F" for the assignment or course, withdrawal from the course, or suspension or expulsion from the college.

PREREQUISITES—courses or other requirements that must be satisfactorily completed before enrolling in a specified course.

SATISFACTORY ACADEMIC PROGRESS—for most purposes, the rate of progress that would enable the student to complete all requirements for graduation in four years. In that sense, satisfactory academic progress would involve successfully completing an average of 30 semester hours each year.

SEMESTER—the normal 16-week academic term at most colleges and universities.

SEMESTER HOURS—see credits above. This is the standard unit of measure employed at Western and most other colleges and universities.

STANDARD PROGRAM—Usually used in contrast to Comprehensive Program. Standard Majors require completion of a Minor. A Major requiring 47 hours or less is considered a Standard Program.

STATE GUARANTEED GENERAL EDUCATION TRANSFER COURSE—a course that is guaranteed to transfer to any Colorado public higher education institution and meet a general education requirement toward graduation if a grade of "C" or better is earned. State guaranteed general education courses are designated with an asterisk in this *Catalog*.

TUITION—the basic charge for taking classes at the college.

UPPER DIVISION—courses designed primarily for juniors and seniors. Numbered 300 through 499. Some have prerequisites.

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